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Competition in Public Transport

An Exploratory Research in Institutional Frameworks in the Public Transport Sector

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By

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Amsterdam, October 2019

Didier van de Velde

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Part I

Introduction

1 Introduction

1.1 Research context

This thesis finds its origins in the debates that developed in the 1980s in Western Europe as to the role that competition and private entrepreneurship could or should play in the provision of public transport services. Free market entrepreneurship and competition between operators had played a role in the provision of public transport services in earlier days—for example in the 1920s and 1930s in the European bus sector—but actual competition within the public transport sector had almost completely vanished from public transport provision in Western Europe by the end of the 1970s. By then, operators owned by local or national authorities dominated the sector. They were often endowed with de facto perpetual monopoly rights. Worryingly—and this became increasingly visible in the 1980s—many of these operators required increasing quantities of public money to maintain service provision. However, while subsidisation increased rapidly, patronage stagnated or did not rise commensurately. Gradually, suspicions of inefficiency appeared, and existing regulatory regimes and governance modes started being questioned.

The rise of neo-liberalism since and mainly after the 1970s, as political ideology underpinned by neo-liberal economic theories, provided scientists and politicians with a matrix on which to advocate market-based reforms in the public transport sector in the hope this would lead to more efficiency and customer orientation. Major market-based reforms were undertaken in Great Britain with the deregulation on long-distance coaches in 1980, with the introduction of competitive tendering in London's buses in 1984, and with the deregulation of local public transport (outside London) in 1986. The ensuing period saw local or national governments in other countries contemplating or implementing in their public transport sectors reform recipes similar to or inspired by reforms that had already been or were being put in place elsewhere. These recipes could be inspired from implementations in public transport in other regions, or implementations in other sectors of the economy that had until then been dominated by publicly owned companies.

Needless to say, not all agreed with the suggested reforms. There was a considerable amount of opposition in the sector against the idea of 'competition', in particular amongst incumbent operators. Furthermore, observation of the debates showed that there was a substantial level of misunderstanding about what had actually happened in other regions and countries, both in relation to the institutional changes put in place and to the results obtained. This means that the general level of factual knowledge on alternative regulatory setups and governance regimes was scant or patchy among public transport professionals and academics, let alone policy makers. This lack of knowledge was especially true when it

came to professionals from one city or region attempting to understand how other cities or regions had been organised before the reforms, how they had reorganised their public transport institutional framework, what had triggered the reforms, what reform purposes had been and what results had been reached.

This knowledge gap was also present in the academic world. Beyond the broad recipes of general economic theories on regulation, a reference framework was lacking to encompass, present and compare the variety of institutional frameworks that existed, the reforms that developed and the reasons for which they were implemented. This gap in academic knowledge was recognised, for example, with the creation in 1989 by Prof. Hensher and Prof. Beesley of the “*International Conference Series on Competition and Ownership in Land Passenger Transport*”, better known as the ‘Thredbo Conference Series’.

The awareness for this gap in knowledge became increasingly clear in policy arenas too as it made it difficult for policy makers to exchange experience and discern all relevant dimensions when it came to improve or design new institutional frameworks that would help solving the observed or perceived performance shortcomings. Several initiatives were taken in reaction to this. For example, in the Netherlands, the government created the Brokx Committee in 1991 to formulate reform options to improve the performances of Dutch public transport (Commissie Brokx Openbaar Vervoer, 1993). A few years later, the European Commission initiated research programs (European Commission, 1996a; 1998) which led to the production of a first international report describing and comparing institutional frameworks in European public transport, together with their reforms and impacts on effectiveness and efficiency (ISOTOPE Research Consortium, 1997).

The real-world implementations and experiences with competition-based reforms, the research activities that developed and the ensuing debate in the professional sector revealed that the introduction of ‘competition’ in this sector was not a simple dichotomy between having competition and having none. The issue proved much more complex. Several major institutional choices are involved besides the variety of policy aims that can be contemplated, many institutional implementation options exist, and various constraints can be present. These are often closely related to the context within which reforms are implemented, such as the existing markets, public management traditions, wider institutional context and history, local power, location of knowledge, etc.

1.2 Research aims and main research questions

The stream of research activities that led to this thesis started in the above-mentioned context at the end of the 1980s with as central research aim to gain a deeper understanding of the variety of institutional frameworks that can exist in the public transport sector and on how these develop.

Within that general research aim, the main focus of this thesis is located on the growing and evolving role of ‘competition’ as an institutional feature that can take many guises when applied to a sector within which the provision of services had until then been dominated by de facto or de jure (public) monopolies.

Three main research questions are formulated:

- ▶ What are the main institutional frameworks that have arisen in the European public transport sector since the pressure for a wider usage of competition appeared in the 1980s? (Part II)
- ▶ How have these institutional frameworks fared since? In particular, what developments can be observed and what can be said about these developments? (Part III and IV)
- ▶ What are the main resulting policy challenges and options? (Part V)

Part II will address the first main question, answering the following sub-questions:

- ▶ What main institutional developments can we observe in the public transport sector since the start of the current era of reform in this sector, what main factors led to these developments and how were these reforms perceived?
- ▶ How to classify institutional frameworks, in order to bring more clarity in the debate on institutional reforms and facilitate presentation and comparison?

Part II will show that two main families of institutional frameworks based on competition can to be distinguished: one based on authority-initiative and competitive tendering, and one based on market-initiative and the 'free' market. These two main options are analysed, respectively, in Parts III and IV with the following research sub-questions, answering the second main research question:

- ▶ How have these institutional frameworks fared since its introduction?
- ▶ What developments can be observed and what can be said about them?
- ▶ Can recommendations be formulated?

Part V concludes this thesis by summarising the main findings of Parts II, III and IV and answering the last main research question. On that basis, in an epilogue of a more prospective nature, lessons are drawn for the future of public transport regulation. This includes further reflections on the relative position of the main competition options in the light of recent sectoral challenges linked to technological innovations.

1.3 Theoretical framework

The research aims of this thesis indicate that it is mainly focused on institutions and in particular on those institutions that shape 'competition'. It is therefore logically located in the field of institutional economics. As a wide range of institutions potentially fall into the research scope, we adopt as a general theoretical framework a four-layered view on "economics of institutions" developed by Williamson (1998; 2000). In this approach, four layers distinguish between embedded, more stable informal institutions (such as customs, traditions, religion), the formal institutions (such as the legislation or the 'rules of the game') that determine property rights and tend to be stable for substantial periods of time, the governance level (i.e. the 'play of the game', which forms the core of the transaction cost economics developed by Williamson) that aligns governance structures with the characteristics of transactions, and the resource allocation level, which forms the focus of neoclassical economics and agency theory, and is focussing on a continuous process of economizing.

These four levels cover the wide issues that will be relevant in this research. The first level is that of the informal institutions of a country (such as culture), a second level is that of the legislation applicable to the public transport sector, a third level is that of the actual governance of the sector as constrained by legislation, down to the level of individual transactions.

Table 1 | Williamson's four layers of economics of institution

Level and Williamson's characterisation	Examples	Theories	Purpose	Frequency	Con-straints	Feed-back
L1 Embeddedness	Informal institutions, customs, traditions, norms, religion	Social Theory	▸ Often non-calculative, spontaneous	10 ² to 10 ³ years	↓	
L2 Institutional environment	Formal rules of the game, especially property (polity, judiciary, bureaucracy)	Economics of property rights	▸ Get the institutional environment right. ▸ 1st order economizing	10 to 10 ² years	↓	↑
L3 Governance	The play of the game, especially contract (aligning governance structures with transactions)	Transaction cost economics	▸ Get the governance right. ▸ 2nd order economizing	1 to 10 years	↓	↑
L4 Resource allocation and employment	Prices and quantities, incentive alignment	Neoclassical economics and agency theory	▸ Get the marginal conditions right. ▸ 3rd order economizing	Continuous		↑

Source: adapted from Williamson (2000)

Williamson focuses in his writings on the constraints that higher-level institutions impose on lower level institutions and, while acknowledging their existence 'in the fullness of time,' he decides to mainly neglect the feedbacks (Williamson, 2000). For him, the institutional environment is exogenous and transaction costs economics theory predicts, when the characteristics of transactions are known, the corresponding efficient governance structures. His approach is of a comparative static nature.

The main focus of the thesis, however, as indicated by the research questions, is also on the processes that lead to the introduction and further evolution of those institutions that shape competition once implemented. We are thus interested in studying the process of institutionalisation, the choices leading to and the appearance of institutional arrangements. This means that, complementary to Williamson's basic framework, we are also interested in the dynamics of the institutional system. In other words, we take the view that the institutional framework is not fully exogenous, that institutions evolve, and that the context and experience of the actors involved are determinant for subsequent institutional developments. Our approach is not of a comparative static nature, but of a dynamic one: we try to understand the processes of institutional change. This is indicated in the last column of Table 1 with the feedback arrows. The theory that fits such a process perspective is embedded into Original Institutional Economics (OIE) where the economy is seen as an evolving system in which actors operate of a different nature (political, economic, social) with different interests and capabilities and with different degrees of power (Wilber

and Harrison, 1978). They are volitional, i.e. take decisions about the structures around them in order to realize their objectives. In other words: structures such as technology and formal and informal institutions do not only constrain actors, but also enable them. This should not imply that all structures are purposefully man made. On the contrary: many of the technological and institutional structures emerge and are the unintended and often also unexpected consequences of interactions at micro level. In our perspective the nature of economic reality is one of change and the core research question is about understanding change. That is why we call our research approach a “process perspective” in contrast to a static or a comparative static approach.

Our perspective can first be characterized as explorative. We aim at understanding and not at explanation and prediction. We aim at an accurate description of institutional frameworks in specific contexts and how these develop over time. More specifically: what do we understand of ‘competition’ as it was introduced and developed in different segments of the research domain? The exploration in this thesis is about getting a better understanding of the ‘facts’ in a specific context of values, institutions and technology.

Second, our research is interested in understanding the dynamics of institutional frameworks; how did these develop over time? Such a question about the dynamics, about the process of change is fundamentally different from static optimization questions, or comparative static questions in which two equilibria are compared. Static optimization questions allow for an abstract *ceteris paribus* approach which is very familiar in neoclassical economics, whereas comparative static questions are central in New Institutional Economics. An explorative question about change is of a completely different nature, because the factors and relations interact making the *ceteris paribus* clause not relevant. Indeed, understanding change involves grasping the full interaction of different actors and factors that constitute technological and institutional structures.

Third, our research aims at categorizing, at creating a typology that allows us to move up from the level of case descriptions to a more general level. In an inductive way a higher level than pure description is formulated at which a typology shows the fundamental characteristics of the phenomenon of competition regimes. Understanding the ‘logic’ of a type, i.e. varieties of competition regimes, provides researchers, but also policy makers, with a perspective to better understand a complex reality. In a complex reality, in which many interacting variables of different nature (values, technology, culture, economics, etc.) constitute a phenomenon, the typology can guide researchers and policy makers.

In short, our research will be looking at a many-sided interactive picture of institutions and actors that shape competition in local and regional transport services. It aims to explore and to understand a complex dynamic phenomenon, i.e. the variety of competition-based arrangements in context specific situations of local and regional transport in Europe.

Whether competition, as an institutional feature that can be used for the provision of public transport, is to be preferred above a regime where competition would be absent is a question that is not directly addressed in this thesis. Rather, the focus of this research is on inventorying, classifying and understanding institutional frameworks that feature competition in one of its guises, on describing and analysing its introduction and functioning, and on bringing more clarity and understanding in the complex set of changes that can be observed in these institutional setups and their functioning over the period studied.

In our methodological perspective the explorative approach starts from real-life observations of phenomena and tries to build from there a more general typology. In observing phenomena like regimes of competition, governmental agencies, private actors, etc. we make use of the framework shown in Table 1. We recognize the impact of the researcher's own background, experience and theoretical knowledge from prior research and experiences. In addition, we recognize that we cannot fully understand real-life phenomena as they "really" are. The researcher always makes a so-called scientific representation (construction) of the world, which can never fully match with reality. In that respect we follow (Guba and Lincoln, 1994, p. 107) stating that 'theory and facts are interdependent, real-life observations or phenomena are for the researcher already theory-laden'. Being aware of possible biases we have communicated and discussed our findings over the years with a broad and varied audience: many discussions with practitioners, policy makers and colleagues from academia took place and created, changed and sharpened our thinking about competition in the transport sector. So many of the findings in this thesis should better not be considered as objective, neither as subjective, but as intersubjective.

Our methodological approach, that we prefer to call the process perspective, can be contrasted with positivism presented by Guba and Lincoln (1994) as the dominant positivistic research methodology. Positivism claims that scientific research is in principle able to generate objective knowledge about reality. The main goal of inquiry is explanation, ultimately enabling prediction and control of phenomena. This type of research is mainly characterized by the use of quantitative research methods, and by the application of a deductive approach. In a deductive approach the starting point is a well-established set of theoretical assumptions from which hypotheses are formulated mostly in the form of a prediction. Then empirical (often statistical) data is collected that verify, confirm, or supports, or at least does not falsify, the hypotheses. The nature of knowledge, as noted by Guba and Lincoln (1994), is verified hypotheses that can be accepted as facts or laws. If a model to test the theory does not lead to the same outcome every time, the model should be modified. Table 2 summarizes the characteristics of the two research perspectives.

Our choice of the process research perspective is based on the nature of the research questions of this thesis. The research questions formulated above revolve about the issue of 'understanding', not the issue of 'predicting' and a main aim is to help 'understanding' through the development of classifications or typologies. This requires conducting process analyses within which numerous factors of a varied nature can potentially be taken into account: economic, political, sociological or technological events, views and reference frameworks of involved actors, interaction between actors.

Table 2 | Two conflicting research perspectives

Positivism	Process paradigm
Explanation: prediction and control	Understanding; reconstructions
Deductive	Inductive
Survey, statistical analysis	(New) real-life observations; case study
Large number of observations	Small number of observations
Conclusive	Explorative

Source: Adapted from Guba and Lincoln (1994)

Being of an exploratory nature, our research will not be based on *ceteris paribus* analyses with quantifications and testing of theoretical hypotheses based on large numbers of observations¹. The method used is mainly that of case study analyses based on a smaller number of observations. While collecting information as participating observer, we will be looking for ‘themes, typologies and patterns’ (Wilber and Harrison, 1978). As we shall conclude in Part V of this thesis our research has discovered several themes (six themes to compare cases from different countries), attempts to formulate patterns in the institutional changes, but foremost contributed to the formulation of typologies (a typology of institutional frameworks, a typology on the layered involvement of actors in public transport provision, and a typology of barriers to change towards ‘functional tendering’).

1.4 Scope of the research

The empirical field of research of this thesis is limited to local and regional public transport in Europe, excluding national transport services. The period studied by this research starts around 1985 and finishes around 2018.

The research does not cover every single European country, although some of the background research conducted in the context of this thesis does provide such overview. The experience of those countries where institutional reforms—in particular the introduction of competition—were most extensive or interesting in relation to the research aims of this thesis is discussed at greater length. While the focus of this thesis is on Europe, a few references are made to other countries, such as Japan or New Zealand. Issues relating to public transport provision and regulation in developing countries, however, are not covered by this thesis.

While long-distance coaching and railways are not explicitly covered, much of what is discussed here is also relevant to understand reforms that have in the meantime been introduced in those sectors. However, issues related to the provision of transport infrastructures, in particular that of railway networks, and issues of coordination that appear at the interface between track and train require further analysis.²

1.5 Research method

The main sources of empirical information on institutional facts and perceptions relating to the cases studied result from desk-research and semi-structured interviews conducted since 1990. Interviews with public transport players were held mainly during field trips and occasionally by phone. Desk-research was used to collect academic publications, consulting report, policy documents, official documents (such as legislation, regulations and evaluations) and statistics. Many of paper sources were obtained during interviews, in particular during the first years of the research. This was later increasingly replaced by internet

[1] Such data would furthermore prove to be very difficult to obtain or be inexistent.

[2] These issues are discussed in other publications (see, e.g., Van de Velde et al., 2012; Van de Velde, 2015b).

searches. Field trips were held around Europe, with a focus on Western European countries and on the Netherlands. Interviews were typically organised separately with civil servants from local governments or public transport authorities, employees from public transport operators, academic researchers and other experts in the public transport field such as consultants and representatives of industry organisations. These sources of information resulted in numerous case studies on the introduction of contracting and competition and on the evolution of existing practices. Many were published or reported upon in various publications covering the period 1990-2015 (see literature list). A part of these case studies were made possible through the financial support provided by authorities (such as Ministries in the Netherlands) or international organisations (such as the European Commission) in the context of advisory work realised for these organisations; this is referred to, where relevant, throughout this dissertation. Many (if not most) cases studies and reports have led to presentations in scientific conferences or contributed to publications in academic journals.

This thesis is to a large extent based on papers and book chapters published over a period stretching from 1990 to 2015 and we would like to thank the respective publishers for the kind permission to include these papers, extracts or chapters in this dissertation. Main papers are included in the thesis while other papers are only referred to. As some of the papers present successive stages of institutional developments over a period of about 25 years, the reader may occasionally encounter some overlap between the papers, but also growing insights and refinement in approach. This may occasionally have led to a slightly different vocabulary usage over the years.

1.6 Overview of the thesis

This thesis consists of five parts (see Table 3). After this introduction, Part II will discuss the path leading to competition, analysing the (re)introduction of competition-based regimes in European local public transport, developing a framework to allow clarifying the complexities of these changes, sketching the resulting institutional frameworks and their diversity. The next two Parts will then analyse the two main family of competition-based institutional frameworks. Part III analyses the introduction of competitive tendering, with a particular focus on the difficult path to functional tendering in the Netherlands and comparing this experience to the main developments elsewhere in Europe. Part IV analyses the introduction of deregulation, with a particular focus on Great Britain, comparing it to developments elsewhere and hybrid arrangements that have developed. Part V comes to a conclusion, answering to the main research questions, drawing the main policy options available and commenting, in a prospective epilogue, on future regulatory needs in the light of current challenges.

Table 3 | Overview of the thesis

Part I - Introduction	
<ul style="list-style-type: none">▸ Research context▸ Research aims and questions▸ Theoretical framework▸ Scope of the research▸ Research method	
Part II - The path to competition	
<ul style="list-style-type: none">▸ Towards competition in the 1980s and 1990s▸ Typologies of institutions▸ Competition in practice	
Part III - Competitive tendering	Part IV - Deregulated markets
<ul style="list-style-type: none">▸ Competitive tendering in public transport in the Netherlands▸ Contrasting cases	<ul style="list-style-type: none">▸ Market initiative in a hybrid world▸ Workshops on market regulation
Part V - Conclusion	
<ul style="list-style-type: none">▸ Overview: The path to reform and main policy options▸ Summary of the research and findings▸ Outlook: Future regulation	

Part II

The Path to Competition

2 Introduction

Several words come to the mind when attempting to sketch the changes that came about, words such as deregulation, liberalisation, corporatisation, privatisation, contracting, competitive tendering and decentralisation. Together these words illustrate the complexity of institutional changes that were to take place in the following decades as well as the fact that these changes were much more than a simple dichotomy between having competition and having none.

This Part of the thesis contributes to bringing more clarity into these topics by investigating the following research questions:

- ▶ What main institutional developments can we observe in the public transport sector since the start of the current era of reform in this sector, what main factors led to these developments and how were these reforms perceived? (Chapters 3 and 4).
- ▶ How to classify institutional frameworks, in order to bring more clarity in the debate on institutional reforms and facilitate presentation and comparison? (Chapter 4).

Chapter 3 “Towards competition in the 1980s and 1990s” provides a first overview of institutional developments by describing influential reforms that took place in Great Britain in the first half of the 1980s and taking stock of the situation and outlook in 1990. This Chapter includes a first overview paper published in 1990 that summarises the changes that took place in the preceding decade and analyses the potential for further regulatory change given by the context of the 1986 British bus deregulation:

Gwilliam, K.M. and D.M. van de Velde (1990), “The Potential for Regulatory Change in European Bus Markets”, *Journal of Transport Economics and Policy*, 24, 333-350

Extracts from a paper discussing general trends and the choice of intervention are also included:

Van de Velde, D.M. and L.I.E. Sleuwaegen (1997), “Public Transport Service Contracts: Searching for the Optimum”, *International Journal of Transport Economics*, 24, 53-74.

Chapter 4 “Typologies of institutions” establishes conceptual frameworks developed in response to the observed lack of knowledge on and understanding of institutional reforms. Together they allow describing, classifying and comparing institutional frameworks in public transport in order to clarify debates on reforms and on the role that competition could play within the public transport sector. Two of these main reference frameworks were published in a paper included in this Chapter:

Van de Velde, D.M. (1999), “Organisational forms and entrepreneurship in public transport (Part 1: classifying organisational forms)”, *Transport Policy*, 6, 147-157

Chapter 5 “Competition in practice” starts by revisiting this Part’s the first research question by taking stock of institutional developments by 2005, using extracts from two book chapters originally presented as keynote addresses at the 8th and 9th Thredbo conference:

Van de Velde, D.M. (2005b), “The Evolution of organisational forms in European public transport during the last 15 years”, In: *Competition and Ownership in Land Passenger Transport, Selected Papers from the 8th International Conference (Thredbo 8)*, Rio De Janeiro, September 2003 (Ed.: Hensher, D.A.), 481-513, Elsevier, Amsterdam

Van de Velde, D.M. (2007), “Regulation and competition in the European land transport industry: recent evolutions”, In: *Competition and Ownership in Land Passenger Transport, Selected papers from the 9th International Conference (Thredbo 9)*, Lisbon, September 2005 (Eds.: Macario, R., J. Viegas and D.A. Hensher), 81-94, Elsevier Science, Amsterdam

It then moves on to discuss the process that led, during that period, to the adoption of a major piece of European legislation (EU Regulation 1370/2007 on public service obligations in public transport) which has since determined the institutional context of European public transport as far as the awarding of exclusive rights and financial compensation for the realisation of public service obligations in public transport is concerned. This includes the following paper:

Van de Velde, D.M. (2008) “A new regulation for the European public transport”, *Research in Transportation Economics*, 22, 78-84

The Chapter closes by summarising elements resulting from practice after the adoption of EU Regulation 1370/2007.

Conclusions are drawn in Chapter 6 and sets the agenda for Parts III and IV.

3 Towards competition in the 1980s and 1990s

Competition, market principles and even proper contracts between authorities and operators were almost completely absent from the list of regulatory features used in the sector at the beginning of the 1980s. This was to change radically in the next decades with market-based reforms introduced in Great Britain constituting major impulses for a renewed thinking on the role of competition in local public transport.

Section 3.1 takes stock of the situation at the end of the 1980s and focuses on the main reform features undertaken in Great Britain in that period. In Section 3.2, a paper by Gwiliam and Van de Velde (1990), written in the context of the evaluation of the first British competition-based reforms, looks at the potential for further regulatory change in public transport elsewhere in Europe by reviewing regulatory regimes and attitudes to reforms in ten Western European countries and comparing this to Great Britain. This paper was published at the beginning of a period of debate on competition options that burgeoned in the Netherlands and in other countries in the following decade, leading to various institutional developments, not all of them pursuing competition as central element. Elements of these debates are summarised in Section 3.3, including sections of another paper by Van de Velde and Sleuwaegen (1997) that attempted to widen the debate to a more theoretical perspective. Final observations on this initial period in relation to our first research question are given in Section 3.4.

3.1 Taking stock at the end of the 1980s

Public transport services at the beginning of the 1980s in European urban areas were typically provided by municipal companies. The situation in suburban and regional transport was more diverse: small private operators existed in Belgium, Denmark, Germany and Sweden; publicly owned regional operators were present in Germany and the Netherlands; private operators existed in France; while national publicly owned companies also operated in the Netherlands, Great Britain and Germany.

Most of those services were provided under authorisation regimes dating back to the 1930s and originally based upon private commercial initiative. Essentially, that form of regulation constituted a reaction to the free entrepreneurship that had developed at the beginning of the twentieth century in road passenger transport and whereby private operators had taken the initiative to create commercially viable passenger transport services using motor buses. That commercial initiative had become viable due to technical progress that had en-

abled the provision of comfortable road passenger transport services combining new technologies such as the internal combustion engine, better suspension and rubber tires, thus replacing less attractive horse-drawn vehicles. Foster (1963, p. 297-298) mentions that regulation by authorisation regimes (quantity and quality ‘licensing’, often complemented by tariff obligations) then resulted from the 1920s’ and 1930s’ perception of a situation of ‘wasteful’ and ‘cut-throat’ competition between commercial providers. This was said to have led to a ‘chaotic lack of system’ and various malpractices such as ‘chasing, nursing and hanging back³ to get each other’s customers’. Another argument was that regulation had been introduced as reaction to what was perceived as ‘unfair’ competition to railway services, themselves already subject to various tariff and service regulations to which newly created bus services were not subjected⁴. However, Mulley (1983) shows that the origins of regulation were motivated by safety in the early 1920s, despite the popular view, rehearsed in front of the Royal Commission that promoted the regulation, that chaotic competition and resistance from the railways have been given as reasons. The Traffic Commissioners, established under the 1930 Act, effectively brought about a concentration in the bigger companies (Glaister and Mulley, 1983).

The period of the 1960s until the mid-1980s then witnessed a rapid rise in public transport subsidisation needs, both in Britain and elsewhere in Western Europe. From a situation in the 1960s in which public transport was essentially self-sufficient, subsidies to support the provision of public transport services grew in some cities to reach up to 60% of total production costs. Academic studies started to analyse this situation, first in the US and later also in the UK (Bly et al., 1980; Pucher et al., 1983; Button, 1984), and concluded that while subsidisation had allowed to keep fares down and increase supply, it had also leaked into inefficiency, with increasing unit costs as a result. Button (1984) noted that there was a lack of pressure to examine the issue of subsidy growth in Britain in the 1970s and linked this to the availability of adequate funding and the presence of other policy priorities. This situation would change completely by 1984 with the British government reviewing expenditures and the Monopolies and Mergers Commission⁵ starting to express concerns about the efficiency of public transport. These growing suspicions of increasing inefficiency subsequently determined changing attitudes towards existing public transport regulatory regimes, not only in the UK but also elsewhere.

Regulatory changes had already begun to appear a few years earlier with the 1980 Transport Act that had deregulated, privatised and liberalised the British long-distance coach market. The British government then introduced further reforms in local and regional public transport in the following years. Competitive tendering was introduced in London’s bus services under the London Regional Transport Act 1984, with the first round of tendering taking place in the summer of 1985. The 1985 Transport Act introduced by 26 October 1986 a complete deregulation of all local and regional public bus transport with the exception of Northern Ireland and the area of greater London. These reforms constituted a major change in the public transport regulatory landscape. Introduced by Margaret Thatcher’s Conservative government, they were directed both at increasing the

[3] See, for example, Foster and Golay (1986) for a description of these practices.

[4] Issues of coordination, integration and transport sector regulation are discussed further in Van de Velde (2005a).

[5] Monopolies and Mergers Commission (1982) cited by Button (1984).

role played by 'the market' as a matter of principle or dogma, and at tackling the inefficiencies that were observed in the sector. This all fitted in the wider neo-liberal thinking of *Thatcherism* in the UK and *Reaganism* in the US and would further influence the spirit of times and policy makers in various countries. This rise of market oriented management also happened in other sectors that were until then usually managed by the public sector and came to be known as 'New Public Management' (NPM) (Hood, 1995).

Note that in the same period of time, the newly elected French socialist-communist coalition had introduced a new public transport legislation in 1982 (*Loi d'Orientation des Transports Intérieurs*) constituting a first step towards a new regulatory framework for the French public transport sector by imposing the establishment of a contractual relationship between transport operator and transport authority. This step, contrary to the reforms implemented in Great Britain only a few years later, was not accompanied by large scale privatisations, deregulation and liberalisation. It would, though only a decade later, be associated with the introduction of a stricter competitive tendering regime in 1994.

The reform introduced in London in 1984 led the publicly owned operator of London's bus services to introduce a system of route-by-route competitive tendering, gradually subcontracting its own routes to various operators who had to compete for these contracts, i.e. a regime of competition 'for the road' (Kennedy, 1995a). The first round of tendering took place in the summer of 1985. The newly created bus subsidiaries of London Transport were the first to be able to compete for those routes. The private sector was gradually involved in those contracts up to a point where all London Transport bus subsidiaries had been sold to private operators. This regime maintains a centrally planned and fully integrated network designed and managed by London Regional Transport⁶ (one fare system, one information system, integrated services) while introducing competition for the operations of individual routes. It also meant that the London public operator was gradually transformed. From a public provider of all public transport services, it became a public organisation responsible for planning and contracting out all bus services by competitive tendering, while continuing to carry all revenue risk on those services.

The reform introduced in Great Britain outside London under the 1985 Transport Act (implemented on 26 October 1986) was radically different and constituted an even more revolutionary change as it introduced a full deregulation of bus services outside London⁷. Differently from London, this reform allowed operators to register routes and timetables where and when they believe such could be done on a commercial basis, i.e. without specific financial support (subsidy) or request from the authority. Deregulation abolished all restraints on ticket pricing, timetable and route. Consequently, this led to the possibility of competition 'on the road'. All that was needed was a simple registration, consisting of a six weeks' notice⁸ to which incumbent operators were not allowed to object. Without

[6] London Transport changed names several times during the last decades. While originally known as London Regional Transport, it is currently known as Transport for London.

[7] Note that the UK Government did not go straight to deregulation of local bus services. Alongside the deregulation of intercity coach services, were the Trial Areas of which the area around Hereford was most notable, where the regulation of the 1930 Act was suspended as a trial to full deregulation (see, e.g., Fairhead and Balcombe, 1984; and Evans, 1988 for an analysis of its consequences).

[8] This was later modified to eight weeks.

exclusive rights on routes, operators were allowed to register a route even when competing operators already served it. Two forms of subsidies remained available, though. Local authorities had the possibility to create ‘Concessionary Fares Scheme’, by requesting operators to give discounted fares to specific passenger groups (e.g. elderly people, children or handicapped) and compensating such rebates on the basis of the number of passengers carried (taking account of generated ridership through a fare elasticity calculation). A national ‘Fuel Duty Rebate’ was also available to reimburse fuel excise taxes to operators⁹. Both subsidies led to more services being provided on autonomous commercial grounds than would have been the case otherwise. In addition, local authorities in deregulated areas had the possibility to organise for additional bus services there where they deemed the result of the market process to be unsatisfactory on social grounds (for example in some areas or periods of the day). To realise this, they could contract operators to provide additional services. Such contracts were usually submitted to competitive tendering unless only a minimal amount of funding was involved (*de minimis* rule). In parallel with the implementation of this deregulation, all main bus companies owned by the state were privatised. The sell-off of these National Bus Company subsidiaries was completed by April 1988, followed by the Scottish Bus Group. Municipal operators had to be simultaneously privatised or at least put at arm’s length, i.e. ‘corporatised’ and made independent from local political influences.

In a nutshell, the reforms introduced led to two very different institutional frameworks (Table 4) and an academic controversy developed around these two regimes just after the publication in 1984 by the British Department for Transport of its policy document that would lead to deregulation outside London (White Paper “Buses” summarised in Banister, 1985). The White Paper advocated the deregulation of all bus services in Britain outside London, although this was eventually limited to the area outside London. The ensuing controversy led to a fierce debate on the relative merits of deregulation and competitive tendering. Gwilliam et al. (1985a) argued against deregulation and in favour of a competitive tendering regime. Beesley and Glaister (1985a) replied, defending the advantages of the free market. The issue of cross-subsidisation between routes of a network played an important role in these discussions¹⁰. Gwilliam et al. (1985b) proposed a rejoinder, and ultimately both parties agreed to disagree in the last reply by Beesley and Glaister (1985b) that summarised their points of disagreement.

Table 4 | London versus Great Britain outside London

London	Great Britain outside London
▶ Discontinuous competition for contracts	▶ Continuous competition for passengers
▶ No service planning freedom for operators	▶ All service planning freedom for operators
▶ No revenue risk for operators	▶ Full revenue risk for operators
▶ Competition <i>for</i> the road	▶ Competition <i>on</i> the road

[9] This subsidy was later reduced to an 81% rebate and since then known as ‘Bus Service Operator Grant’.

[10] This issue was to continue to play an important role in discussions on the merits of deregulation (see, e.g. Colson, 1996; and Simpson, 1996).

The potential for regulatory change in 1990

By 1990, the first effects of the British reforms had become visible. A special issue of the *Journal of Transport Economics Policy* was dedicated to the analysis of the consequences of the British 1986 bus deregulation. In that issue, Heseltine and Silcock (1990) found that the privatisation and deregulation had led to cost savings by about 30 per cent for former urban operators, and 15 to 20 per cent for operations elsewhere outside London. In the same issue, White (1990), engaging in a tentative welfare balance sheet for London and for the rest of Britain, concluded that the London example of competitive tendering had worked much better from a passenger's point of view as substantial savings had been realised, as had also been the case in deregulated areas, but without the associated losses observed in those areas.

The question then was whether any of these reforms would be copied by other countries. This question was addressed in the same issue of the *Journal of Transport Economics Policy* in an outlook paper by Gwilliam and Van de Velde (1990) that analysed the potential for further regulatory change in public transport in other European countries. Based on the results of structured interviews with transport operators, authorities and researchers, this paper investigated ten Western European countries in 1990, comparing circumstances and attitudes towards regulatory reform in order to appreciate the likelihood of the British example being followed in other European bus markets.

Written when the first analyses of the consequences of the British bus deregulation became available, the following paper¹¹ (Gwilliam and Van de Velde, 1990) was the first to provide a comprehensive overview of the reforms undertaken in the 1980s in ten Western European countries. An earlier study by Hibbs (1985) already provided a first review of bus and coach regulation throughout the world, but that study gave a more detailed overview of the situation in Anglo-Saxon countries throughout the world and a less detailed analysis of continental European countries. Also, Hibbs' study was more concerned with developing a taxonomy of 'licensing' than attempting to discern the existence of a debate on sector efficiency or a potential for regulatory change. He did however observe a lack of interest for deregulation in a number of countries and conjectured that this might be related to their Civil Code traditions rather than the Common Law tradition (Hibbs, 1985, p. 35-37; 1986).

Our paper, focussing on ten Western European countries, describes for each of the selected countries the institutional context, the structural potential for competition and the nature and extent of likely future change. These features are then compared to the British experience, in an attempt to explain why other countries have been reluctant or slow in following the market reforms implemented in Great Britain.

Contributing to answering the first research question, our paper concludes by observing that, by 1990, competition still played a relatively minor role in most countries studied. The paper considered this to be paradoxical in view of the liberal spirit of the age and the

[11] The author of this thesis wrote this paper with Prof. Ken Gwilliam, when working together at the department of transport and port economics at Erasmus University Rotterdam.

reforms that had been introduced in some countries. The paper explains this by differences in perceptions: high costs and lagging innovation were not always perceived to be serious problems; elements considered crucial at the local level in some countries, such as direct local political control and fare and service integration, were perceived to be incompatible with deregulation; and this also appeared to be linked to many perceptions being based on scant information about the real nature of the reforms undertaken in Britain.

The Potential for Regulatory Change in European Bus Markets

Gwilliam, K.M. and D.M. van de Velde

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1. INTRODUCTION

Market regulation typically arises when government feels itself unable to achieve its objectives while the market is free. So it sets up political, administrative and regulatory structures to achieve those objectives. Economic agents adapt their behaviour to the regulation, and economic performance is the outcome. The longer a regulatory regime is in place, the greater is the possibility of regulatory failures associated with distorted inducements and regulatory capture. Demand for regulatory reform thus tends to arise from changes in the perceived balance between the opposing dangers of market and regulatory failure. This simple paradigm suggests that regulation can best be judged in terms of the specific objectives of government and the history of the regulatory environment.

This paper reviews from that viewpoint current attitudes to deregulation in ten Western European countries. It is based primarily on the results of structured interviews with operators, administrators and transport researchers. In section 2 we analyse the current situation in ten nations, taken roughly in the date order of their most recent major regulatory change or review. For each country we first identify the legal and institutional basis of the regulatory regime. Then we describe who are the operators, how they have been organised (with particular reference to employment of labour), and how they have performed (with particular reference to costs of production and innovation). Next we consider the structural potential for competition either in current competitive experience (for example, in contract or scheduled express markets), or in the existence of profit-seeking companies already within the industry. Finally, we discuss any recent changes in the regulatory regime, and assess, in the light of the observed national philosophy on bus transport, the nature and extent of likely future change.

In section 3 we compare British experience and that of other countries, using the same basic structure and finally attempting to explain why other countries have been so reluctant, or so tardy, in following the UK pattern. A number of definitional issues complicate the comparisons.

Cost covering ratios are quoted in terms of locally applying conventions, which may vary substantially (for example, in the treatment of capital costs or of the administrative costs of co-ordinating authorities). We have not attempted to standardise those measures. In discussing the way in which subsidy is paid we distinguish between "pure deficit finance", which is the automatic ex post covering of the deficit accrued, "norm-related finance", which is subsidy related to some general and ex ante norms of performance, and "contract-related finance", which is subsidy based on the contractual outcome of an ex ante but specific negotiation or competition. When we refer to a "commercial company" we are simply implying the application of the normal national conventions on accounting forms and obligations, and not that the company is necessarily privately owned or profit seeking. Finally, when we refer to a "monopoly franchise" we mean the grant of exclusive rights to operate; these may be on either a route by route basis or an area basis, and are not necessarily either subject to any initial competitive bidding or subsequently saleable.

2. THE CASE STUDIES

2.1. Eire

Bus services in Eire are still provided under a national licensing law of 1932, with no localised discretion in application. Most local bus operation is undertaken by the two bus subsidiaries of the semi-state company CIE: namely, "Dublin Bus" in the capital and "Bus Eireann" in the other cities and rural areas. These companies have an effective monopoly in urban services, as applications for licences from the private sector are usually opposed by the state company, and few have been issued. However, despite the licensing system there are about 40 private operators competing with Bus Eireann in the inter-urban market, sometimes without having been licensed. Rural school transport services are also provided predominantly by very small private operators under contract to Bus Eireann, but competitive tendering is not used. Variations of routes and fares are initiated by the operators, but increases in fares have to be sanctioned by the Ministry of

Transport, which has had a strong moderating influence, and the state companies are deficit financed.

The state companies are 100 per cent unionised; two main unions accounting for most of the bus crew. Bus crew earnings are estimated to exceed the average earnings of male industrial workers by between 5 and 10 per cent, and the same wages are paid to female crew. It has been asserted that cost savings could also be achieved through improved work practices and reduced absenteeism. The small private companies are mostly not unionised, and their wage rates appear to be lower.

Standard double-deck vehicles dominate urban operations, and coaches are used on all inter-urban routes. A small number of minibuses (3 per cent of the fleet) have been introduced in Dublin in the last three years. The Dublin network has been revised substantially in the last three years, but local service networks are generally very stable.

Revenues cover 83 per cent of costs for Dublin Bus and 96 per cent for Bus Eireann, but these proportions include direct state compensation for free travel for pensioners and subsidies for school transport. There is no institutional co-ordination between public transport and other urban or local planning functions, and, because of the absence of overlapping operations, little in the way of multi-mode or multi-operator ticketing. The only element of inter-operator co-ordination that would be vulnerable to competition is that a competitive bus industry might set out to compete more fully with the Dublin Area Rapid Transit urban rail system.

Existing licensing powers could be used to allow new entry, though more complex tendering systems would probably require new legislation. A transport bill is now being prepared, and bus regulation is being actively considered. The centre-right coalition government has a general predisposition towards liberalisation, but free entry is not considered likely.

2.2. West Germany

Entry to the bus industry is heavily restricted in the Federal Republic. The relevant level of government has power under a law of 1961 to grant licences of unlimited duration and to determine routes and fares.

In urban areas the general rule is to have one main municipally owned operator. Some are comprehensive public utility companies practising internal cross subsidy between electricity and public transport. Sometimes routes licensed to the municipally owned companies are sub-contracted to private operators, or some vehicles are rented from private operators.

In more rural areas many services were provided by the Geschäftsbereich BahnBus (GBB), which was owned and deficit financed by Deutsche Bundesbahn. Many GBB services were replacements of rail services. GBB has recently been split into 25 regional companies to receive fixed, lump sum grants. Private sub-contractors provide 9,000 of the 13,600 buses operating GBB services; private operators also operate in their own right, though there is no commercial competition for licenses.

In the long-distance market the Federal Ministry of Transport as licensing authority has consistently refused any applications to compete with the national rail system, except for an international bus network in which the Federal railway company is itself a main shareholder.

The essential feature of the system at all levels is thus not public ownership of operations but tight administrative control and co-ordination of routes, fares and timetables. That tight control is formally the responsibility of the municipality, but one of the best-known features of public transport in Germany is the co-operation between companies to exercise that control themselves through self-regulation.

Commercial co-operation can range from agreements between companies to market each other's tickets to the adoption of a common pricing system for a group of companies (Tarifgemeinschaft). Joint network planning and timetabling may be undertaken through a transport community (Verkehrsgemeinschaft). If a specific organisation is set up to perform these functions it is usually called a transport union (Verkehrsverbund). In such a case the regional (urban) network of DB is usually associated to it. This last form of co-operation is typical for larger urban areas or conurbations. If the chosen legal structure of the union is that of a private company, the labour unions are usually also associated in the management board of the company.

These transport communities can be organised on the initiative of local governments (municipalities, Länder, or other local authorities), but also on the initiative of transport companies themselves (as in Hamburg). Attempts are now being made to develop similar forms of co-operation in more rural areas, in order to enhance integration and to increase responsibilities at the local level.

There is no great variety in the sizes of vehicles used. Articulated buses are used on heavier routes, and touring buses in some rural areas where operators combine scheduled and occasional transport services. The composition of the fleet has not changed significantly in recent years.

Local transport under this regime has been very stable; existing operators are rigorously protected against new entrants. The industry is strongly unionised, with a high level of employment protection. There is one labour union, which makes separate national agreements for private and public sector operators; supplementary agreements are reached at the local level, taking wages substantially above the nationally agreed floor. Wages and operating conditions differ substantially between the public sector companies and the private sector companies. Within the publicly owned sector, the specialist public transport companies are thought to be more efficient than those which are part of more general municipal utility companies. It is therefore possible that the introduction of competition could lead to substantial reductions in labour costs.

The proportion of costs covered by direct sales revenue varies between about 60 per cent for the urban operators and 80 per cent for the regional operators. The responsibility for deficit funding of the municipal bus operators is shared by the municipality, the Land and the Federal Government, and part of the fuel tax is earmarked for the support of public transport and channelled through municipal authorities. At present, the Federal Government would like the Länder and the municipalities to meet more of the deficits.

In return for supporting the Kohl coalition, the liberal FDP extracted an agreement that economic deregulation should be systematically examined; an interim report of the deregulation commission on the bus industry, to be published in spring 1990, is likely to conclude that the protection of DB in the long-distance market is unacceptable and that the Federal Ministry should prepare for transition to total long-distance deregulation, albeit phased over a number of years. For local bus services it is more likely to recommend movement towards supply side competition within comprehensive tendering.

2.3. Italy

In Italy local public transport services are provided under the terms of a Regional Transport Plan Act of 1981. Under this act the region acts as the licensing authority for local public transport services, granting monopoly franchises of long duration, for which there is no commercial competition. In the larger towns the monopoly is usually granted to the municipally owned public transport company, but in rural areas the concessions may be granted to public or private companies. Longer-distance services are also the subject of monopoly franchising, without any formal protection in cases where local and longer-distance services overlap.

Co-ordination of transport services within a region is provided for in a regional transport plan. Operators can propose changes in services and fares but all changes must be approved by the licensing authority. Only 50 per cent of the total costs (including investment expenditures) are met from farebox revenue; financing of the deficit is shared between the region and the municipality.

Within this system labour is strongly unionised. Four major unions operate in both public and private sectors, making agreements at the national level. Multi-operator ticketing systems are rare, though their introduction is now being considered.

The Italian system is thus another highly regulated system, with urban operation almost exclusively in the hands of municipally owned companies. There is some current discussion of liberalisation, but little experience of competition in the transport sector, and few obvious sources of competitive initiative in the industry.

2.4. France

The organisation of public transport in France, outside Paris, is based on the arrangements of the Loi d'Orientation des Transports Intérieurs (LOTI) of 1982, which allocates responsibilities between the various tiers of local government. At the highest level 22 regions have some responsibilities for regional rail transport, but effectively no responsibility for bus transport.

At the next level the 96 départements are normally responsible for bus services outside urban areas. These are secured through monopoly franchise contracts, mostly on a route-by-route basis, often with small private operators. It is possible for subsidised contracts to change hands, but patrimonial rights attach to unsubsidised operations, which are often closely integrated with other local business activities. There is strong administrative co-ordination of services and no direct competition, despite the large number of relatively small operators. School services and medical and works contracts are also organised by the département, frequently on the basis of competitive tender.

Public transport within the périmètre d'agglomération of urban areas is controlled by an Autorité Organisatrice (AO), formed by an association of the communes within the area. The AO normally enters into a single area monopoly contract, within which it determines service structures and fares levels. The contract, which may be for between five and nine years, may formally require the operator to supply only management expertise without taking any risk, or may involve both cost and revenue risk. Within the urban areas there are normally no special school services. The land, garages and vehicles

are normally owned by the AO. Moreover, the operating staff normally have security of employment, so that in the event of a change of contractor both the physical and human operating assets are transferred to the new service managers. Even the management contracts appear to change hands infrequently, so that contracts confer secure long-term monopoly rights. For both fares and service structures there may be consultation with operators. Fare levels are constrained by a national government guidance, which in many cases is a binding maximum limit; many AOs would like to increase prices more than the framework allows.

Four major groupings control almost the whole of this market. Although over half of the business is formally in private company hands, all face the same unions and the same working agreements.

In areas with a population of more than 30,000 a special tax earmarked for public transport support, called the *versement transport*, is charged on all business establishments with more than nine employees. Outside Paris municipal operations are on average financed about 50 per cent from the farebox, with 30 per cent coming from the *versement transport* and 20 per cent from other local sources. The farebox proportion varies from about 80 per cent in the smaller municipalities to only 30 per cent in Paris.

About 60 per cent of the workforce is unionised, with the same unions facing both private and public sector operators. There are three or four general unions operating on a national basis, but there is no closed shop and the unions are relatively weak. There is a national wage negotiation, adjusted substantially by local agreements. There appear to be both productivity differences and wage rate differentials of 10 to 15 per cent between operators in larger and smaller cities, reflecting differences in cost of living and tighter labour markets in the large cities as well as the bargaining power associated with the broader monopoly.

The bus industry was considered to be poorly paid until the seventies, but average earnings of bus crew now appear to exceed average industrial earnings by up to 20 per cent. This relative change has been attributed to the support arising out of the *versement transport*, though there does not appear to be any pressure to enlarge this differential. The bus industry in France, unlike that in some other countries, appears to be the preserve of the indigenous male, with little female or immigrant labour.

At the moment the national rail company, SNCF, is protected against bus competition in the inter-urban express market. That may change as it concentrates increasingly on the long-distance and international

market and is less inclined to defend all parts of its inter-urban monopoly. There are, however, many private local bus operators outside the urban areas, even though there is no multiple operation on routes or current competition. There is also a large contract and touring market, and many of the operators outside the urban areas are involved both in scheduled and in contract businesses. Even within the urban areas there is some subcontracting. So competitive potential exists.

Technical innovation has centred on specific cities, particularly in LRT and larger vehicles. Articulated vehicles make up 10 to 15 per cent of the fleet; only about 2 per cent of the fleet consists of smaller vehicles, and these are mostly demanded for topographical rather than for competitive or cost-minimising reasons. Service innovation is also limited. In the mid-seventies there was a fear of ossification of route structure, and many authorities undertook radical redesign of networks. But it is now estimated that no more than 10 per cent of services change substantially each year, in a well-recognised process concentrated at the beginning of the school year.

An increasing number of urban systems are multi-modal in character. Where there is more than one operating company (for example in Lille or Grenoble), there is strict administrative co-ordination between the modes, as well as multi-modal ticketing systems. In Paris bus routes typically cover shorter distances and are co-ordinated with rail networks, including those of SNCF, though in other areas there is less conscious co-ordination of buses with SNCF. When there is over-running of shorter and longer distance routes there is strong protection of the more local services.

The 1982 law reflected an increased commitment to public transport, and to local political responsibility and discretion. At the moment no further change is under active consideration for the urban areas, though outside the urban areas the *départements*, which can afford it, are tending to seek firmer control through increasing subsidy rather than through public ownership of operations.

In summary, the current French system involves strong local political control of monopoly operators, some of which are private in legal form and some public. Wage rates in the industry appear to be above what would be free market rates, despite a relatively weak union organisation, and potential entrants do appear to exist. A substantial injection of competitive pressure could probably be achieved within the existing legal situation, if the will existed. There is little sign that that is likely. Partly that is because the distributional consequences of reduced real wages in the bus industry are not desired, but above all because of the strong, and commonly held, philosophy

that public transport is a matter for the control of the local public authorities.

2.5. Spain

Urban and interurban transport in Spain is regulated under a framework contained in the Transport Act, 1987. The relevant local authorities – the municipal councils in urban areas – are responsible for determining both route structures and fares. The law requires transport to satisfy community needs at a minimum social cost, but also requires that special attention be given to the needs of low-income groups, elderly and disabled people, and those who live in rural areas.

Operation of the scheduled network is performed under an area monopoly franchise, which may be given for a minimum of eight or a maximum of 20 years. School journeys may be provided by charter companies under a competitive tendering system, but there is no suggestion that this might be extended into any other part of the scheduled service market. Of the 185 companies operating urban bus services in Spain, 28 are municipally owned, three are labour co-operatives, and the rest are privately owned. Private companies operate in 129 out of 134 towns with population below 100,000, but in four of the five cities of over half a million population transport is provided by the municipalities. Services in medium sized cities are fairly equally divided between public and privately-owned companies.

Public transport employment is highly unionised, with two main national unions and a number of smaller local unions involved. National wage agreements are the basis for locally negotiated amendment. Wages appear to be higher in the larger cities, but public ownership also appears to have an independent influence in explaining high wage levels and low crew productivity.

In most areas urban, suburban, school and charter services are provided by different companies, overlapping in area but not competing for scheduled service. There is no competitive long-distance bus sector. Revenue to cost ratios for medium-sized towns vary between 60 and 90 per cent; in Madrid and Barcelona they are lower. Both private and publicly owned operators receive deficit finance on a network basis under the terms of their franchise. There is variety in sizes of vehicles, but in recent years there has not been much change in the composition of the fleet.

Only the local planning authorities of Madrid and Barcelona practise co-ordination between public transport modes, with multi-operator and multi-mode ticketing systems, pooling of revenues and central planning of services. The local authorities determine

when services are to be modified; this happens seldom, and information is provided by the operators.

The transport regulation system was reconsidered and modified as recently as 1987, and the socialist government has clearly no intention of moving to a more competitive regime. Though alternative governments might be more liberally inclined, the organisation of public transport has not been a prime issue of public concern. There is relatively little discretion available to local authorities to introduce competition within the existing law.

In summary, there appears to be some evidence of inefficiency associated with monopoly franchising. Except for Madrid and Barcelona there is little in the way of system co-ordination to lose, and there do appear to be enough existing operators for competition to occur if it were encouraged. But there is little political pressure for change.

2.6. The Netherlands

The basis for regulation and financing of the bus industry in the Netherlands is the 1988 Passenger Transport Law. For all public transport services a licence is required. For urban transport the licensing authority is the municipality; for inter-urban transport it is the Ministry of Transport.

There are nine municipal transport operators owned directly by the municipalities. A further 45 municipalities act as controlling authorities but obtain their services by contract from the 16 regional bus companies. These were formerly owned by the Dutch National Railway but were sold out in 1982, mainly to a state-owned holding company, which owns 80 per cent of the regional bus operation.

Fares are strictly controlled by the government on a national tariff which supports a nationally available multi-ticket system (the *strippenkaart*). Service levels and structures may be proposed by the companies but are determined by the licensing authorities, ostensibly in order to keep supply roughly in proportion to levels of demand on a route-by-route basis. About 25 per cent of the costs of urban companies and 40 per cent of the costs of regional companies are covered by ticket revenues. Municipalities owning their own companies control route structures directly. Change is administratively difficult, and route structures are very ossified. Until 1988 pure deficit financing applied, but since then the levels of service and of subsidy are determined in advance in order to give some inducement to efficiency.

Although in principle municipalities are able to contract with a number of different companies, in practice they normally contract for long periods with a single contractor.

Given the common ownership of the regional companies (which enforces a policy of non-competition) and the absence of either a large domestic coaching section or any inducement to enter, there is little effective competition. Only in a few places (for example, Haarlem) has there been some attempt to provide competitive services with small buses and taxis.

More than 50 per cent of staff is unionised, with separate unions for the regional companies (two different unions) and the municipalities (part of a general union). The municipal general unions typically lead the wage settlement, with the transport unions trying to follow the settlement closely. There is also a separate union active in the coaching sector. Wage structures are very complex. Average earnings in the regional companies are, however, higher than in the municipal companies. Both in the number of direct productive hours per driver employed and in the proportion of paid hours driven there is a difference of about 30 per cent between best and worst performers. Absenteeism and sickness rates also seem very high.

There is very little scope for independent initiative. Most educational transport is undertaken on normal public transport services, and the costs of the concessions are included in the general subsidy payment. Free public transport for students in higher education is about to be introduced, and the costs will again be consolidated into the general support system. Only transport for disabled students and long-distance schooling movements have specific scholar services which are contracted by the municipalities, sometimes with private companies. About 1 per cent of service is subcontracted from the regional operators to the private sector. This proportion is increasing slowly. The private coaching sector is predominantly engaged in the international touring market.

The bus fleet is very standardised. Vehicles are mostly modern and well equipped, particularly with radio systems to activate priorities at junctions. Some subcontracting of scheduled services to small vehicles has started recently, and at the beginning of 1990 a two-year experiment was started to provide local distribution from railway stations by shared taxi at a low fixed supplement on the rail fare.

Despite the opportunities for municipalities to introduce some competition within the existing law, the Netherlands remains an uncompetitive, high-cost regime. That appears to be a consequence of the existence of the national fares scheme with its associated national financial support. The emphasis in controlling subsidy costs is presently directed towards the payment of subsidies based on cost and revenue norms, rather than as pure deficit financing,

leaving any residual deficit to be covered by the local authorities out of their general revenues. This may encourage authorities to look at subcontracting to lower-cost private operators, and at controlling fare evasion. Transport policy in general, and public transport policy in particular, is very high on the political agenda, but deregulation is not.

2.7. Belgium

Under the regulatory system which existed till 1990, monopoly rights in urban public transport in six of the largest cities (Brussels, Ghent, Antwerp, Charleroi, Liege and Verviers) were granted to local, publicly owned companies. Bus services in rural and smaller urban regions were by law provided by regional operating units of a nationally owned bus company. About 40 per cent of the services of the national bus company were subcontracted to private operators on a standard contract specifying the service to be provided, the fares and the rates of remuneration, leaving them little freedom or risk. Subcontracting is of minimal significance in the main urban areas.

Fares are fixed by the public transport companies subject to ministerial approval. The cost-covering ratio was around 30 to 40 per cent for the urban bus companies and between 25 and 55 per cent for the various regional sub-units of the national bus company. In 1987, in an attempt to reduce the cost of subsidy, the government introduced a system of compulsory annual adaptation of average fare levels, but operators were allowed to decide how the changes should be structured. The urban companies used this freedom to encourage greater use of multi-operator travelcard schemes.

Union membership is high, and, though there are separate negotiations for the different sectors, settlements appear to be very similar. Furthermore, the national bus company was legally compelled to assure the same status for its personnel and that of its sub-contractors by the inclusion of a special clause in all sub-contracting agreements. Labour unions are also represented on the conseil d'administration of the urban companies, though since 1987 this has ceased to be the main management board.

On 1 January 1989, as part of the federalisation of the national political structure, responsibility for the regulation of bus transport was transferred to the three regional governments of Flanders, Brussels and Wallonia. The Flemish arrangements are expected to be quite similar to those for Wallonia, discussed below.

The Walloon part of the national bus company and the urban public transport companies of Wallonia

(Charleroi, Liege and Verviers) will be merged into a quasi-commercial regional company, owned by the region. Five non-overlapping local operating subsidiaries will be created, with area monopoly powers granted under *contrats de gestion* for between four and six years. The regional public transport company will determine levels of fares and allocate subsidies to the operating companies, whose activities they will co-ordinate (common ordering of vehicles, promotion of a common statute for the personnel, common services between operating companies, etc.). The operating companies will determine timetables and are to be allowed to sub-contract their operations.

The arrangement in Brussels is likely to be quite different. The Brussels regional government will probably take all strategic powers over fares and service structures, to be administered in co-ordination with the regional urban planning department, and give all operational responsibilities to a restructured publicly-owned monopoly operating company.

The essence of the current reforms in Belgium is thus a move towards increasing the planning responsibility of local government (both regional and municipal), while giving the companies a little more entrepreneurial freedom in operation by giving them a more commercial form. However, despite the continued use of sub-contracting to the private sector, there appears little role for real competition. The wish to reduce subsidy has had little effect in attempts to reduce costs through any effective pressure on labour costs; both unions and the centre-left government are against any greater participation of the private sector in bus operations.

2.8. Denmark

Before 1978 bus services in Denmark were licensed by the municipalities for intra-municipal transport, by county councils for inter-municipal transport, and by the national passenger transport council for inter-county transport. Since 1978 any county council, with the agreement of one third of its municipalities representing at least half the population of the county, has been able to create a regional transport company to manage all regular public transport operations within the county. All councils except Fyn and Aarhus have done so.

In principle the public transport company has the power to take over all installations, vehicles and services. Personnel then also have to be taken over, and have the right to retain existing conditions of employment. The licensing power is also transferred from the municipalities and the county council to the (politically constituted) board of the transport company. If there is no public transport company, the regional council can require

municipal authorities to change the licensing conditions in the interests of better co-ordination of transport within its area. Railway companies can also request the licensing authority to take co-ordination requirements into account.

In practice these regional companies have usually planned and marketed services, but have generally licensed other (mostly private) companies to operate. Licences are granted for five to eight years and specify route, timetable, fares and other operating obligations. However, these licences are not subject to competitive tendering, and standard cost contracts are normally used, so that some cost risk is carried by the operator. Revenues go to the regional transport company, and its deficit is financed by the local authority responsible for public transport. Several different operators are thus usually operating within any area under a tight co-ordinating control, integrating the network and using multi-mode and multi-operator ticketing systems.

Under this regime most workers are members of one or other of the two main general unions, though unionisation is probably lower in smaller private companies. A biennial general agreement on wages and working conditions applies on the national scale to both public and private operators, but it has recently tended to define only a minimum, supplemented by local negotiations. Wages in the industry do not appear to be considered high.

Special regular transport services (for schools, workers, etc.) are also generally provided by private operators under licence. Private companies can vary greatly in size, and are frequently also active in the tourist sector. Cost comparison between private and public sectors is difficult, as most operators outside Copenhagen are private, though in Copenhagen bus services are mostly produced by the public company. Though Copenhagen has some special characteristics (for example, generally higher wages in the capital, more night driving, etc.) which could explain some cost differences, private companies do claim they could produce bus services at 60 per cent of the cost of a public operator. There are also about 10 long-distance bus services, though the three main operators have created a common marketing company, DanBus, to co-ordinate their operations.

The vehicles used in local bus service are mostly "standard" single-deck vehicles. Articulated buses are used on trunk routes; some minibuses are used for some specific services (local or for disabled people). No important change in the total fleet has been observed recently, though from 1 January 1991 all new vehicles will have to be equipped with lifting devices to enable wheelchair users to enter the buses.

Transport in Copenhagen has a history remarkably like that of London. Public transport inside the Capital Region (which is composed of several counties) has been provided by the Capital Region Public Transport Company, which owns its own buses and sub-contracted only a small part of its operations (about 18 per cent, to 17 bus operators on a five-year contract basis). About 1,400 of the 3,400 buses in Denmark are used in Copenhagen. Very recently, however, the Copenhagen Capital Region Council has been abolished and the co-ordinating regional plan suppressed. A new law on the Capital Region public transport company has applied since 1 January 1990.

Under this law, the Capital Region public transport company is charged with general transport planning, preserving network and fare integration in association with the railway companies. The company is required to put out at least 45 per cent of the bus services on competitively tendered long-term contract by 1 April 1994. About 20 per cent was put to tender by 1 April 1990. Revenues for the system are shared between the transport company, the State Railways and the private railways, and the deficit of the public transport company (about 50 per cent of its costs) is recovered from the municipalities. Further proposed measures now before the parliament, would increase the freedom of the statutory public transport companies in respect of both the services they provide themselves and their licensing function. Under these proposals all licensed operators would be obliged to respect the general agreement on wages and working conditions for drivers. The private sector appears keen to enter a more deregulated environment, but the most likely outcome is the extension of competitive tendering in what is already, outside Copenhagen, a largely privately-operated industry.

2.9. Sweden

In Sweden an Act of 1978 transferred responsibility for local and regional law services from a national licensing authority to newly created county transport authorities. The authorities were to determine service levels and structures, fares, and subsidies. Services would be operated either by municipal companies or by private companies under contract. Fares covered only about 30 per cent of costs.

The functions of the county authorities were increased by an Act of 1988, which gave them the power to operate services themselves, abolished all existing licensing rights, and extended their powers to local rail services. In Stockholm responsibilities had been centralised in a county council since 1971, and nearly all services were operated by the publicly owned Stockholm Transport.

The recent legislation has, however, separated strategic planning (which remains centralised), service planning (which is delegated to five area units), and operations (which are split into 25 smaller units). Under the regime introduced in 1988 more authorities use competitive tendering for at least part of their service requirement, and it is estimated that cost reductions of between 5 and 15 per cent have resulted, with many changes of selected operators. However, there is no forced uniformity of approach, and both private and municipal operators provide services.

The essence of the recent changes has thus been to strengthen the planning powers and responsibilities of the local political authorities, but to make it possible to discipline the operators by competitive tendering.

2.10. Portugal

Portugal is, after the UK, the most extensively deregulated country in Western Europe. A new law of March 1990 displaces a regime which had been in operation since 1945. Under the old law a centralised national licensing authority exercised extremely detailed control. Initially services were operated by private companies, but after the revolution of 1975 the major companies were nationalised, and the new state holding company operated a fleet of 3,500 vehicles. The publicly owned companies covered only about 60 per cent of operating costs from revenue, and were subsidised by central government. There also remained a fringe of unsubsidised private operation, even in large cities like Oporto. Within the metropolitan areas there has been little service integration, though smaller urban markets have typically been protected against longer-distance regional operators within the municipal area. Within the metropolitan areas multi-operator, multi-mode, travelcard systems operate. All operators are required to offer concessionary fares to old people without specific compensation.

The two main trade unions (divided on political grounds) are very strong within the public sector, and there is a history of strikes. The private sector is more weakly unionised. Wage negotiations are at company level. There does not appear to be any large difference in pay rates between private and public sectors, but the fringe benefits are more generous in the public sector. Bus industry wages are thought to be relatively high in comparison with those for work of similar skill. It is formally prohibited to set up a long-distance bus service where the railways can provide an equivalent service. Yet there has developed in recent years a very active, effectively free-entry, long-distance market operating under the guise of tourist services.

The law of March 1990 distinguishes between the metropolitan areas (Lisbon and Oporto) and the rest of

the country. In the metropolitan areas commissions have been set up with the task of establishing and implementing a public transport plan and determining procedures for the regulation of the system. The present state ownership of the publicly owned operating companies is to be transferred to the municipalities, which appear rather reluctant to receive them. A "London style" system could emerge.

For the rest there is to be complete deregulation, subject only to a qualitative licensing system for operators. The state retains a power to constrain maximum fares, and the municipalities will have the right to supplement the commercial network by contracting for subsidised services. The conditions applying to this aspect of the system have not yet been decided.

3. THE COMPARISON

The similarities of the new British and Portuguese regulatory systems are very striking. So were the similarities in the prevailing circumstances before deregulation, with a very conservative regulatory regime; strong unions in the protected, publicly owned parts of the industry earning relatively high wages; and a buoyant private sector in the express, tourist and fringe stage markets offering the possibility of an effective competitive threat. But Portugal is the exception rather than the rule, and it is the more general unwillingness to introduce total deregulation that we have to explain.

3.1. Initial regulatory regimes

The original institutional regime in the UK was one of local monopoly franchising, ostensibly on a route-by-route, but effectively on an area-wide, basis. The formal regulatory body was a quasi-independent authority, with no direct links with the local planning authority. In practice, increased dependence on subsidy from the local authorities meant that real control had already progressively moved to them. In the metropolitan areas that was formally recognised in the powers and duties of the PTEs after 1968. In some respects, however, the pre-deregulated UK situation was already relatively liberal: there were low levels of subsidy in the shire counties, and operators were able to make initiatives to improve their finances or their market size with little hindrance from either the licensing or the political authority.

In most other European countries, the regulatory regime also seems to have produced de facto area monopolies, whether the licences were formally route-specific or not. A striking difference, however, is that the licensing responsibility was in all other countries more directly executed by a political authority than in the UK. In most countries, moreover, this power was decentralised to the

most localised level of political authority appropriate. Indeed, much recent reforming effort has been directed to extending this local political responsibility, with inducements to efficiency built in through the arrangements for financing support.

3.2. Structure of the operating industry

Before deregulation services in Britain were predominantly provided by municipally owned companies in the major urban areas, and by the subsidiaries of a nationally owned company for the rest. The private sector was involved in local scheduled service only in rural areas and in fringes of the urban areas of little interest to the major incumbents. It did have, however, a large share of special contract services, and, after 1980, freedom of entry into the express sector.

For the major urban areas public ownership was also the norm in most other countries: in municipal hands in the larger countries and in regional or national operating company hands in the smaller. Only in the French system was there a substantial private sector. Outside the major urban areas several countries had private operators licensed to operate local scheduled services either in their own right (Spain, France) or under subcontracts from public companies (Belgium, Denmark). Maintenance or extension of the role of the private sector appears to have been incorporated in recent reforms, without any necessary association with a commitment to free entry, or even competitive tendering. Moreover, the public ownership of buses and infrastructure, and the legal commitment for new management contractors to continue the employment of existing staff, may further weaken the effect of private management and of apparently competitive processes.

3.3. Productive efficiency

The operational indicators of the cost problem in the UK were low levels of physical productivity (in bus kilometres per employee) and high relative wage rates (a high ratio between average earnings of bus employees and employees in manufacturing industry, and large disparities between private and public sector bus operators). Some other countries in our sample show very similar performance problems, and are seeking policies to overcome them (for example, the Netherlands, Sweden, Eire). Others recognise the phenomenon but do not appear to be pursuing any structural or regulatory policies to eliminate it (for example, Italy, Spain). A third group apparently do not regard it as a substantial problem, either because they have a private sector which is already playing a substantial role (for example, Belgium, France), or because in view of the union position it is not believed

that changing the structure will substantially change operating arrangements or costs.

3.4. The labour market

The institutional indication of the potential for reduction of labour cost in the UK was the juxtaposition of a strongly unionised labour force and a subsidised monopoly operator. Cost reductions have arisen mostly from increases in labour productivity and from reductions in real unit labour costs. Both have been achieved because the power of organised labour to sustain conditions and rates above free market rates was weakened by a political environment in which concern about the effects of union power was not restricted to the extreme right, and by an economic environment of high unemployment. Those conditions seem to be most closely mirrored in Portugal, where full deregulation is being introduced outside the metropolitan areas.

In several countries it is believed that comparable reductions in real labour cost are unobtainable. This may reflect historically weak unions which could not fully exploit the protected product market (for example, the Netherlands), unions exercising leverage through legal powers within company management (West Germany), much tighter labour markets, particularly in metropolitan areas (France), or even a strong political commitment to prevent competition from the non-unionised sector (Belgium, France, Denmark). Whether or not those countries are right in perceiving that their labour cost position is more favourable than that of the UK is more difficult to judge.

3.5. The role of subsidy

Bus services in the UK were normally supported by direct subsidy from the local authorities, usually on the basis of deficit support of a network operation. Global deficit financing has also been the rule in most other countries, though with variations in both the proportionate extent of subsidy and its source (municipal, regional or national). As in the UK, subsidy has typically been increasing, and has appeared as a problem to the political authorities.

A number of avenues have been explored. Ex ante, norm related, budgeting of support, accompanied by more local financial responsibility, is replacing pure deficit finance in the Netherlands. In Belgium and in non-metropolitan Denmark, the combination of budget constraints on the public operating company with a freedom to subcontract creates some inducement to find scope for lower-cost private operators, without formally abandoning the monopoly planning powers of the public sector operator. Competitive tendering has been introduced in Sweden and in Copenhagen, and appears to be under consideration

in Eire and in the Federal Republic of Germany. Only in non-metropolitan Portugal has complete deregulation been seen as a desirable solution.

3.6. Potential competition

Particularly if the market is not considered to be inherently highly contestable, a necessary condition for competitive pressures to bind in a deregulated regime is the prior existence of some credible competitive threat. Although few private companies were active in local bus operation in the UK before deregulation, there were several important potential sources of competition and competitive experience. A large, competitive non-scheduled coaching sector had already shown some willingness to enter into a deregulated scheduled express market; school services were already widely subject to competitive tender and contested between public and private sectors; and municipal and non-municipal operators overlapped considerably and jealously. The existence within the National Bus Company of a decentralised management structure also made it relatively easy to fragment as a further stimulus to competition.

The situation in other countries was very different. In several (France, Belgium, Spain) a substantial role had already been found for private companies within the regulated regime, so that their vested interests were in the retention of licensing controls.

Moreover, overlaps of operations were usually within a strictly planned environment. There was thus typically little experience in competition between private and public sector operators, even in the schools transport market. Nowhere was there a formally deregulated express sector, though it is significant that in both Eire and Portugal, where a degree of *de facto* freedom of entry had been established in the express market, there have been pressures to extend that area of freedom to provide a role for competing private sector operators in the local scheduled market.

3.7. Innovation

Inadequate innovation was perceived in the regulated regime in the UK. Deregulation has seen increased use of smaller vehicles, often associated with new routes providing better accessibility. Few other countries appear to view innovation in the same light. Minibuses are often viewed as irrelevant to metropolitan transport, and the level and frequency of service adjustment in the UK is regarded as one of the costs rather than the benefits of deregulation. The preferred indicators of technical innovation are higher quality (usually large) vehicles and associated control systems, and product innovation is more highly regarded in the form of promotional

ticketing and other devices yielding gains in consumer surplus rather than producer surplus. Competition is viewed as inimical rather than favourable to innovation.

3.8. The framework of urban and regional transport co-ordination

In the shire counties in the UK the framework of co-ordination, both with other transport modes and with other aspects of urban and regional policy, was historically very weak. In the metropolitan counties co-ordination was formally better provided for, though in many cases it was effective only within public transport rather than in the broader field of regional land use and transport planning. Deregulation coincided with the reduction of local government autonomy, particularly through the abolition of the metropolitan county governments.

In most European countries exactly the opposite applies, and conscious policies of decentralisation are pursued. In some (for example, the Netherlands) attempts are being made to reduce the extent of subsidy to public transport, but only in the UK is it strongly perceived that the elimination of the local political interest will be a major contributor to that end. The more general view is that political control over price levels and service levels and structure (to be exercised, particularly in the case of structure, at the local planning level) is an essential requirement of a local transport regime.

The main problems that have been perceived in the UK have concerned the undermining of various aspects of co-ordination between operators and modes, particularly in metropolitan areas. Tyson has found earlier in this issue that at least some of the aspects of co-ordination thought to be in jeopardy have in fact survived (for example, multi-mode ticketing systems and modal service co-ordination), and that it is probably in service stability and in availability of information that the enduring (and possibly inherent) problems of deregulation have arisen.

In most countries the controlling authorities in urban areas have enforced relatively simple fare structures – to the extreme extent of nation-wide availability of tickets in the Netherlands. That would certainly make it difficult to accommodate complete market freedom, but seems to be quite irrelevant to the argument for supply side competition. Nevertheless, there appears to have been little systematic examination of the range of possible forms in which some competitive impact could be obtained.

4. CONCLUSIONS

Our enquiries have shown that local bus services are operated under monopoly franchises in most of the countries we have examined; only Denmark, Sweden

and Portugal appear to be to any significant degree competitive. Moreover, all those local monopolies have been in existence for many years; so the *a priori* expectation would be that regulatory capture has occurred, and that in the context of the more liberal spirit of the age there would be strong pressure for liberalisation. In the event, there has been little move in the direction of free entry, even where liberal or conservative parties have been in power (West Germany, the Netherlands), or where regimes have recently been reformed (France, Denmark, Belgium, Sweden). Our concluding objective is to try to explain that paradox.

Differences in the perceived performance of the system is a partial explanation. Hardly anywhere is a lack of innovation in public transport perceived to be an issue. In countries where there is already a substantial private sector component in supply, or where (as in France) the power of trade unions is not strongly expressed through the collective bargaining process, high costs are not perceived to be a serious problem.

But in many countries the indicators of excessively high costs are plainly to be seen, yet this does not lead to deregulation. The most plausible explanation is that public transport is seen primarily as an element of a locally planned social infrastructure, which requires direct local political control. The implementation of regional or (in the Netherlands) national fares systems, often applying to all modes, is perceived (perhaps incorrectly) to be incompatible with a deregulated market. There is a more general commitment to using local transport policy as an instrument for the achievement of broader goals, and particularly to providing substantial autonomy for the selection of those broader objectives at the local or regional level. The greatest emphasis is thus put on maintaining effective leverage. Total commercial freedom for operators is seen as the antithesis of this. Thus even where services are provided by private companies, as in France, or through competitive tendering, as in Sweden, there remains a commitment to planned integration of public transport and to local autonomy in application.

Finally, it should be noted that in our enquiries we found that the perceptions of British experience with deregulation were largely unfavourable. In many cases these perceptions appeared to be based on scant information, either of the complicated nature of the British package, or of the different experiences in different locations. There was no recognition of the possibility that integration was not really in jeopardy, or that it could be protected by reliance on the more limited measures of comprehensive competitive tendering. Even in the most

radically intent countries, competition had to be limited either to areas where no integration issues were perceived to arise (Portugal) or to supply side competition within a largely planned system (Sweden and Denmark).



A burgeoning debate on competition and its options in the 1990s

The overview produced in the paper included in Section 3.2 (Gwilliam and Van de Velde, 1990) showed that the competition-based institutional reforms in public transport were still rather limited in the 1980s, with the major exception of Great Britain. De facto area monopolies by public operators were common by the end of the 1980s in many European cities, as had been the case in the former British regime, with France constituting something of an exception with a substantial—and historical—private sector involvement. Private operators were more common outside major urban areas, operating local services in their own right or as sub-contractors to public companies. Existing local monopolies were often long-standing, with little move in the direction of competition.

This situation would change considerably in the 1990s with the development, both in academic and political circles, of an increasing interest for the observed or assumed inefficiency and poor performance in the sector. This—combined with the neo-liberal spirit of the time—generated a growing questioning about the adequacy of existing regulatory structures and an increasing interest for the role competition could play to address performance issues.

At the international level, this was epitomised by Professor David Hensher and Professor Michael Beesley setting up a conference series titled '*Competition and ownership in land passenger transport*' first held in Thredbo (Australia) in 1989 with as a background the research that started to emerge out of the British bus deregulation (Hensher et al., 1991). Their objective was to provide an international forum to examine passenger transport competition and ownership issues, reporting on recent research and experience and developing conclusions on key issues, and focussing on determining the effects of different forms of competition, ownership and organisation for land-based passenger transport on operators, users, governments, funders and society as a whole. This conference series—since known as the 'Thredbo Series'¹²—started producing numerous papers on regulatory reforms in its biennial meetings held all over the world¹³.

Specific examples illustrating the reflections or debates in several countries can also be given. A few publications on public transport contracting and incentives appeared in France during that period. Here a formal obligation to use tendering procedures when contracting public transport services would not exist until 1994. Caillaud and Quinet (1993) made a first attempt to analyse the incentivising character of French public transport contracts. Earlier on Domenach (1987) had already commented on the metamorphosis of the French public transport contracts and the problems caused by the discrepancy in expertise between transport authorities and transport operators, leading to a difficult relationship between both. In Sweden, reports and analyses on the first effects of competitive tendering

[12] The author of this thesis became member of the International Steering Committee of this conference in 2004.

[13] Thredbo, Australia, 1989; Tampere, Finland, 1991; Toronto, Canada, 1993; Rotorua, New Zealand, 1995; Leeds, UK, 1997; Cape Town, South Africa, 1999; Molde, Norway, 2001; Rio de Janeiro, Brazil, 2003; Lisbon, Portugal, 2005; Hamilton Island, Australia, 2007; Delft, The Netherlands, 2009; Durban, South Africa, 2011; Oxford, UK, 2013; Santiago, Chile, 2015 and Stockholm, Sweden, 2017.

in Swedish local public transport were published in the 1990s. Jansson and Wallin (1991) reported cost savings varying between 5 and 15 per cent, while Jansson (1993) observed this to be 5 to 45 per cent. Alexandersson et al. (1998) came to the conclusion that an average of 7 per cent of cost reduction per kilometre of bus traffic could be observed, while the average cost per passenger increased by 12 per cent, which also reflected a reduction in passenger numbers. This was followed towards the end of the 1990s by academic studies on the possible uses of competition in German public transport (Werner, 1998; Weiß, 1998; Lehmann, 2000). Interestingly, these studies did discuss the potential role of both free market initiative and competitive tendering in the context of the complex and hybrid institutional setup of German public transport.

In the Netherlands, the discussion on the merits of alternative organisational forms in public transport started at the beginning of the 1990s. We contributed to this debate with a paper that discussed the lack of efficiency and effectiveness incentives in public transport regulation in the Netherlands in a paper (Van de Velde, 1992b). That paper reviewed potential lessons from a few other European countries. The Dutch Ministry of Transport and Water Management created in 1991 a Committee charged with suggesting a reform of the Dutch public transport sector. This Committee, convinced of the existence of efficiency issues in the sector, contemplated the introduction of competitive tendering in the sector (Commissie Brokx Openbaar Vervoer, 1993). Authorities and operators, however, were sceptic as to the usefulness of 'competition' in public transport—a scepticism that was to a large extent based on scant information about the nature of the reforms undertaken in foreign countries (see also Gwilliam and Van de Velde, 1990). To fill that informational gap, and on the basis of its first compromise position in favour of competitive tendering, the Committee decided to order the realisation of a comparative study on competitive tendering regimes used in public transport abroad (see also Part III). We realised that study in 1993-1994 (Van de Velde and Westeneng, 1994). It was probably the first and most extensive report on competitive tendering practices across Europe at the time¹⁴. Regrettably, the Committee showed no interest in extending the study to a review of alternative competition-based institutional options—such as market deregulation (i.e. the 'free' market)—despite our suggestion to do so. The Committee also consulted professors from four different disciplines to comment upon the first advices and position papers produced by the Committee (Commissie Brokx Openbaar Vervoer, 1994). On the basis of those contributions, we published a paper together with one of these professors (Van de Velde and

[14] That report addressed the following questions: Which tendering regimes are used and how have they appeared? What are the results and how do the actors perceive the regime in place? Are there reasons to believe that some aspects of the regime are dysfunctional and are there proposals to amend the existing regime? The report included the experiences of Great Britain, France, Germany, Denmark, Sweden and Norway, thus covering countries with extensive tendering practice and countries only considering its introduction. For each country, the legislation, market structure, tendering procedures and contract types were described. The information collected was based on desk research and field trips during which semi-structured interviews were conducted with representatives of authorities, operators and research institutions. General findings were formulated concerning the functioning of each tendering regime, as well as on the degree of efficiency, customer orientation and competition level observed by local researchers. The report formulated a number of points of attention linked to the shaping of a tendering regime as well as some general conclusions, but it did not formulate a general recommendation as to the best option for the Netherlands. The information collected through desk research and semi-structured interviews for the purpose of this report constituted a first major set of case studies for this thesis. This came in addition to the information gathered during the interviews conducted while writing two earlier papers (Gwilliam and Van de Velde, 1990; Van de Velde, 1992b).

Sleuwaegen, 1995; 1997)¹⁵ in which we did discuss the issue of the choice of a theoretical reference framework for intervention (choosing between two concepts of competition) in these markets in a paper written (see extract below). The final report of the Committee (Commissie Brokx Openbaar Vervoer, 1995) was followed by further advisory reports that we had the opportunity to write. One of these advisory reports provided recommendations to the Ministry of Transport and Water Management on the way to implement the competitive tendering regime (Van de Velde and van Reeve, 1996). Another report for the Dutch Ministry of Economic Affairs (van de Velde et al., 1996) reviewed the potential role of competition—in this report both tendering and the free market could be addressed. Eventually, competitive tendering was only implemented in 2001 in the Netherlands, ten years after the start of the competition and reform debates in the Netherlands, with a clear choice for competitive tendering as a reference framework for competition and without further consideration for market deregulation.

A paper written together with professor Sleuwaegen (Van de Velde and Sleuwaegen, 1997)¹⁶ summarised a number of trends that our research had so far identified (a limited re-introduction of competition and an initially limited role of contracts, a movement towards devolution and competition in relation to an urgent need to curb public spending). Importantly, the paper attempted to put the discussion on the introduction of competition in a wider perspective, looking at the academic discussion on how to realise economic efficiency and comparing the recent literature of the time on auctions and tenders that on contestable markets. In that approach and from a normative point of view the prescription to implement one or the other type of competitive regime would have to result from specific proof underpinning the choice. It observes, however, that such proof is not given nor envisaged in real world observations in the public transport sector. It warns, consequently, that a specific choice (in the Dutch case this was the choice for competitive tendering) might be seen as an option with short-run positive results but with uncertain long-run effects that are outside the scope of political concern.

[15] This work was based upon the work that we both did for the Brokx Committee: Van de Velde and Westeneng (1994) and Commissie Brokx Openbaar Vervoer (1994).

[16] This was first presented at the World Conference on Transport Research in Sydney (Australia) in 1995 (Van de Velde and Sleuwaegen, 1995).

Public Transport Service Contracts: Searching for the Optimum (Extracts)¹⁷

Van de Velde, D.M. and L.I.E. Sleuwaegen

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1. INTRODUCTION

[Section removed]

2. GENERAL TRENDS IN EUROPEAN PUBLIC TRANSPORT

2.1. Limited re-introduction of competition on the road

The very negative stance of European public transport authorities towards any form of competition in the provision of public transport services has developed as early as the 1930's. Regulation associated with the granting of monopoly rights started to be introduced as a means to solve what was seen to be a chaotic and even destructive form of competition between public transport services. This form of regulation did not, in most European countries, make the entry of new operators impossible. Still, in most countries, it effectively annihilated any form of competition. Whilst the private sector usually remained active, albeit under strict regulation, in a number of cases local public transport services had been almost totally nationalised by the end of the 1970's.

The deregulation of local passenger transport in Britain – as a result of the 1985 Transport Act – initially reinforced in other European countries the disapproval of competition as a means to improve the performance of the public transport industry. Partially unduly, most regulators and public transport operators in continental countries perceived the British deregulation to be against the public interest. In this respect, and without defending full-scale deregulation, it is quite interesting to observe that these judgements often were (and still are) based on scant information about the true consequences of the 1985 Transport Act. However that may be, the most negative consequences of bus deregulation in Britain

found a much easier way into continental ears than its positive consequences.

2.2. Role of contracts initially limited

In most other European countries, the introduction of competition, be it *on* or *off* the road, was until quite recently not considered to be desirable. Fears for 'cherry picking' and 'dangerous competitive practices' were widespread amongst regulators. These fears were further fostered by the relative information asymmetry between regulators and regulated, the latter trying to defend their protected position by emphasising all that could go wrong in a more competitive market. One could add that another motive was the fear of the regulators to lose power on an industry which had traditionally been tightly regulated. The relative importance of these two possibilities – in other words the relative power of these two interest groups – are the result of historical circumstances.

For many years France constituted an interesting exception to the tight regulatory approach of most other European countries. Initially quite informally, later via legal changes, France developed a very flexible system of franchising and/or contracting of local public transport services. Two elements determined the success of this system which existed before the British deregulation. These are, firstly, the fact that local decisions on local public transport had to be paid using local taxes and, secondly, the large flexibility for transport authorities to devise franchise agreements or contracts suiting their needs. The 1979 legal change which attempted to formalise and restrict the type of contracts that could be used remained a dead letter and the 1982 legal change restored contract freedom. The main source of failure in the French system was the absence until 1994 of a legal framework for the auctioning of public transport franchises or contracts.

[17] Section 1 (Introduction) and Section 4 (The search for optimum contracts in the context of tendering), which draws conclusions on various contracting issues from the international case review (Van de Velde and Westeneng, 1994) are not included here.

Although this has not been demonstrated, it was often privately argued in France that the competitive process, even if still formally present, had lost most of its substance by the beginning of the 1990's. The fact that, firstly, the industry was largely dominated by an ever decreasing number of large 'groups'¹⁸ and that, secondly, the various urban public transport networks seldom changed hands, were put forward as elements to support the argument. The apparent increase in competition since the introduction of the 1994 Act on the Prevention of Corruption tends to confirm the presumptions against the previous system.

2.3. Towards a twofold solution: devolution and competition

Despite previous stances, the growing financial requirements that characterised many public transport systems since the 1960's compelled authorities to consider alternative ways of organising their public transport services if these were to be maintained at all. The solution chosen was mostly twofold. Even if the way to implement this solution varies from country to country, or even from region to region, it can be summarised in the words: 'devolution' and – after all – 'competition' (for a detailed description of this phenomenon see Van de Velde and Westeneng, 1994).

2.3.1. The way towards devolution

Local public transport became a decentralised competence of local authorities there were the largest influence on local public transport services was still at the central government level – arguably as a means to get rid of a cumbersome and, foremost, costly competence. The financial impossibility for the national budget to continue to support further increases in public transport deficits together with the politically ungrateful task of imposing cuts in service level can be seen as important triggers for the devolution of the control on public transport services.

It is often the administrative level at a scale immediately above the municipality which inherited of the control on local public transport services. This was expected to lead to a better correspondence of the services to the needs (subsidiarity). The expectation was that this in turn would lead to a reduction in financial needs. A tighter control on subsidies would furthermore automatically be enforced by the fact that local authorities usually can not resort to the

same amount of fiscal sources as central governments. The expected result being in this case a higher cost-awareness at local government level than a central government level.

2.3.2. The way towards competition

The widespread presumption against competition *on* the road in continental Europe combined with the urgent need to curb the increasing deficits resulted thus in a number of European countries in the introduction of competitive tendering – competition *off* the road. The rationale used in this context is mainly that of the potential reduction in X-inefficiency. The type of public transport services provided, and in particular their quality, is usually not the problem at stake.

In addition, the EU-directives on tendering were for some countries – ironically more so for those still outside the EU – one of the other triggers which led to the implementation of competitive tendering into public transport. On the one hand Sweden largely copied the EU tendering provisions and Norway delayed the implementation of the provisions of its 1991 Transport Act until 1994 in order for the situation around the EU tendering rules to become clearer. On the other hand, countries already inside the Union, as Germany and France, proved to be less conformist. Germany, e.g., had in 1994 not yet come to a conclusion on the relevance of the EU provisions for local public transport.

The growing international experience with tendering in local public transport services also contributed modestly to competition through tendering becoming more fashionable. Yet, fears of 'cherry picking' – which are not justified in this case – are still expressed in Germany (see, e.g., Girnau, 1993) or in the Netherlands, illustrating again the low level of information available to some parts of the regulated industry.

3. CHOICE FOR INTERVENTION

To put things in perspective it is useful to put forward a number of thoughts concerning modern approaches to 'optimal policy' in public transport. The focus here will be on the realisation of the largest economic efficiency.

With the risk of oversimplification, it can be stated that two approaches can be distinguished, both of which

[18] According to (CETUR, 1990, p. 42), these groups had a market share of 65% in urban public transport services. This share was even 80% if only the larger urban agglomerations were taken into account. The development of so-called 'groups' can also be observed in other countries, as Sweden, Denmark and Britain. In these countries, the appearance of groups stems from the existence of multi-plants economies (i.e. no or few economies of scale at the local production level and more pecuniary economies of scale at the group level). The case in France is slightly different as it is generally the municipalities and not the groups who own the fleets, there multi-plant economies are related to the possibilities of transferring management and marketing knowledge from city to city. In all cases, the question is whether the legislation on competitive practices is adequate to prevent undesirable monopolization.

state that the model of perfect competition (perfect information, numerous suppliers, homogeneous product, free access and egress) is not the adequate reference framework for state intervention in public transport.

3.1. Auctioning, Tenders and Agency Theory

Auctions and tenders are considered as essential instruments in the allocation of public franchises and service contracts. The central idea behind the use of auctions and tenders is that the true value of a service contract or franchise is unknown to the government agency so that bargains will often favour the incumbent contractor. By using a competitive tendering system or auction, a better measure of value may emerge, and greater emphasis on efficiency of provision of the service will have to result (Cripps and Ireland, 1994). Sophisticated approaches emphasising the information asymmetry between the government agency and the service provider combine the functioning of these competitive systems with the design of regulatory mechanisms embedded in or attached to the contract. These approaches model the strategic use of private information possessed by tendering firms and appropriate responses by regulators within the framework of agency models (Laffont, 1994). The recent literature following this approach is very mathematical and abstract and still requires that the government agency disposes of essential minimum information about basic conditions of the market and technological conditions under which the bidding firms operate. The basic approach mainly consists in presenting tendering firms with a menu of alternative contracts from which to choose. The design of the contracts and auction has to guarantee that the winning firm will be the most efficient and choose the contract that also makes welfare highest.

Workable models within this approach assume, as in the case for unregulated franchises, that a minimum number of conditions are fulfilled. It is, e.g., necessary that the required means of production be accessible to all potential suppliers on open markets against free competitive prices. Furthermore, the collusion costs between competitors must be so high as to guarantee that competitive bids will be placed (see, e.g., Braeutigam, 1989).

3.2. Contestability

The alternative school of thought, mainly developed in the 80s, also starts from the observation that the model of perfect competition is not the adequate point of reference. The model of perfectly contestable markets is put forward as alternative and guidance for 'optimal' regulation.

A market is perfectly contestable if entry and exit is free. The newcomer may thus not have to support sunk costs, such as investments that cannot be recouped once entry

took place. The working of contestable markets guarantees that suppliers cannot reach higher profits than in perfectly competitive markets, that inefficient suppliers will not be able to maintain themselves and that they will be replaced by more efficient entrants, that cross-subsidisation between products will be impossible and that under certain conditions prices will be similar to those prevailing under economic efficiency and Pareto optimality given the restriction that the supplier has to break even. These results are achieved even in the presence of economies of scale or scope (network economies). There where extreme economies of scale or scope, i.e. natural monopoly, are present this approach results in a second-best situation because in the presence of a budget constraint the supplier is not able to support the loss-making welfare-maximising marginal cost pricing. It is clear that if the second-best solution is quite close to the theoretical first-best solution in terms of welfare, this could reduce to a minimum the state intervention and the associated costs of regulation. However, it is possible that with weak natural monopoly that, if a market is contestable, the second-best position may be unsustainable, so that contestability does *not* guarantee second-best.

This approach, by focusing mainly on contestable markets as a reference framework, limits the role of the regulator in a pragmatic way. According to Baumol and Sidak (1994, p. 28), the following principles should be followed: firstly, there were competitive forces are adequate and effective, the regulator has to refrain from any intervention; secondly, the regulator should observe the behaviour on competitive markets and should, in the public interest, impose this behaviour to regulated firms and, finally, the regulator should not limit the freedom of the firms further than what is stated above. Regulated firms should be able to engage in all actions that would also have been possible under effective competitive-market forces. Within this approach the focus is thus on competition in the largest sense and it includes not only real competition within the market but also competition for the market through threat and actions initiated by substitutes (intermodal competition) and potential entrants. This competitive model gives an integrated framework that, because of the more restricted conditions compared to the model of perfect competition, is a better instrument for determining state intervention.

It is nevertheless important to realise that the model of contestable markets is only a reference framework and that it does not pretend to represent reality. It does, though, give the opportunity to develop simple and adequate regulation and/or conditions for competition. An example of this would be the creation of an instance that would have to control and allocate production

factors (as infrastructure) which would otherwise hinder free entry if these were owned by only one supplier.

3.3. The choice of a reference framework

The decision by authorities to replace an existing regulatory regime by one involving (a different form of) competition includes implicitly the judgement that the existing arrangements were inadequate. This position rejoins the American and European approach according to which state initiative and regulation clearly failed in a number of 'strategic' sectors and sectors where natural monopoly tendencies were suspected. Rationales according to which state intervention has led to larger failures than the market failures it was supposed to solve can amply be found in the literature (see, e.g., Wolf, 1993).

Experiences of deregulation and implementation of free competition in a number of sectors of the economy, both in Europe and in the United States, have further shown the importance of adequate anti-trust legislation in preventing collusive or predatory behaviour. In that respect the British experience of deregulation of local public transport showed that such protection of market forces could be difficult to implement because of the relatively long reaction time of legal provisions compared to the speed of non-competitive behaviour and its consequences on the market. Furthermore, there seems to be a growing doubt about the validity of the proposition according to which the local public transport markets are contestable markets (see, e.g., Preston, 1991). While the acquisition of vehicles and workforce do not seem to cause sunk costs, it is market knowledge that causes the trouble.

From a normative point of view, the prescription to implement competitive tendering in public transport would have to result from both the proof of the existence of market failure on the market concerned and the demonstration that competitive tendering is the system guaranteeing, all things included, the best way to improve social welfare. In real world situations however, and as can be seen when analysing public transport policies in several European countries (see Van de Velde and Westeneng, 1994), these two points are not demonstrated explicitly. In fact the proof of the first is largely replaced by beliefs which can stem from times irrelevant for the problem at stake and the demonstration of the second is not even envisaged as no alternatives are seriously discussed.

The danger is then that the issuing of franchises or contracts by competitive tendering is seen as a *deus ex machina*. Such a system can only function properly if the authorities have adequate monitoring and control systems at their disposal. Furthermore, it also requires the feasibility of a tendering system where effective competition can be guaranteed. Most of this is often poorly studied prior to the introduction of a tendering system. The reason for this could be that short run positive results can be expected, while uncertain long-run effects are outside the scope of the political concern.

4. THE SEARCH FOR OPTIMUM CONTRACTS IN THE CONTEXT OF TENDERING

[Section removed]

5. CONCLUSIONS

The international comparative study on which this paper is based (Van de Velde and Westeneng, 1994) illustrated the political processes, the historical contingencies and limited influence of theoretical reasoning on decisions to implement competitive tendering into public transport services. These findings have been summarised in this paper while discussing the problem of the choice of the theoretical reference framework.

Hensher (1988) already mentioned the need for fundamental thinking and field experience before we can say that competitive tendering will work. In the meantime, practice has shown the ability of competitive tendering to reduce production costs by often more than 15% while maintaining the quality of service. Experience of competitive tendering leading to innovation in terms of service is more limited. The international comparative study shows that field experience is likely to abound in the near future but that fundamental thinking tends to take the form of reinventing the wheel in each country that decides on the implementation of competitive tendering. The need for international exchange of experience in this field is still present. Beyond theoretical discussions, there is a need for empirical studies on the interaction between market structure and tendering procedures.

REFERENCES

[See reference list at the end of the thesis]



Coming back to our first research question (what main institutional developments can we observe in the public transport sector since the start of the current era of reform in this sector, what main factors led to these developments and how were these reforms perceived?), we can now make a number of intermediate observations:

- ▶ The perception of inefficiencies and performance issues in the sector was growing in the 1990s compared to the 1980s, even though this perception was not shared by all.
- ▶ Developments showed that, during the 1990s, both the extent and direction of institutional developments varied substantially between countries, regions or even cities. Some authorities chose to reform only the governance of their operators, introducing contracting with some incentive mechanisms but without competition, while other authorities chose to implement no changes at all. Few countries introduced competitive tendering. Those that did hardly gave any service design freedom to the operators in the context of tendering and contracting. No country outside Great Britain effectively implemented a full deregulation and few studies focussed on the potential relevance of institutional frameworks based upon the free market.
- ▶ From a more theoretical point of view, as far as economic theory is concerned, two opposing views as to the reference frameworks for competition were present (competitive tendering versus contestability), both related and influenced by the political trends of the time (neo-liberalism). Yet, there appeared at the level of actual local decision-makers hardly any real attempt to identify on theoretical grounds which reference framework for competition might be more suited. Rather, political dogmatism or individual preferences of decision-makers and involved actors appeared more determinant.

In sum, various reform paths started to appear (deregulation, competitive tendering and governance reform) but a clear overview of reform options was lacking as authorities and researchers alike had undertaken little systematic examination of the range of reform options for local public transport, in particular those in which competitive impact could be obtained. Theoretical discussions on reference frameworks for 'competition' existed but were rather remote from actual decision-making. Unsurprisingly perhaps, opinions about available reform options diverged considerably.

Our research led us at the beginning of the 1990s to conduct many case studies through desk-research and semi-structured interviews with many public transport professionals, both on the operators' and on the authorities' side, but also with academic and further observers. These revealed that a variety of reform paths had started to appear and that complex differences could be discerned between regimes that seemed identical at first glance. For example, discussions on the components of competitive tendering regimes with local experts revealed substantial differences in transition and implementation paths, in authority and other actor involvement in service planning, in authority configuration, in the contractual prerogatives of actors, in competitive procedures, in competition purpose, in incentive regimes, in payment systems, in required staff skills, in asset ownership, etc. This was reported upon in our two first overview papers (Gwilliam and Van de Velde, 1990; Van de Velde, 1992b)¹⁹.

The actual realisation of these cases studies, but also the debates with interviewees which often followed upon interviews, revealed that there was a substantial level of confusion about these factors when discussing with and between professionals. Furthermore, it appeared that many stakeholders did not have a clear vision on available reform options. We found that this resulted from two main causes. We observed, on the one hand, a fundamental lack of clear factual knowledge by many interviewees and local experts about regimes other than those they were operating in or best acquainted with. On the other hand, we experienced that discussions were often hampered by the lack of common reference frameworks that could serve to present and distinguish between all institutional features involved and reforms undertaken.

The unfolding variety and multidimensionality of the reforms, as well as the observed confusions, pointed to the need for the development of reference frameworks that could serve to help describe and understand the complex changes at play. Being able to represent institutional frameworks succinctly, comparing their essential characteristics, would facilitate mutual understanding and learning, in particular in relation to the role played by competition. The idea was that such frameworks, by easing and clarifying comparisons, would bridge the knowledge gap that existed between specialists, as identified earlier, in the interest of fruitful discussions. In turn, this would facilitate considering, debating and even designing further regulatory reform options in the public transport sector.

[19] The first paper is included in Section 3.2 of this thesis.

Hence our second research question, which will be addressed in this Chapter: How to classify institutional frameworks, in order to bring more clarity in the debate on institutional reforms and facilitate presentation and comparison?

From the interviews and our own desk research, we identified that there was a specific need to develop reference frameworks that would first elucidate two issues linked to the provision of passenger transport services. The first issue is that of the ‘appearance’ of passenger transport services (who has the ‘right of initiative’ to create services, and where does this right come from?). The second issue is, subsequently, that of the attribution to various actors of the responsibilities and decisional components linked to the provision of services, regardless to whom the ‘right of initiative’ is attributed. This is discussed in Section 4.1.

In addition, our research showed that there was a need to distinguish between various institutions playing a role in the provision of public transport services. This is where the four layers of economics of institution suggested by Williamson (2000), and introduced in Part I, come to play an important role to facilitate understanding. This is discussed in Section 4.2.

4.1 The right of initiative and decision layering in service supply

The observations on institutional features and practices gathered during the case studies led us to gradually develop a set of reference frameworks that was meant to alleviate the observed confusions and knowledge gap around two main issues:

- ▶ The issue of the ‘appearance’ of passenger transport services: How does service supply ‘appear’ on the market? Who takes the initiative of creating services? What is the role of the (transport) authority in this appearance? In other words: Who has the ‘right of initiative’ to create services, and where does this right come from?
- ▶ The issue of decision-making, i.e. the involvement, responsibilities and layering of various actors and their decision powers in relation to the actual initiative, conception and realisation of the services, regardless to whom the ‘right of initiative’ is attributed.

A first paper was presented at the 6th World Conference on Transport Research in Lyon (Van de Velde, 1992a). Its main suggestion was to use the ‘strategy – tactics – operations’ typology, which is common in management science, to help represent and elucidate the allocation of decision powers to actors whatever the institutional framework of public transport provision adopted. A first graphical implementation was included, both for ideal-typical cases and for specific cases that had been studied in the earlier overview papers (Gwilliam and Van de Velde, 1990; Van de Velde, 1992b). This first framework was later enriched, using the results of further case studies and information collection. This involved a detailed study of relevant public transport legislations of the areas studied (in particular those of the Netherlands, Germany, Great Britain, Denmark, Sweden, Norway, France, Singapore, Honk Kong and Japan). This required analysing various local and national government documents related to public transport regulatory regimes in the countries considered, as well as analysing advisory and academic reports on the functioning of these

regimes. This was complemented by academic debates and further interviews held during or in the margin of Thredbo conferences.

These activities also led to the publication of several advisory reports to Dutch authorities (Van de Velde and Westeneng, 1993; 1994; Van de Velde, 1996a; Van de Velde and van Reeve, 1996; van de Velde et al., 1996) that used the enriched framework, which was then included in a European research project (Van de Velde, 1997e; 1997f). Several academic publications resulted (Van de Velde, 1995b; 1996b; Van de Velde and Sleuwaegen, 1997; Van de Velde, 1997b) and further versions of the framework were presented and discussed at the 5th Thredbo conference in Leeds (Van de Velde, 1997a) and at the 8th World Conference on Transport Research in Antwerp (Van de Velde, 1998). A version of that work was brought into the Isotope report written for the European Commission (ISOTOPE Research Consortium, 1997)²⁰, as the research consortium welcomed it as contributing to one of the main purposes of the report, which was to describe and compare existing legal and organisational structures for urban public transport in Europe.

The final version of the paper was eventually published in 1999 (Van de Velde, 1999)²¹, presenting the two resulting frameworks:

- ▶ The first framework introduced in the paper brings the managerial ‘Strategic-Tactical-Operational’ (STO) classification into our analysis of public transport governance. It is based on the corresponding managerial levels of planning and control. Applied to the supply of public transport services, the paper distinguishes between aim setting (strategic level), means determination (tactical level) and realisation (operational level). The STO classification—together with the levels, timing and method according to which competition plays a role—proves to be extremely well suited to represent and understand differences in the layering of decision power between actors in various institutional frameworks²². It can also usefully and graphically represent reforms in institutional frameworks, which is obviously core to the issues addressed in this thesis.
- ▶ The second framework developed in the paper introduces a global distinction between two main institutional frameworks. It follows a dichotomy between authority initiative and market initiative regimes, which refers to two fundamentally different ways of organising the supply of public transport services. It also relates closely to a fundamental difference in the formal institutions (legal environment) within which services are meant to develop. Depending on the choice made, the functions of revealing and serving market demand will rest either upon autonomous market entrepreneurs or upon an authority legally charged, essentially in monopoly, to realise those functions and thus

[20] The author of this thesis was one of the members of that research consortium. The report was funded by the European Commission under the transport RTD program of the 4th framework program.

[21] That paper is included hereafter in this Chapter.

[22] The paper makes use of the concept “organizational form”. With hindsight, the concept of “institutional framework” might have been more general and better suited to our purpose. We have for that reason chosen to use this latter concept throughout this thesis to avoid confusions with the more restricted concept of organizational form defined as the shape adopted by an organization (such as a company) to manage its business (such as a partnership, a hierarchy, a matrix structure, a networked organization, etc.)

determining largely or even totally how market demand will be served. This framework also allows to show that authorities can have various roles²³.

These reference frameworks are not meant to and do not by themselves allow to draw conclusions on the adequacy of specific institutional frameworks in specific circumstances. They can, though, help when contemplating alternative regimes in the context of a reform. The graphical exercise of converting extant and conceptual regulatory arrangements into comparable graphical representations is meant to serve several purposes. One is to allow those not familiar with an institutional framework to capture its essential features in a glimpse. A second is to help actors to position and discuss concrete institutional forms or reform options in relation to ideal-typical institutional forms. A third is to better structure the threads of reasoning when designing institutions, for instance during advisory work. To illustrate this, the paper contains representations of five ideal-typical institutional frameworks²⁴.

[23] Licensing authorities grant access to the profession. Authorising authorities grant access to the market under market initiative regimes, while concessioning authorities grant access to the market in authority initiative regimes. Regulatory authorities set and enforce ‘rules of the game’ in all regimes. Authorities can also be enterprising by creating services and bearing risks on them as main or secondary entrepreneur. They can do this by owning an operator or by outsourcing planned services. They can do this either under legal public monopoly in authority initiative or under public sector initiative in market initiative regimes. Subsidising authorities, finally, stimulate supply and/or wealth redistribution to selected target groups in all regimes.

[24] These are based upon an earlier advisory report written for the Dutch Ministry of Transport and Water Management in the context of the preparation of the reform of the Dutch public transport regulation (Van de Velde and van Reeve, 1996). Note that the world does not stand still. As a consequence, some of the concrete cases mentioned in the papers may in the meantime have moved to a different institutional framework compared to what is presented in the paper.

Organisational forms and entrepreneurship in public transport (Part 1: classifying organisational forms)

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Transport Policy, 1999, vol. 6, p. 147-157

Abstract - This paper develops two classification frameworks in order to clarify the discussion on regulatory reform in public transport and in order to compare the organisational forms which have appeared during the last 15 years. The concept of levels of planning and control is applied to the supply of public transport services and various forms of organisation are classified such as to allow a positioning of the various real-world organisational forms in relation to 'pure' organisational forms. Illustrations of a number of ideal-typical organisational forms are then provided. This also illustrates the various roles competition plays within those organisational forms.

1. INTRODUCTION

The organisation of local and regional public transport in Europe has been subjected to considerable changes during the last two decades. A common feature of the changes implemented is the growing usage of some form of competition. These can broadly speaking be classified under the headings 'competition *on* the road' and 'competition *off* the road' but the actual organisational forms implemented in the various countries exhibit more variety than suggested by this division. While competition *on* the road gives operators the possibility to develop services as they like, systems using competition *off* the road usually prescribe rather strictly which services have to be produced but vary considerably in their implementation.

With the exception of Great Britain where free competition *on* the road, privatisation and deregulation were introduced, Western European countries, where competition has been introduced have moved towards various forms of regulated regimes using competition *off* the road. Such regimes have now been implemented at a wide scale in Sweden, Denmark and France, while in other countries their usage is either growing (Germany) or planned (The Netherlands). Transport authorities retain (or get) in such regimes all powers to define the transport services, if they so wish. This includes the politically important definition of the social function of public transport. Competitive tendering procedures are then used in such regimes to select efficient operators for the realisation of the services that are mostly centrally planned by the authority or its planning company.

A main perceived disadvantage of both the authority-owned monopolies and the new competitive tendering regimes based on central planning is the danger that both lack incentives to respond to market needs due to monopolistic tendencies and bureaucratic ossification. On the contrary, a main perceived disadvantage of the deregulation regime (in the version as implemented in Great Britain in 1986) is the danger for an inadequate response to market needs due to a fundamentally different problem: market failure.

If route by route tendering systems as used in Scandinavia and London have indeed shown their adequacy in improving productive efficiency, they have however not led to significantly more passengers, even if their performance in this respect seems at a macro level to be better than that of free competition as implemented in the rest of Great Britain (see Mackie and Preston, 1996). Without refuting the importance of implementing mechanisms designed to tackle productive inefficiencies – which themselves often result from regulatory failure – we would like to put forward here that more attention should be paid to the implementation of mechanisms that will reveal true market demand. This is often forgotten, and as regulatory reform in public transport mostly arises from political concern about growing deficits, this easily results in a wrong discussion where competition *off* the road is seen to be 'the' alternative to competition *on* the road. Things are more complex than this.

Unfortunately, mutual knowledge of organisational systems across Europe is limited, both at the level of authorities and operators. This combined with a lack of

truly comparable data²⁵ about performances hampers the mutual learning process. With this defective source of inspiration and a largely unfavourable perception of the British deregulation (often based on scant information), most regulatory reform processes in which European countries have embarked lately have not opted for deregulation but, perhaps unconsciously as in The Netherlands, for more regulation. The policy wording used in that context often suggests the contrary as a larger involvement from the private sector in strictly controlled forms of competition off the road is often unduly called 'deregulation' (e.g. in Sweden).

This paper will develop two classification frameworks in order to clarify the discussion on regulatory reform in public transport and in order to allow the comparison of the various organisational forms which have appeared during the last fifteen years. The second section after this introduction will apply the concept of levels of planning and control to the supply of public transport services. The third section will then classify the various forms of organisation of public transport such as to allow a positioning of the various real-world regimes in relation to 'pure' regimes. The fourth section will then provide illustrations of a number of ideal-typical organisational forms by combining the elements of the two preceding sections. This will illustrate both the conceptual differences between organisational forms chosen in various countries and the role competition plays within those.

2. LEVELS OF PLANNING AND CONTROL IN PUBLIC TRANSPORT

Public transport is a service provided on a market; i.e. there is a supply, there is a demand and there is a price – even low or subsidised – to be paid to use the service. Similarly to other markets for goods or services and whatever the legal and regulatory setting, a number of decisions will have to be made before passenger transport services can actually be produced and sold. It is generally accepted that planning and control systems within companies can be divided into hierarchically

ordered types of activities which differentiate themselves according to the scope of the planning issues addressed and the planning horizon. This can be carried out for public transport just as for other products offered on markets. Based on various theoretical definitions (see, e.g. Anthony, 1988; or Hellriegel and Slocum, 1992), we will use here the following denominations²⁶:

Strategic level:

- Strategic planning is involved in the formulation of general aims and in the determination in broad terms of the means that can be used to attain these.
- *In short: what do we want to achieve?*

Tactical level:

- Tactical planning is about making decisions on acquiring means that can help reaching the general aims, and on how to use these means most efficiently.
- *In short: what product can help us to achieve the aims*

Operational level:

- Makes sure the orders are carried out, and that this happens in an efficient way.
- *In short: how do we produce that product?*

Figure 1 translates these to the public transport sector, without yet referring to any specific legal or regulatory setting.

At the strategic level we can find things such as the general aims and service characteristics, which include such topics as the profit and market share aims, the general description of the services that will be provided, the area of supply, the definition of the main target groups and the positioning of the services in relation to substitutes and complements (intermodality). We define this level as being at the core of 'entrepreneurship' and the actor responsible for these crucial decisions as the 'entrepreneur' as he takes the initiative for the creation and supply of services, thereby takes some form of risk, and as he delineates at least the main characteristics of the services that will be provided.

[25] The European Commission (1996b), recognising this problem, has attempted to ease it by measures originally presented in a Green Paper that-with its sibylline title "The Citizen's Network"-was aiming at the exchange of successful practices. This move, resulting partly from the Commission's concern that the quality of its Trans-European Networks (TEN's) will depend on the quality of local transport at the nodes and terminals, is however seen by some as an infringement upon the principle of subsidiarity formulated in the European Union (Maastricht) Treaty. In a follow-up to that Green Paper, the Commission has set up the European Local Transport Information Service (www.eltis.org) to stimulate information exchange and the Commission is also supporting benchmarking by self-assessment in local and regional passenger transport (see European Commission, 1998). Research on the field of organisational forms has also been sponsored by the European Commission through the ISOTOPE Research Consortium (1997) in which the author of this paper participated.

[26] This division has been used in Van de Velde (1992a) in a first attempt to compare organisational forms in public transport. It has subsequently been redeveloped in Van de Velde (1997a).

Decision level	General description	Decision	
		“Software”	“Hardware”
Strategic Long term (5 years)	<i>What do we want to achieve?</i>	General goals Transport policy Market share Profitability General service characteristics Areas Target groups Intermodality	
Tactical Medium term (1-2 years)	<i>Which services can help to achieve these aims?</i>	Detailed service characteristics Fares Image Additional services Vehicles Routes Timetable	
Operational Short term (1-6 months)	<i>How to produce these services?</i>	Sales Selling activities Information to the public ...	Production Infrastructure management Vehicle rostering and maint. Personnel rostering and mgmt

Figure 1 | Levels of planning and control in public transport

The tactical level translates these aims into detailed service characteristics. The actual ‘design’ of the services takes place at this level. We find here the traditional parameters of public transport such as the definition of the routes, timetable, vehicles and fares, but also ‘softer’ aspects such as the image of the services and the provision of additional services to the passengers (such as catering, news, etc.)

At the operational level we find the translation of the tactical aspects into day-to-day practice. This includes the management of the sales staff, of the drivers, of the vehicles and of the infrastructure to ensure the realisation of the services according to the tactical planning.

In opposition to the *hardware* side, which is the production of vehicle-kilometres, we define the *software* side as everything that will help to *sell* the vehicle-kilometres, i.e. transforming them into passenger-kilometres. Seen from a dynamic perspective, there has of course to be a feedback between the decision levels involved, notably based on the feedback provided by (potential) clients. Moreover, there will ideally be a link between the hardware and software side at the tactical level to ensure an adequate evolution of the services, in accordance with market needs and the stated general aims. Figure 1 does not, for clarity’s sake, focus on these dynamically essential links and feedback of information. It focuses on the way management decisions pertaining to the appearance of public transport services on markets are ordered, whatever the organisational form in place and whatever the extent of public intervention. Up to this point nothing is said neither on the exact aims of the public transport system (strategic level) nor on the identity of the actors involved at the various levels – leaving open whether these are one or several public or

private companies, authorities or other actors, nor on the competitive nature of the organisational form.

As for any production, one or several actors can be responsible for each of the decisions presented in the table. In general the strategic-tactical-operational chain can be seen as a (series of) principal-agent chain(s). Numerous forms of organisation of this chain of principal(s) and agent(s) are possible and the following classification will clarify this by delineating a number of ‘pure organisational forms’ in relation to which real-world organisational forms can then be positioned.

3. CLASSIFICATION OF ORGANISATIONAL FORMS IN PUBLIC TRANSPORT

The tree-diagram presented in Figure 2 presents a global classification of organisational forms as can be encountered in public transport in Europe. The first distinction presented in the diagram is the dichotomy between ‘authority initiative’ and ‘market initiative’. This distinction refers to two fundamentally different categories of organisation of the supply of public transport services and relates closely to the legal framework within which services are meant to appear. In authority initiated regimes, transport authorities have the *legal* monopoly of initiative in the sense that autonomous market entry is legally impossible and that all production or market entry is the result of a conscious one-sided authority initiative to produce or request the production of services (this is the current legal situation in local passenger transport in France and Belgium). In market-initiated regimes, the supply of transport services is based upon the principle of autonomous market entry resulting from a market process with more or less regulatory checks at the entrance (this is

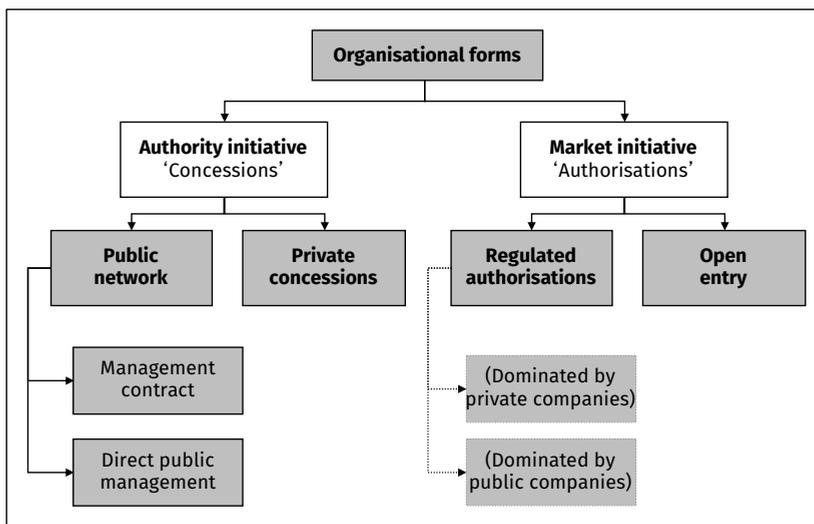


Figure 2 | Organisational forms in public transport

the current legal situation in local passenger transport in Great Britain, The Netherlands and Germany).

As will become clear from the rest of the presentation of this classification, two axis can be distinguished in the figure: the level of authority intervention in the appearance of public transport services increases from right to left, while from top to bottom the level of authority intervention increases in terms of design and production.

It should also be noted that all regimes presented in this figure can make use of competitive tendering to contract out parts or whole of their activities. This stresses that competitive tendering is merely a selection mechanism in the context of outsourcing, it is a method of production available to any initiator of services whatever the organisational form²⁷, but it is not an organisational form in itself. Concessions, regulation or direct competition can therefore not be seen as alternatives to competitive tendering.

The following paragraphs will describe market initiative regimes and authority initiative regimes. The following paragraphs will illustrate the possibilities for combining both regimes but also the confusions that sometimes appear.

3.1. Market initiative

The market initiative regimes in the tree-diagram have as common characteristic that commercially viable services are meant to appear out of autonomous market processes.

The role of the authority can be three-fold in these regimes:

- *Watchdog*: the authority can be a watchdog (regulatory authority), controlling and restricting the actions of autonomous companies on the market. Examples of this are the control on predatory behaviour (such as by the Office of Fair Trade in Great Britain), the control on the safety of operations, the granting of a temporary level of exclusivity and/or the co-ordination of supply (such as the authorisations granted by the German Traffic Commissioners), etc.
- *Subsidiser*: the same or different authorities can grant fare rebates to specific target groups of users and/or subsidise transport companies (e.g. by means of fuel duty rebates). Such subsidies, by means of redistribution of wealth, aim at reaching a different market equilibrium than what would prevail otherwise. These subsidies artificially transform a number of unprofitable markets into profitable markets and thereby increase the number of services that can appear autonomously in market initiative regimes.
- *Supplier*: the authority can itself also play a role in this regime by creating its proper supply. By so doing, the authority too becomes an entrepreneur on the markets

[27] Contracting out can indeed sometimes be observed in the free competition environment (see, e.g. the experience of Southern Vectis, House of Commons, 1995, p. 227).

considered. This action can be limited to additional services that do not appear out of the market process (non-profitable services) but that are deemed to be socially desirable on the basis of the policy aims of the authority. The realisation of such services can be secured by own means or by means of contracting-out (see further the section on combined regimes). In the extreme the authority can also become the main supplier of services (authorisation system dominated by public companies); a situation that is very common in a number of countries such as Germany and The Netherlands.

Market initiative regimes vary from fully competitive open entry regimes to restricted authorisation regimes where the operators are granted a more or less permanent and extensive levels of exclusivity.

Open entry regimes, which are only optimal in the absence of market failures, can in principle be based on various reference frameworks such as pure and perfect competition, contestable markets or monopolistic competition. The British bus sector is supposed to work according to the contestability framework, but the question is whether the rather strict theoretical conditions are met, the answer here is probably negative. These frameworks will only lead to a first- or second-best equilibrium if specific theoretical conditions are fulfilled in the markets at stake. A second-best equilibrium can be acceptable when the alternative regulatory costs to reach a first best equilibrium are taken into account. Authority intervention is not fully absent even in this regime as a proof of professionalism, credit-worthiness and reliability in the form of a licence²⁸ will usually be required to guarantee the safety and continuity of the service.

In *authorisation regimes*, the market is also the initiator, but licensed transport companies have to apply for an 'authorisation' before being able to provide services. This then protects them from competition for a period of time and to such an extent as is thought to be desirable by the relevant legislator or regulator. A wide range of possibilities exists here, granting more or less exclusivity to the operator. Regulation could, e.g. state that entry is prohibited if it influences existing services or that entry

is only allowed when it improves the existing services (such as an increased frequency while retaining co-ordination). The advantage of such regimes is that the initiative to create or improve services remains on the side of the market, avoiding the requirement for an authority to engage into the creation of services. The danger is, however, that the regulations and protections against competition become so extensive that firms are no longer disciplined by market forces and/or that regulatory capture takes place. This would, e.g. be the case when the incumbent operator benefits from an almost automatic renewal of its authorisation when it is due for renewal; as was the case in Germany until recently.

Within this regime a further distinction can be made between those organisational forms where autonomous private companies still dominate the market and those organisational forms where publicly owned companies dominate the market. The first variant tends to become exceptional nowadays outside some more rural areas (Norway, Portugal). The second variant, on the contrary, is the common situation in the Netherlands and Germany, especially in the urban areas, and it was applicable to Britain before the 1986 deregulation.

3.2. Authority initiative

Authority initiative regimes have as common characteristic that services can only result from a conscious action by the authority. As such no services can appear as result of simple market forces as no legal provision makes such autonomous entry possible (a legal public monopoly of initiative exists in France). In this sense, the authority is in this regime a monopolistic 'entrepreneur' as no services will appear without its action or order. Within these systems, a distinction can be made between regimes based on concessioning and on public ownership.

In *concessioning* the authority selects a (private) company to set-up and operate public transport services (usually a network) and this company is usually owner of its installations and vehicles²⁹ (an example can be found in France in Rouen). The selection procedure can take place according to various procedures (such as direct selection, negotiations after pre-selection or competitive tendering).

[28] The words 'licence', 'authorisation' and 'concession' tend, unfortunately, to have different meanings in each country. For the sake of clarity, we define here the recognition of professional qualifications (together with creditworthiness and reliability) as a 'licence'. This should not be confused with an 'authorisation' which is the document allowing actual market entry.

[29] It has to be noted that the word 'concession' has been used here 'in a rather strict sense where the right to exploit is transferred from an authority to a private company that will bring the necessary investments. The case where an authority transfers a right to its own public company has been classified under the heading 'public ownership', even if – legally speaking – this may also fall under the term 'concession'. This is carried out to avoid making a distinction between the various cases where the whole company or its main assets are public (such as production by the internal services of the authority, production by a publicly owned company, and production with public assets by under private management).

Public ownership regimes can be divided into two forms. In *public management* the vehicles and other installations are owned and run by the authority directly by its own administration (this can be found in smaller French cities, such as in Carcassonne), or through a publicly owned company at arm's length (this can be found in a few larger French cities, such as in Marseille). Alternatively, in *delegated management*, the authority makes the assets available to a (private) operator and to whom the authority delegates the management of the network (this can be found in many French cities, such as Lille or Lyon). Here too several procedures can be used. Such arrangements lead to a wide scope of contracts giving more or less operational and commercial risks to the operators and a more or less service design freedom to the operators.

These examples illustrate that the statement 'the authority is the entrepreneur' in authority initiative regimes does not mean that the actual operator necessarily has no room for own initiatives in term of services provided. It rather refers to the fact that: firstly, the room for initiative is limited to those sets of markets for which the authority has decided to select the operator; and secondly, that the scope for initiative is more or less severely limited by the contract linking the authority to the operator. In many real-world cases, the operator has effectively only a limited or no possibility to explore new markets.

Besides its role as entrepreneur, the authority retains in this regime too a watchdog task, mainly controlling the safety of operations by means of licensing of operators. This function is often not carried out by the authority responsible for creating the transport services, and there are indeed reasons to think that the organising and controlling tasks should not be carried out by the same authorities.

3.3. Combinations

It is important at this point to state that the classification presented up till now is only meant to represent a number of 'pure organisational forms'. Probably no single real-world example will fully correspond to any of the organisational forms presented in Figure 2. Therefore, only a careful reading and understanding of the legal, regulatory and organisational frameworks will be able to deliver the necessary information to position each real-world organisational form in relation to these 'Pure organisational forms'.

Intermediate forms may be desirable, are possible and do exist in reality. This is exemplified by the French practice combining what has been called 'delegated management' and 'concessioning' in Figure 2. The assets can partly be brought by the authority (such as infrastructures and

specific rolling stock) and partly by the operator (such as buses). Parts of the risk related to the investment can be born by the authority rather than fully by the operator, e.g. by guaranteeing a take-over of the investments and the personnel at the end of the contract. Parts of the production cost and the revenue risk related to the operations can also be born by the authority.

Observation of the real world will also show that several regimes can even co-exist within one area. Market initiative can be complemented by authority initiative but authority initiative can also be complemented by market initiative. Two (British) examples can be given to illustrate this point. In the British bus sector the initiative is left to autonomous accredited entrepreneurs to create public transport services. The local authorities can then intervene as a second order entrepreneur to create additional 'social' services (authority initiative), usually additional evening and Sunday services together with services to very low population density areas, which are not provided on a commercial basis by market initiative. A combination in the reverse order is also possible and is encountered in Britain in the railway sector. There the authority (in this case the Office of Passenger Rail Franchising on behalf of the Department of the Environment, Transport and the Regions) takes the initiative to create railway services by means of tendering (the so-called 'franchising'). In a second step the existing railway companies (and possibly also entrants) are allowed on the basis of their own initiative to venture into each other's territory up to a limit of 20% of the total revenues of a franchises (limited market initiative), this according to the so-called stage two of the 'moderation of competition' (Office of the Rail Regulator, 1998).

A different version of the combination of market initiative with authority initiative is also present in the current German local passenger transport legislation. According to the principles of that legislation autonomous market entry regulated by a system of authorisation provides for all profitable services. Additional non-profitable services can then be provided but have to be tendered by the responsible transport authority. These legal principles do not always correspond to the reality as various subsidies and cross-subsidies blur the distinction between profitable and non-profitable services.

3.4. Confusions

The authorisation regime when dominated by authority-owned companies is, interestingly, often confused with the public management situation under the authority initiative regimes. These organisational forms do indeed resemble each other as in both case one publicly owned company provides all services. They are however legally

speaking fundamentally different. The public company has in the first case only a de facto monopoly position, while it has in the second case a de jure monopoly position. Seen from a dynamic point of view, the monopoly position of the public company in the authorisation case is conditional upon the validity period of the authorisation or upon the preservation of specific protective regulations pertaining to the allocation procedure for the authorisation. In this sense an entry threat at the moment of the renewal of the authorisation cannot legally be ruled out. In the public management situation on the contrary, no entry threat legally exists.

We have been able to observe this confusion, or at least the lack of a clear distinction between both cases, in various discussions on regulatory reform. Policy makers as well as operators often have an understandable tendency to amalgamate both situations as the practice of the authorisation system, where companies are owned and controlled by the authority, such as in most cases in The Netherlands and Germany, has indeed become almost identical to a situation where the authority has the legal initiative. This illustrates how discussions can be hampered by the lack of adequate legal information besides the understanding of the day-to-day functioning of the systems in place. In the context of a discussion on a regulatory reform, the difference between both situations should however carefully be kept in mind as it determines the acceptability and legal feasibility of some reforms. A regulatory reform towards less regulation is, e.g. much easier to realise starting from a legislation based on authorisation than from a legislation based on concessioning.

An example of such a confusion is that between the legal position of the French publicly owned transport companies (*Régies* and assimilated) and the position of the German publicly owned transport companies (*Stadtwerke* and assimilated). The French public transport law (outside the Paris region), which is based upon the authority initiative regime, gives the transport authority the first right to create passenger transport services. In doing this it also gives the authority the right to decide whether these services will be provided directly by the authority (own production or own company with specific public status) or whether the services will be delegated to a different manager (using a specific awarding procedure). The German public transport law, which is based upon the principle of market initiative, gives the first right to create passenger transport services to the market. This does not give any specific legal right of first initiative to authority

owned companies. However, the low profitability of those services together with, on the one hand, some features of the German law which until recently strongly protected the incumbents and, on the other hand, a widely used practice of cross-subsidising public transport with the profits of other urban utilities (such as electricity distribution) resulted in a situation where publicly owned companies were not directly threatened by the existing German legal requirement to competitively tender all unprofitable services. This situation may change with the current tendency in Germany to interpret the law in a stricter sense and with the increase of competition in the electricity sector which may soon make cross-subsidisation impossible. This example further illustrates the point made above that an adequate understanding of the existing legal situation is essential for the analysis and design of regulatory reform.

4. EXAMPLES OF ORGANISATIONAL FORMS

Using the levels of planning and control as presented above, together with the insights provided by the classification of organisational forms, it becomes possible to draw graphical presentations of both existing and conceptual organisational forms in public transport.³⁰ As an illustration, a few organisational forms will be presented briefly hereafter. All are closely related to existing organisational forms in Europe or in the rest of the world.

The actors involved, their number and the way in which they come to play will depend on the organisational framework in place. In some cases all actors will be part of the same organisation or company ('in-house' or integrated production case), in other case contracting-out will be used and the actors involved will be part of different organisations or companies. The following examples will illustrate that the contracting out question is present at two different levels: for the link between the strategic and the tactical level and for the link between the tactical and the operational level. In particular the issue of tendering and contracting between authorities and operators, which has attracted a lot of attention in recent years (the main examples being Scandinavia, London and France), will be clarified by this approach.

In all but the last example the authority plays the role of principal' in the chain of actors. In these organisational forms the authority, which can be called *organising transport authority*, supplants the market and behaves as an entrepreneur by taking the initiative to 'create' transport services. In the last example, the authority is

[30] See Van de Velde and van Reeve (1996) for an earlier description of such models, at greater length, in a report on the implementation of tendering in public transport in the Netherlands, written for the Dutch Ministry of Transport.

not part of a principal-agent relationship, it is therefore not an organiser or entrepreneur as such. However, if the authority owns a transport company and determines transport supply through this ownership link, it thereby transforms its role into a de facto organising authority.³¹ In all cases, but especially in the latter, distinct *regulatory authorities* can also exist. These are the authorities issuing authorisations and those paying subsidies to users and producers.

The democratic relationship which exists between ‘the People’ and the (transport) authority should also be added to the principal-agent chain. This link exists as both organising and regulatory authorities are supposed to act on behalf and represent the interests of ‘the People’. Similar to the case where an authority chooses a transport operator in a tendering procedure, ‘the People’ chooses here an authority, or at least its controlling organs, in a democratic process.

The graphical exercise of converting existing regulatory arrangements into comparable grids can serve several purposes. It can be used to allow people who are not familiar with a regime to catch its essential features in a glimpse. It can also be used when designing regimes in order to keep the threads of reasoning well structured.

Key for reading the figures:

- The first row of each figure indicates which actors are involved in the organisational form described. The nature of each actor is given below its general name.
- The second row of each figure indicates by arrow-shaped blocks which control relationship there is between the actors involved.
- The lower part of each figure indicates which actors are responsible for the various decisions presented in Figure 1 by positioning each decision below the responsible actor. A white block indicates that the actor under which the block falls is the main or sole responsible for that decision. A shaded block indicates that the actor concerned also has some competence for the decision located immediately to the left or right. Text between brackets and within a shaded block indicates the type of influence given to the actor considered. The following examples are used in the tables (between quotes here): the ability to ‘discuss’, to make ‘proposals’, to set ‘minimum standards’ by means of contract, to create fare ‘rebates’, to impose vehicle ‘accessibility standards’, to require service ‘co-ordination’ and to require service ‘publication’.

- Text located vertically indicates the instrument or selection mechanism used to put in place the relationship represented in the second row of the figure.

4.1. Example 1: central planning and tendering of the realisation

The transport authority determines a number of transport and social policy goals which then serve as planning framework for its own transport department. By doing this, the authority states its ‘public service aims’. The transport department is obliged by the authority to contract out the realisation of all (or part of the) planned services to private transport operators using competitive tendering procedures (see Figure 3).

This organisational form, also known as ‘Scandinavian model’ or ‘London model’, can be witnessed amongst other places in the Copenhagen area. In this area several regional and local governments co-operate to form a transport authority (the political board of HT) which has its own planning body (HT-Hovedstadsområdets Trafikselskab), itself resulting from the split-up of the former regional transport company into a planning division and a bus division. HT organises the tendering for the realisation of the services it has planned.

4.2. Example 2: central planning at arm’s length and tendering of the realisation

The transport authority determines a number of transport and social policy goals which then serve as planning framework for its own transport planning company. By doing this, the authority states its ‘public service aims’. This first relationship is organised by a kind of management contract. This contractual relationship is not the result of a selection mechanism based on competition, although this could conceptually at least-be the case. This separate transport planning company is obliged by the management contract to contract out the realisation of all (or part of the) planned services to private transport operators using competitive tendering procedures (see Figure 4).

This organisational form is akin to what is known as the ‘Scandinavian’ or ‘London model’ with the difference that it includes a better formalisation of the relationship between the strategic and the tactical level by means of a separate planning body itself submitted to a (non-competitive) management contract. Such a organisational form was used in the Malmöhus region in Sweden until a recent local authority merger after which the arm’s length

[31] A municipal authority can, e.g. decide on the actions of its own passenger transport company even if, legally, there is a free market which is regulated by a different authority, such as a regional traffic commissioner (a situation existing in Germany).

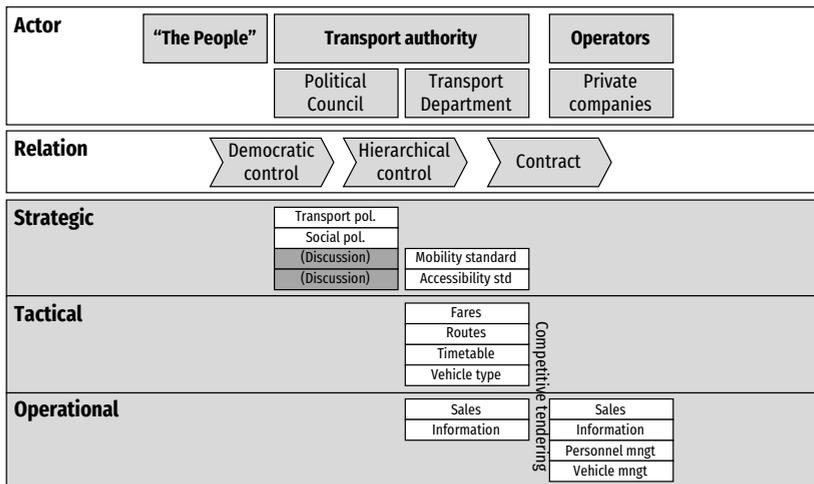


Figure 3 | Central planning and tendering of the realisation

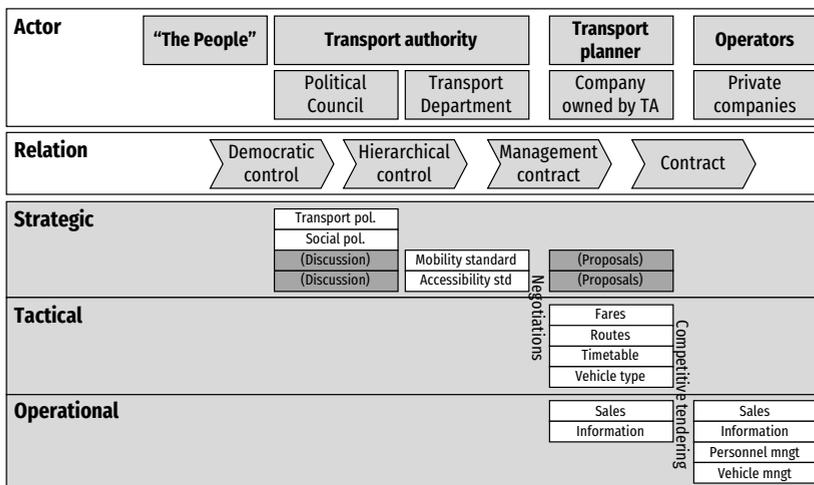


Figure 4 | Central planning at arm's length and tendering of the realisation

relationship between planner and authority disappeared due to the scepticism of one of the merging authorities about this organisational form.

4.3. Example 3: tendering of the realisation with re-design incentives in sub-areas

This organisational form is similar to the previous one with the difference that transport operators are given some freedoms to re-design the services in their area of operation and that contracts are organised at the level of small networks (sub-areas) and not at the route level. The definition of the 'public service aims' takes place in the same way as in the previous organisational forms. The planning company acting as an agent of the authority only influences the tactical decisions of the operators

by predetermining a 'minimum level of service' (which, if set at a high level, limits considerably the freedom of the operators) and an integrated fare system. The redesign freedoms of the operators are limited in order to maintain service integration (correction of market failure to realise network benefits). The planning company sets the fares and carries the revenue risk, taking into account the budget allocated by the transport authority, while incentivising the operator by paying a passenger(-kilometre) based fee (see Figure 5).

This organisational form is similar to the essence of the so-called 'Adelaide model' (South Australia), albeit that the real-world implementation of this organisational

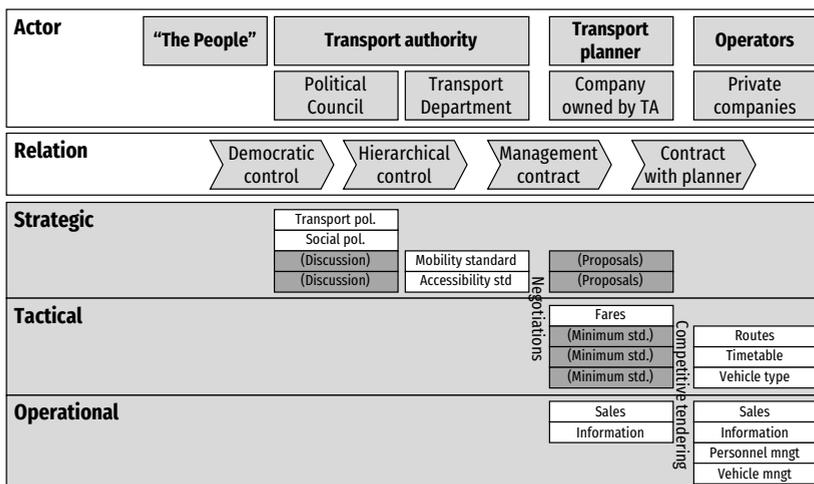


Figure 5 | Tendering of the realisation with re-design incentives in sub-areas

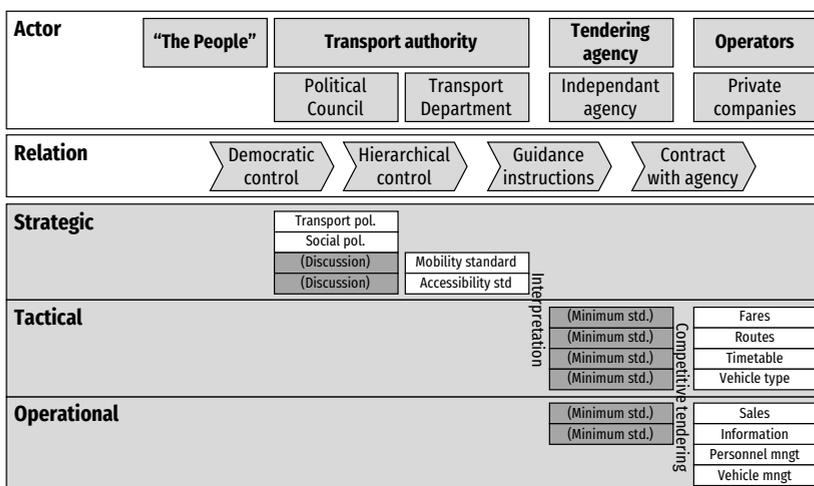


Figure 6 | Tendering of the design and realisation (concessioning)

forms in Adelaide was less thorough and ambitious than it potentially could have been.³²

4.4. Example 4: tendering of the design and realisation (concessioning)

This organisational form goes a step further in giving redesign freedoms to the transport operators. These

are limited by the minimum standards defined by the concessioning agency (such as the *passenger service requirements* defined in Britain by the *Office of Passenger Rail Franchising*³³) which organises the tendering of all services, area-wise, according to the instructions of the transport authority. The split between the 'transport department' of the authority and the tendering agency

[32] See Radbone (1997) for more details on the implementation and Cox and Van de Velde (1998) for the comments given by a conference workshop on this implementation.

[33] It can be argued that the word 'franchise' is not the most appropriate here as the common usage of this word refers to commercial brand franchising (fast-food restaurants, hotel chains, retailing, etc.) The so-called 'franchising' of the British railways was characterised by a desire from the Department of Transport to give a substantial level of freedom to the 'franchisee' in terms of the definition of product and its marketing. This is exactly the opposite of what happens with the commercial franchises mentioned above; there the product is well defined and the franchisee is not allowed to modify its specifications, he is however encouraged to sell more of the same.

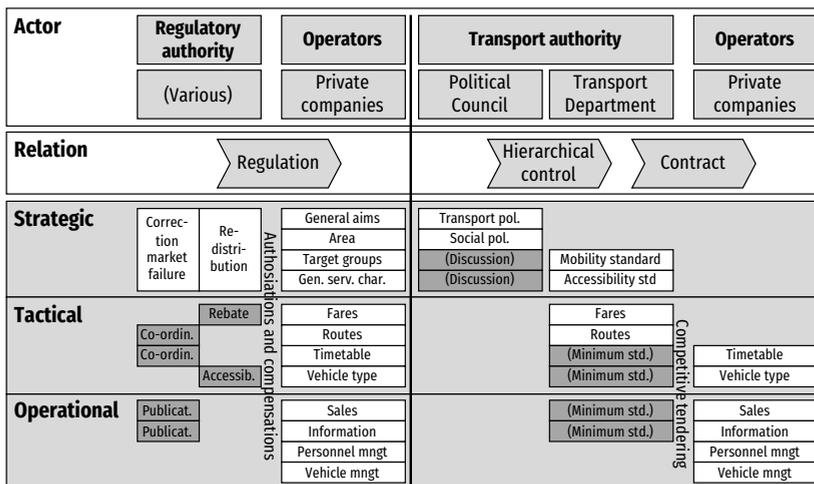


Figure 7 | Free competition with (light touch) regulation

introduces a relationship at arm's length but is not strictly necessary. The authority could also set the minimum standards and levels of the service itself, thereby determining the 'public service obligations' (see Figure 6).

This organisational form, which was used for the franchising of British Rail, is akin to the French practice for urban public transport networks. However, the distinction between the transport department of the authority and the concessioning agency either does not exist in the French practice or is not as strict as presented in this organisational form. Further, the difference between this organisational form and the practice in urban networks in France is located in the balance of power between operator and authority. While the operator has a rather strong position in negotiating the contract in France, its position is often weaker during the contract as most of its 'freedoms' often boil down to being *allowed to suggest* modifications to the services to the authority.

4.5. Example 5: free competition with (light touch) regulation

In this example, profitable services appear autonomously out of a market process. Some subsidies may indirectly be involved in the appearance of the commercial services (such as compensation of fare rebates for specific target groups, compensation of fuel duties in specific areas, etc.) By these means the authority may achieve some redistribution. Regulation may be needed to correct market failures without necessarily closing off all possibilities for competitive threat and autonomous innovation. Such a 'light touch' regulation could be

devised to avoid the most negative consequences of free competition which have been observed in Britain. The light re-regulation advocated in the bus sector in Britain, based for example on quality partnerships between operators and authorities, is an example of such a organisational form (see Carr, 1997). Besides anti-predatory measures, such regulation can include various 'rules of the game', such as:

- obligations to operate the services registered, to carry passenger according to published fares and timetables, etc.;
- provisions for service co-ordination, integrated information and integrated ticketing;
- an obligation to use vehicles accessible for prams, handicapped, etc.;
- an obligation to use specific fares, to provide a minimum level of frequency, etc.

It has to be remembered that an increase in requirements/obligations will in most cases result in fewer services being profitable. Such requirements/obligations do not, however, influence competition as long as they are equally valid for all incumbents and entrants (see the left-hand part of Figure 7). Additional, non-profitable services can be ordered by the authority on the basis of negotiation and/or tendering procedures. The transport and social policy aims, within the budget limits, define the extent of those services (see the right hand part of Figure 7).

The operators acting upon their own initiative in this setting are free to use sub-contracting in whatever way they like. This means that they may want to sub-contract

We prefer therefore to use the word 'concession' in the context defined in this section.

(parts of) the operational level to different (local) operators, they may also want to give to these operators more or less tactical powers (service re-design incentives) and may even want to contract out the whole design and operation. In all cases the selection mechanisms that these initiative takers can use vary from open competitive tendering, at one extreme, to direct selection and negotiation at the other extreme. In other words, the whole scale of organisational forms presented above in the context of authority initiative, is also available to the private entrepreneur *within* this organisational form.

5. CONCLUSIONS

The graphical approach presented in this paper allows for a simple comparison of the main features of most organisational forms in public transport. The five examples presented above are, however, only a limited illustration of the wide variety of organisational forms present in public transport in Europe. These examples also illustrate the differences that exist between the pure organisational forms presented in Figure 2 and the real world. As such the approach presented here is only a tool to facilitate mutual understanding and learning. It does not draw conclusions on the adequacy of the organisational forms presented but it is useful when considering alternative regimes in the context of a regulatory reform.

The framework presented illustrates clearly the importance of distinguishing between three levels (strategic, tactical and operational) when analysing organisational forms in public transport. An important point of attention for a further analysis is the level at which competition is used within each of these organisational forms, together with the timing and method according to which competition is used. A second paper will focus on the growing usage of competition within the various organisational forms put in place during the last fifteen years. It will reflect on the place of demand revelation within those organisational forms and summarise the elements of the discussion. By doing this the importance of the figure of the 'entrepreneur' in creating passenger transport services and of the mechanisms disciplining his actions will be stressed. We will then illustrate why, beyond the success of competitive tendering in achieving more productive efficiency, the search for a better demand revelation and realisation of the social goals of public transport may not easily be realised within some organisational frameworks commonly put in place with tendering. We will also suggest that other organisational forms based on market initiative but combined with adequate regulation may be more appropriate.

REFERENCES

[See reference list at the end of the thesis]



The STO framework

Many years after first developing these frameworks (1992) and publishing the main paper (1999), one can observe that these reference frameworks and their graphical components have indeed—as hoped for—proved useful to clarify the debate on institutional reforms in public transport, facilitating presentation and comparison of institutional frameworks. This can be inferred from their wide uptake in both the academic world and in advisory work, as indicated by the number of citations³⁴ of the paper. From both reference frameworks, it is the STO framework that caught most attention, as can be illustrated by a few examples.

The STO framework was recently recognised by the Thredbo conference series as one of its recurrent themes (Hensher, 2015b) and Wong and Hensher (2018) refer to it as a landmark idea that has grown “*to become the centrepiece of the Thredbo conference series [...] allow[ing] a range of issues to be framed within this setting as a way of understanding the various roles of stakeholders*”.

The frameworks found their way into various advisory reports and policy documents. They are included in World Bank advisory reports, such as in the report titled “*Administrative structures report on advancing urban passenger transport reform in the Europe and Central Asia region*” (Finn, 2003a) and more recently the report titled “*Institutional Labyrinth: Designing a way out for improving urban transport services: lessons from current practice*” (Kumar and Agarwal, 2013). They were used by research reports for the European Commission: the ISOTOPE Research Consortium (1997) report that analysed the organization of urban public transport in Europe, the QUATTRO Research Consortium (1998) report on quality in contracting urban public transport and the MARETOPE Research Consortium (2003) report on barriers to changes in regulatory developments in European public transport, as follow up to the Isotope report, and in the official study for the European Commission on the implementation of Regulation 1370/2007³⁵ (Maczkovics et al., 2010, p. 90). The International Public Transport Union also included the STO framework in its advisory report on how to set up transport authorities (UITP, 2011).

The frameworks were also used by various authors to present and describe public transport organisation or governance reforms. For example, Lleras (2005) applied the STO framework to describe graphically the reforms that accompanied the introduction of the TransMilenio bus system in Bogotá (Colombia); Wang and Zhu (2013) used it to depict the organisation of the Shanghai (China) public bus system (Wang et al., 2014)

We also used the frameworks when advising national or local governments in the context of potential reforms of local public transport. A prior version of the framework was included in the policy document on the implementation of competitive tendering in the Netherlands delivered by the Ministry of Transport to the Dutch Parliament prior to the enactment of the corresponding legislation (Tweede Kamer, 1996, p. 25; Van de Velde and van Reeve, 1996). It was used in reports for the Norwegian government analysing

[34] Google scholar counted 211 citations by September 2019, out of which 103 citations registered by Scopus, with a 4.48 field-weighted citation impact

[35] See further in this Part for more details on the EU Regulation 1370/2007.

competitive tendering in public transport (Van de Velde, 2004; Longva et al., 2005). It was used to sketch reforms options for public transport governance in the southern part of the Randstad area in the Netherlands (Van de Velde, 2011). More recently, it was used in a mission for the World Bank that we carried out and in which the reorganisation of the Bucharest metropolitan transport authority (Romania) constituted one of the major challenges. In this case, the conceptual and graphical analysis proved essential to facilitate the understanding by the local actors of their institutional situation in relation to international benchmark cases. It was subsequently used to progress in workgroup setting towards a consensus on the regime to adopt for the coming reform (World Bank, 2014).

Finally, the frameworks were or are regularly used in the context of academic lecturing at Erasmus University Rotterdam (the Netherlands), Delft University of Technology (the Netherlands) and the University of Lyon (France). They also constitute a central component in professional trainings that we give regularly across Europe for the UITP (International Association of Public Transport).

The entrepreneur, property rights and reference frameworks for state intervention revisited

The title of the paper refers to the concept of ‘entrepreneurship’ and the paper defines the actor in charge of the strategic level as being at the ‘core of entrepreneurship’. The specific attention paid by the paper to ‘entrepreneurship’ and to the figure of the ‘entrepreneur’ is linked to a concern that we observed during the case studies in some countries in relation to the ability of institutional frameworks reforms to deliver an improved ‘customer focus’. In the case of the Netherlands, this concern was very much at the basis of the reform that was being contemplated: operators were seen as closer to the market, thus more aware of the passenger market’s needs and thus better suited as ‘entrepreneurial’ actors from which could be expected that they would, if set in the right institutional framework, deliver more ‘customer focus’ and realise a better demand ‘revelation’ (i.e. better serve existing and yet unserved but potentially present demand). This would in turn (in the Dutch case) help to address one of the policy concerns that stood at the base of the reform that was being contemplated (increasing road congestion and stagnating public transport usage). The issue was thus to devise the ‘right’ institutional framework. The issue of demand revelation was also present at the core of other reforms, such as in Great Britain outside London for example, although in that case for rather dogmatic reasons. The issue of demand revelation could also be absent, as in Denmark for example, where the trigger for reform was inefficiency and not unsatisfactory demand revelation.

Entrepreneurship is defined in the paper as taking the initiative for the creation and supply of services, delineating at least the main characteristics of the services and taking some risks linked to selling the services. Implicit in this definition is the concept of innovation.

The paper then uses the localisation of entrepreneurship in the institutional framework, in the sense of the allocation of the legal right to create transport services to a specific type of actor (the authority or market actors), to discern between two main regimes: ‘authority initiative’ and ‘market initiative’. This is closely related to the discussion on the choice of reference framework for state intervention introduced earlier in Section 3.3 in the paper

by Van de Velde and Sleuwaegen (1997). However, while that paper considered alternative references framework for competition (pure and perfect competition, contestable markets, tendering) as simple alternatives, the approach adopted here goes one step further, in theoretical terms, by referring to the issue as one linked to ‘property rights’: who is the repository of the property rights of supplying passenger transport services in a specific market? In the authority initiative case, the authority has all property rights³⁶ to provide transport services, although it can decide to grant this right (temporarily) to another actor using, for example, a competitive tendering procedure. In the market initiative case, ‘the market’ (i.e. any qualified operator) has in principle the right to provide services, though this may under certain circumstances be submitted to specific regulation by the authority, while keeping the market ‘open’ to autonomous market initiatives, at least to some extent³⁷.

It can be interesting to compare this with Hibbs’ taxonomy of licensing³⁸ that was already alluded to earlier on. His taxonomy distinguished between ‘arbitrational licensing’ and ‘franchising’ but sees them essentially as a ‘range’. While these two concepts essentially correspond to our definition of ‘market initiative – authorisations’ and ‘authority initiative – concessions’, we see them as two fundamentally different organisational forms, not as a range (in our analysis, the ‘range’ aspect is limited to a continuum between ‘open entry’ and ‘regulated authorisation’, including the degree of involvement of authority-owned companies). Within the range that he perceives, Hibbs does nevertheless also see “an important ‘qualitative gap’ when arbitration ends and franchise begins” (Hibbs, 1986). While this implicitly refers to a similar entrepreneurship borderline as ours³⁹, it is not posited as centrally in his analysis. Rather, he sees the distinction between countries following the Common Law and those following the Civil Code as an important determinant for differences in regulatory approach. While this dichotomy undoubtedly has an impact on what is perceived in the countries considered to be the responsibility of the state, our work (see also the next Parts of this thesis) shows that things are not as clear cut and that other factors may in the meantime have led to a considerably more mixed landscape of arrangements.

A second theoretical approach can be used for further clarification. This links the definition of the entrepreneur used in the paper to the ‘entrepreneurial orientation’ construct, which is widely used in the entrepreneurship literature. Lumpkin and Dess (1996) define it as the combination of five behavioural characteristics that can be exhibited by firms which they link to better performance:

- ▶ Innovativeness
- ▶ Pro-activeness
- ▶ Risk-taking

[36] See, for example, Ekelund and Hebert (1981) for a discussion on the history of competition and property rights, in particular in relation to competitive tendering (franchise bidding).

[37] As Crain and Ekelund (1976) put it: “*It may be that the Chadwick-Demsetz principle would preserve competition at the expense of free enterprise.*”

[38] He defines the British and many similar licensing systems as ‘arbitrational’ and contrasts this characteristic with systems which are overtly based upon the allocation of a ‘franchise’ (Hibbs, 1986). This essentially corresponds to our definition of ‘authorisations’ vs. ‘concessions’.

[39] See also the section on ‘confusions’ in our paper.

- ▶ Competitive aggressiveness and
- ▶ Autonomy

It is clearly not our intention to investigate this relation here. However, this construct proves useful for clarification purposes within our approach. It allows in particular to qualify the extent to which an actor is expected to be ‘entrepreneurial’ in a specific institutional framework. To this effect, the list of behavioural characteristics can be used ‘in reverse’ to find out whether and to what extent a specific institutional framework allows and induces a specific actor (public transport operator, public transport planner, public transport authority) to exhibit any or all of these behaviours. If none of these are allowed for a specific actor, then clearly the institutional framework does not posit that actor as ‘entrepreneur’ on the passenger transport market. If one or more of the behaviours are allowed or encouraged by the institutional framework, then the corresponding actor increasingly qualifies as expected entrepreneur.

These concepts will play a role in the discussions on alternative institutional frameworks in later Parts of this thesis.

Remark

As the title and the concluding section of the paper suggests, a follow-up paper was supposed to be written after the 1999 paper included above. It would have focussed on the growth of competition as institutional feature and would have reflected on the positioning of the demand revelation function and the related incentives. The intention was to investigate why, beyond the productive efficiency improvements realised with competitive tendering, the improvement of demand revelation and better realisation of social goals may less easily be realised with some of the organisational forms emerging with competitive tendering. Then, alternatives, such as organisational forms based on regulated market initiative would have been discussed. While health reasons prevented realising that follow-up paper as planned, it seems—with hindsight—that this endeavour was anyway too ambitious to realise within one paper. Indeed, a large part of this thesis is devoted to discussing said issues.

4.2 Institutional layers

The case studies revealed the existence of a wide variety of institutions linked to the provision of public transport services. These vary from legislation at various levels of government, or national and local authority regulations developed in the context of those legislations, via the creation of specific governance structures at the regional or local level, such as the creation and specific setup of a local transport authority, the establishment of formal contracts between authority and operator, to various types of enforcement transactions (for example various practices or routines for monitoring or coordination purposes) undertaken by the actors involved in the realisation of public transport services.

In view of these complexities, we conclude that Williamson’s four layer framework (Williamson, 2000) introduced in Part I, needs to be enriched to more adequately cover the distinctions between institutional layers that have been identified through the case stud-

ies. While remaining in line with Williamson’s four layers, we need to distinguish a few sub-levels to allow for a more complete representation and a better understanding of the institutional layers at play (see Table 5). We also introduce a shorthand for these layers, which will be used throughout the rest of the thesis. At the level of formal institutions (L2) we distinguish between laws (L2.1) and regulations (L2.2), following a need revealed by case study research (Van de Velde and Leijenaar, 2001). Note that this sub-layering is in line with Williamson’s ‘frequency’ classification (layer L2.2 is or can be modified more frequently and more easily than layer L2.1). Similarly, we distinguish between two sub-layers within the institutional arrangements (L3). Layer L3.1 refers to the broad governance choices made when creating and organising transport authorities within the constraining framework of the formal institutions (L2). Layer L3.2 refers to the contracts that those transport authorities establish with transport operators, within the constraining rules determined by the governance arrangements at L3.1.

Table 5 | Institutional framework

Level		Examples	
L1	Informal institutions (embeddedness, customs, traditions)		▶ General behavioural rules in Rhineland societies, in Anglo-Saxon countries, in Japan, ...
L2	Formal institutions (legal environment)	L2.1 Laws	▶ National constitution ▶ Overarching public transport legislation
		L2.2 2 nd order laws Regulations	▶ Additional regional legislation ▶ Implementation rules of public transport law ▶ Ministerial subsidy regulations
		L3	
L3	Institutional arrangements (transaction governance)	L3.1 Local governance arrangements	▶ Creation of a local PTA ▶ Choice of governance type for the PTA
		L3.2 Contracts	▶ Concession contracts between PTA and PTO
L4	Interactions (transactions)		▶ Contract monitoring actions by PTA ▶ Contractual actions by PTO ▶ Daily PTA/PTO interactions

Source: author, based on Williamson (2000)

Finally, the interviews also showed that the existence of an institution is no guarantee for its actual functioning. For example, a transport authority can be created by law (L2.1) or local decision (L3.1 following L2.1) but this is no guarantee that said institution will be, or be able to be, functional as might be derived at first sight from information obtained through desk research (reading laws and statutes, for example). A contract can exist (L3.2), but this is no guarantee that it will be enforced and that a genuine intention exists among the parties involved to realise the interactions (L4) foreseen in the contract with the appropriate seriousness. Such discrepancies could be blamed upon a lack of information, a lack of time, a lack of budgets, ignorance, purposeful strategic behaviour or even sabotage, to name but a few possible causes. For our general research aim and method, this means

that understanding the functioning of an institutional framework requires more than a cartography of institutions through desk-research. Interviews are necessary to reveal actual practices and their potential discrepancy from formal structures. From a prescriptive point of view, it also means that one should be aware of potential discrepancies between ideal and real institutional arrangements, and be aware of the dangers resulting from following a 'nirvana approach' (Demsetz, 1969) when considering or advising the replacement of existing 'imperfect' institutional arrangements with idealised alternatives. A more subtle comparison of 'the achievable' will be required, informed by practical experience (L3), while taking a possibly changing institutional environment (L1 and L2) into account.

5 Competition in practice

This Chapter revisits the first research question, updating the overview presented in Chapter 3 by taking stock of the main institutional developments in European public transport in the following period (1990-2015). That period was rich in institutional reforms and learning and further case studies on institutional development in European public transport were conducted during this period⁴⁰.

This chapter contains two main sections. Section 5.1 covers developments until more or less 2005. Section 5.2 covers the next period, until more or less 2015. That second period is of major importance for the organisation of public transport in Europe as it includes the adoption of a new European Public Service Obligation Regulation in 2007. The process leading to the adoption of this Regulation, as well as its main contents and evaluation of its effects are presented and discussed in this section.

5.1 Developments until 2005

Several case studies were conducted during this period. This resulted in a number of papers presented at the 7th Thredbo conference (Van de Velde, 2001), as plenary paper at the 8th Thredbo conference (Van de Velde, 2003) and as plenary paper at the 9th Thredbo conference (Van de Velde, 2005c).

Two plenary papers were subsequently included in the conference proceedings books published by Elsevier (Van de Velde, 2005b; 2007). Extracts from these two chapters are included below. The first paper gives an overview until 2003, the second an update for 2005. The main points are summarised below the two extracts.

[40] The method used was, again, studying the legal texts organising the public transport sector, holding further semi-structured interviews with observers and actors involved in the reforms, and studying policy documents and advisory or analysis reports whenever available.

The Evolution of organisational forms in European public transport during the last 15 years (Extracts)

van de Velde, D.M. (2005)

In: Competition and Ownership in Land Passenger Transport Selected Papers from the 8th International Conference (Thredbo 8) Rio De Janeiro, September 2003
Hensher, D.A. (editor), 2005, p. 481-513, Elsevier, Amsterdam.

1. INTRODUCTION

[Section removed]

2. THE PAST 15 YEARS

2.1. Introduction

More than a decade ago, a paper by Gwilliam and Van de Velde (1990) analysed the potential for regulatory change in European bus markets. That paper was written in the context of the analysis of the consequences of the British bus deregulation that took place a few years earlier. It reviewed attitudes to deregulation in ten Western European countries (Eire, West Germany, Italy, France, Spain, the Netherlands, Belgium, Denmark, Sweden and Portugal) and focused on the rejection of the British free-entry deregulation by most of the analysed countries. While most authorities still adopted a rather conservative stance to most forms of competitive pressure, a number of them had already started to introduce competitive tendering. In the meantime, several countries adopted or continued to develop a contractual approach, often giving competitive tendering a place in their new regime (Denmark, Sweden, Germany, the Netherlands, Italy, etc).

That paper was probably the first one engaging in such an international comparison of the evolution of organisational forms in public transport in Europe. Organisational forms continued to evolve in the ensuing years and numerous publications have in the meantime reported on their performances.⁴¹ This chapter aims at providing an overview of the main *directions of change* that could be witnessed in those countries during the

last 15 years without focussing on *performance changes*. Legal and regulatory changes are complex to describe and often contain many subtleties. As it is impossible to treat this exhaustively within the scope of this chapter, we will focus here on the main evolutions within the general legal and regulatory frameworks of local and regional public transport (sometimes including rail) focussing on contracting and competition. This will be done for a list of essentially EU-countries selected such as to represent the most interesting evolutions⁴² up to the summer of 2003. Some pending changes are included in the presentations as well, but we refer the reader to Gwilliam and Van de Velde (1990) for developments prior to 1990.

2.2. The countries

2.2.1. Great Britain

The organisational form of local and regional public transport put in place in the 1980s in Britain is dual. Outside London, this was deregulation, liberalisation and privatisation, leading to a regime of free competition on the road. In London, this was central service planning and full outsourcing of route batches through competitive tendering by a division of the former publicly-owned operator, and privatisation of the bus operating divisions, leading to a regime of competition for the road.

Few things changed during the 1990s in the bus sector. The London tendering scheme passed from gross-cost to net-cost for dogmatic governmental reasons, and then returned to gross-cost. With the move back to gross-cost contracts, quality incentives are now being redeveloped.

[41] The ISOTOPE study (1997), in which this author participated, refers to several such studies and contains additional evidence.

[42] This chapter is based upon two papers presented at the Conference on Competition and Ownership in Land Passenger Transport (Van de Velde, 2001; 2003).

Deregulated areas settled down, concentration took place and passengers continued to decrease. The railways, on the contrary, were submitted to radical changes after 1993 with the introduction of network ‘franchising’ (i.e. competitive tendering). See Nash (2003) for a discussion on the developments in the railway sector.

The main changes came with the new transport policy promoted by the New Labour government since 1997, as policy initiatives were developed to tackle some of the problems linked to deregulation and privatisation. These give local authorities since the Transport Act 2000 some additional control on local public transport supply by giving them formal powers to create Quality Partnerships, or (exclusive) Quality Contracts (i.e. a competitive tendering scheme replacing deregulation). While the peak-time for quality partnerships⁴³—a practice that had appeared to improve public transport quality—seems to have been 2–3 years ago, little is happening since its ‘legalisation’, contrary to expectations. Existing quality partnerships continue to deliver, such as the area-wide agreement in the GMPTE area (Manchester) reducing the number of days in the year where bus services can be changed by the operators. In this area, bus patronage is reported to have grown by 4% over the past two years. Quality Contracts—i.e. the replacement of the free market by a regime of competitive tendering of exclusive rights to operators—remain unused as legal obstacles to their usage prove to be very strong. Such contracts are meant to be exceptions: to be allowed, it must be shown that this is the only practicable way of implementing the policies the authority set out in its bus strategy, it must be shown that quality partnerships cannot work and that proper notice has been given to incumbents.

A study published by the Department for Transport (DfT, 2001) on the deregulated markets outside of London (where competitive tendering is used only to complement the commercial network) is worth noting. Based on case studies of local bus tenders, the study reveals that on average the number of bids per contract continues to decline and contract prices tend to rise, with, however, a large variation over the country. Furthermore, concentration continues, even though new companies also appear and though no cartels or market dominance seem to have appeared. Explanations seem to be located, according to the study, amongst others, in increasing staff shortages, more realistic amortisation practices than in the past, higher quality specifications by local authorities,

the expectation of more commercial rates of returns by the large groups, and reduced patronage on some services.

Statistics (DfT, 2003) show that after many years of decline, the bus market (measured in passenger journeys) has grown modestly every year since 2000, but this does not exceed 1%. Furthermore, this growth is almost entirely due to London with a growth of more than 5% in recent years following upon a continuous growth since 1993. Outside London, only Scotland witnessed a very modest growth of 1% in 2001–02, other regions continued on average to decline at around 1% a year. The exceptions are a few towns and cities such as, for example, Oxford (Parkhurst and Dudley, 2004), where bus usage grew substantially and where most services are now supplied on a commercial basis. Such success is heavily dependent upon the strong and long-standing restrictive car-traffic policy.

The major change in London was the introduction of a road user charge in 2003, leading to a 16% reduction in traffic inside the charging zone after three months (TfL, 2003). TfL reports that 50–70% of this has transferred to public transport, which represents an increase of 3% in public transport activity crossing into and out of the zone and an increase of 1% in underground usage to stations in the zone. Patronage on buses entering the charging zone during the morning peak hour (08:00–09:00) was estimated to increase by 14%, while supply has gone up 19% in the number of buses in the charging zone. Most of the growth is, however, in the suburbs or associated with all-night services. While the London bus network virtually did not require subsidisation anymore since 1997–98 (except concessionary fare rebates, though), this subsidisation level started to rise rapidly again under the policy of the new organisation ‘Transport for London’, led by the new Mayor for London. This policy with added supply, combined with growing operating expenses (due to increasing wages resulting from labour shortages) in recent years, and with a road user charging scheme that appears to be more expensive in operations and generating less income than expected, may, according to observers, lead to a financial crisis (see also Preston, 2003).

Finally, the existing tension between the competition policy and the integrated transport policy of the Labour administration has been exacerbated by the new Enterprise Act (2002), regulating anti-competitive behaviour. This act now imposes severe penalties on such behaviour, further discouraging commercial operators to

[43] In such partnerships, local authorities can guarantee, e.g., some level of investment in public facilities (such as bus lanes or shelters) in exchange for improvements in the quality of service supply by independent transport operators, such as vehicle quality standards. Guarantees in terms of frequencies may not be asked though.

co-ordinate services (in particular timetables) contrary to what some of the critics of deregulation would want to see happening.

2.2.2. Eire

Public transport organisation (large publicly owned operators) in Ireland has remained stable in the past decade until rather recently. However, government consultation papers were published describing reform proposals that would lead to the reform and partial privatisation of the large publicly owned companies and a larger participation of the private sector (DPE, 2000). As a first step, Dublin bus was asked to introduce some sub-contracting by competitive tendering of bus routes. Further steps were to include the creation of an independent regulatory body that would take care of further competitive tendering. In parallel, more private operators were allowed to enter on the basis of market initiative (under the current legislation dating back to 1932) for as much as these did not compete with pre-existing services. It should be noted in this context that a fringe of non-licensed private operations has gradually developed besides the state-run companies. Both actions were meant to generate a larger pool of operators for the future regime.

Bus franchising (defined as competitive tendering with 'adequate' commercial freedom) is now due to become the primary means of organising bus services in the Greater Dublin Area (DoT, 2002). New services will be subject to this new approach first, to be followed by a phased tendering of the rest of the services starting with 25% in 2004. An independent body will be established to organise Greater Dublin public transport (service definition, fares and quality) and tendering. Long-distance buses entering Dublin will also be submitted to this regime. Suburban railways will continue to be operated by the national railways but under a negotiated public service contract, while LRT and metro services will be procured on a PPP-basis by the Railway Procurement Agency. The minister also declared that he had the intention to re-establish the three companies (Dublin buses, national buses and national railways) falling under the CIE-holding as independent commercial State companies with strong commercially focussed boards. Privatisation is not envisaged. Additionally, further infrastructure investments are planned for the Dublin area.

The reform of public transport regulation outside the Greater Dublin Area has not yet been determined. A consulting report (SDG, 2002) suggested a diversified

approach. The existing express network would be transferred to a management company (itself possibly subject to management tendering) charged with the gradual competitive tendering of the existing services, and regulated by a national regulator. Additional commercial services provided by private operators would fall under an authorisation regime, improving the currently outdated legal framework equally based upon market initiative. Urban bus services in the province would be contracted out competitively by one of two regional regulators, using net-cost contracts with additional incentives. Local regional services would fall under a two-tier deregulated regime (i.e. commercial services plus non-commercial tendered services), bearing some resemblance to the British regime but much improved by integrative measures. This proposal was received with criticism by the Public Transport Partnership Forum (PTPF, 2003), an official consultative body on public transport matters.

It is not clear yet how the balance between the current legal market initiative regime and the authority initiative through tendering will settle as further decisions have to be made on this point. The suggestions made in the report mentioned here indicate that market initiative for commercial services is likely to retain a place in the new regime, while integrated planning will gain in importance as well, where most appropriate, together with the spreading of tendering.

2.2.3. Denmark

The Transport Law for Copenhagen made the usage of competitive tendering compulsory in that area. This transformation process started in 1990 and ended by 2002. There is no obligation to use competitive tendering in the rest of Denmark, yet during the last ten years the usage of competitive tendering has gradually become the norm there as well, such that the pre-existing provincial 'public transport companies'⁴⁴ are now in effect only public transport planners. As a result, almost all bus services have now been tendered in Denmark (with the exception of the municipality of Århus). Recently a first batch of about 15% of the railway sector was also submitted to competitive tendering.

The tendering regime developed in Copenhagen started with rather simple gross cost contracts. The transport planner chose, as in all other regions of Denmark, to retain revenue risk. Quality management features were gradually added. Yet, quality incentives to operators are solely related to operational aspects and not to tactical

[44] The Danish law gives regional authorities (municipalities and provinces) outside the Capital region of Copenhagen the power to organise public transport jointly or separately. For this purpose they can create 'public transport companies' that are allowed to produce all services themselves or contract out services.

(service design) aspects. This regime tends to serve as an example for the rest of the country. Recently a new 'Capital region development council' (HUR) was created to integrate public transport planning in Copenhagen with wider regional issues. The pre-existing 'Capital region public transport company' (known as HT), that was responsible for the planning of bus services in the region, was integrated in this new structure. A further five local railways and the new automatic metro line were integrated too while regional rail services remain under the responsibility of the Danish State railways (DSB). Yet, all modalities continue to fall under the integrated fare regime developed by HT (now HUR).

Contract forms are in slow evolution. Based upon repeated requests by operators to transfer more powers to them, Copenhagen is now experimenting with a patronage incentive contract added on top of an existing tendering contract for an urban express bus route. The new Metro-services also fall under a passenger incentive contract. The discussion on the advantages and disadvantages of net-cost contracts continues in the provinces, but is also influenced by the mitigated success in Sweden. The addition of specific incentives, as is developing in the Copenhagen area, is more likely to be followed in the rest of the country, as an incentive linked to passenger growth in Silkeborg.

On the supply side, it can now be observed that most large companies are foreign-owned with Arriva and Connex having together about two-thirds of the market. The former state-owned Combis (formerly DSB Bus) had come into financial difficulty and was taken over by the British Arriva in 2001. Its Copenhagen operations were taken over by Connex to avoid a too large market share for Arriva in Copenhagen. The rest of the market is in the hands of many small Danish firms. There was a fear for this growing concentration, which was exacerbated by the upward trend in contract prices after the major cost reduction reached in the 1990s with the introduction of competitive tendering. However, prices are reported to be still about 10% under the old level, while bus quality has been increased markedly. Nevertheless, to control this concentration trend, Copenhagen decided to use tendering with negotiation after pre-selection for the first time in its June 2003 tendering round, and further tendering will follow this same path. New contracts will also be longer (6+2 instead of 4 years). Prices have now been stabilised or reduced slightly.

2.2.4. Sweden

The organisation of public transport in Sweden has moved since 1989 from an ossified market initiative regime, where operators had exclusive monopoly rights, to a regime that

is essentially based on authority initiative and where regional transport authorities (sometimes in the form of a company owned by local and regional authorities) are responsible for the public transport planning (routes, timetable and fares), while operations is contracted out by competitive tendering. Competitive tendering spread gradually throughout Sweden and almost all routes have been tendered at least once by now. Tendering is not limited to bus services. It has also spread to most regional railway services and the Stockholm metro. Tendered contracts, mostly of the route-by-route type, have led to substantial cost reductions. In the same period, publicly owned companies operators were privatised or taken over. Overall, the number of operators decreased.

The large majority of contracts are gross-cost and their content evolves only slowly. Some Swedish observers have expressed their fears that the current gross cost contracts exert too much pressure on costs and do not allow for sufficient innovation. A minority movement towards net cost contracts and more freedom of planning for operators can be seen but this is currently limited to the cities of Helsingborg, Sundsvall and Östersund where network contracts have been let. Net-cost contracts seemed to be developing further a few years ago, but by 2000 only 3% of contracts were net-costs, though that share has been reported to have grown slightly later on (SLTF, 2002, p.20). Yet, in the meantime, existing net-cost experiences seem to have come into difficulties for various reasons, amongst which the division of service planning responsibilities between operator and transport authorities seems to play a major role. The Helsingborg contract (lasting until June 2004) may well return to gross-cost and the future of other experiences, such as the 1999 Sundsvall contract, should be followed in more detail. Other contracts based on gross-costs but with added passenger incentives (as in Jönköping) or with at least some freedom of design may well develop where, as in Stockholm, the tendering authority declares that quality and customer focus is the next goal after cost reduction.

Profitability problems have been mentioned in the sector for several years. Gross-cost contracts, the alleged resulting strong focus on cost competition, and inadequate indexation clauses in the past are blamed. In recent tendering rounds, though the picture is not yet clear, contractual price increases have been reported. See Alexandersson and Pyddoke (2003) for more details and an overview of the last 15 years of competitive tendering in Sweden.

On the supply side, further internationalisation could be witnessed, even if the British players Stagecoach and Go-Ahead left the market (for Go-Ahead this was linked to

problems with two tendered railways contracts), leaving Arriva as the only British player in Sweden. The Swebus company, formerly owned by Stagecoach, was taken over by Concordia, a Norwegian company. Perhaps even more than in other countries, the presence of French groups is very visible. Keolis (resulting from the private VIA-GTI and Cariane, a subsidiary of the French state railway SNCF) took over the shares of Go-Ahead and bought 70% of Busslink, the public bus operator in Stockholm. Connex is very present too with many contracts, including the Stockholm metro. This Swedish branch of Connex is furthermore Connex's head-office for the northern and eastern parts of Europe.

2.2.5. Norway

In Oslo, the public company has been split into three modal (metro, tram and bus) divisions in July 2003 (the separate bus division already existed since 1997), all owned by the same municipal company which continues to function as a central planner and principal to the service contracts. The planned privatisation of the bus division could not be achieved until now as there is no clarity as to the future contracting or tendering regime. Meanwhile Connex grows by take-over and won contracts in the counties of Rogaland (Stavanger), Akershus and Vestfold.

The development of quality contracts that was typical for Norway a few years ago has slowed down. One reason for this is that it is not clear whether this approach will remain acceptable after the expected enactment of the proposed EU-regulation (due to replace the 1191/69 regulation and which is, interestingly, directly applicable in Norway). Quality contracts are currently being used in Norrland, Hordaland and Kristiansand. Net contracts are in the minority. There seems to be a development towards tendering on gross cost basis, but overall there is still very little of it around. The share of tendered operations has grown from 10 to 15% of the whole bus market during the last 1½ years. A new 'output-based' competitive tendering regime is due to be implemented in Telemark too, but a lack of budget is slowing down the reform. See Berge et al. (2003), Hagen (2003) and Odeck et al. (2003) for some issues relating to quality contracts, subsidisation regimes and staff costs in competitive tendering.

By 2004 a new trial scheme for urban public transport will start. Several larger cities have been invited to participate in this new type of organisation where all finances, investments, costs will be bundled into one budget, avoiding separated budgets for investments and operations. These organisations will also carry the

responsibility for contracting and tendering, though this is not the main aim of the reform.

2.2.6. The Netherlands

Local and regional public transport in the Netherlands was historically based upon the principle of market initiative but moved de facto gradually away from that principle, giving a great degree of stability to incumbent operators, which were mostly authority-owned. The 1988 Passenger Transport Act was meant to simplify the regulatory framework (limited deregulation), to better integrate services and give more control on the growing deficits. A lump-sum subsidisation regime was implemented while the nation-wide ticket and fare integration, introduced back in 1980, was maintained. The subsidisation was rather complex and often fine-tuned by the Ministry. It moved from a supply norm base, to a passenger-km base and finally a passenger revenue base but it was crippled with exceptions and time lags that weakened its incentive power. Regional transport companies, owned by the state or local authorities, were amalgamated into one large group before being split again and for some parts privatised in order to generate competitors for the pending tendering regime. Autonomous entry by private operators, while still legally possible, hardly ever took place in practice.

The period from 1992 to 2000 witnessed a seemingly interminable discussion on the introduction of a competitive tendering regime.⁴⁵ This resulted in the enactment of a new Passenger Transport Law by January 2001. The reform aims are twofold: more attractive public transport services (especially in areas worst hit by congestion), and an improvement in cost recovery ratios. Powers were decentralised to provincial and regional authorities, competitive tendering for concessions was introduced gradually (35% of services have in principle to be competitively tendering by 2003, a target that was not reached on time but that will quickly be exceeded within the next years), and authority-owned local transport companies are to be put at arm's length or privatised. A go/no-go decision to move to 100% in 2006 will take place after a Parliamentary evaluation (based on passengers, quality and costs) in 2004.

The particularity of the new Dutch regime is that it aims at tendering competitively whole networks whereby it is up to the operator to design the services to be produced and the fares to be charged within the aims and limits stated by the concessioning authority. The first cases can now be observed but most authorities seem to be reluctant to

[45] Two experiences with competitive tendering (with mixed results) even took place in 1994 (see Van de Velde, 1995c).

actually give a lot of freedom to the operators. Only a few cases seem to follow the original idea of the reform. While it is still too early to be able to draw clear conclusions, one can observe that operators are offering between 10 and 60% more bus-hours for the same amount of subsidy as before. See Hermans and Stoelinga (2003) for more details on the reform and first conclusions, and Van de Velde and Puijmbloom (2003) for further details on the first cases of service design tendering.

2.2.7. Germany

- Legal basis

German public transport is legally based on the principle of free entrepreneurship and market initiative. Yet, financial support to publicly owned companies is organised in such a way, and markets are so strictly regulated in practice, that freedom of initiative hardly exists and incumbents have, de facto, a preferential position. Furthermore, most services are provided by publicly owned companies even if, in the countryside, a substantial part is provided by small private operators, often based on traditional sub-contracting.

The decentralisation of subsidisation and parts of the legislation to the German states were the main changes that took place after the German reunification. In most cases, local authorities were granted the power (or duty) to establish regional transport plans, that became leading when operators request authorisations to provide transport services, even if the legal principle of market initiative remained. At the same time, the *Verkehrsverbände*—transport associations co-ordinating public transport in larger areas that were sometimes created by co-operating public operators—were granted a more formal position. They were often re-established as co-operations of local authorities effectively granting them a position of passenger transport authority.

- Limited usage of competitive tendering

Legally, commercial (i.e. profitable) services can be granted without tendering to requesting operators, while non-commercial (i.e. non-profitable) services have to be tendered since 1996. This principle is similar to the distinction between commercial and non-commercial services in the deregulated areas in Britain; with the substantial difference being that competition *on* the road is not allowed as the authorisations provide a high level of exclusivity. In practice, however, German public transport lives in a rather hybrid situation and this legal distinction between commercial and non-commercial services is at the centre of much debate. Most services are heavily subsidised and are thus economically non-commercial, yet few services are actually submitted to competitive

tendering. This is because various forms of subsidies (in particular cross-subsidisation from other public utilities such as electricity distribution, but also capital grants and investment subsidies) continue to be used to maintain a fiction of profitability and avoid the competitive tendering obligation. Furthermore, several sources of subsidy (such as those on rolling stock investments) prevent new entrants from having fair access to markets. The result is that there is still very little competitive tendering to be observed in the bus sector. One notable exception is the transport authority of Frankfurt (Main), planning to move to 100% competitive tendering within 8 years. There is, besides this, a slight tendency to have more contracting and quality agreements than before, but the traditional ways of covering public transport deficits *ex post* seems to stand in the way of a further spread of such *ex ante* contractual practices.

Contrary to the bus sector, regional rail was the sector where most competitive tendering could be observed in Germany a few years ago after the decentralisation of financial means from the federal government to the federated states. Tendering in this sector continues at the same slow pace, with the participation of companies such as Connex, but also numerous regional companies, often in the regional public sector. Besides this, most regional railway contracts have now been awarded directly to DB for periods of 10 to 15 years without competitive tendering, despite a court decision in 2002 declaring that competitive tendering was applicable. Tendering rules were subsequently modified to state that only a 'substantial' part of the transport services had to be tendered competitively. The regional DB-contracts now include provisions to gradually submit 10 to 30% of those networks to competitive tendering. Still, MehrBahnen (a union of new entrants) blames politicians for supporting this conservative stance and some observers are concerned by the contractual terms continuing to reward DB on an average price basis, even after the planned contracting out of the most unprofitable routes. A further court ruling in September 2003, based on a case started by Connex, stated that there is no obligation to use competitive tendering in the railway sector, which in turn prompted a request for further explanation by the European Commission.

- The Altmark ruling

The future may see important changes taking place, though, as another court case has finally led to a ruling by the European Court of Justice on 24 July 2003. Prior to the ruling, the presumption of several observers was that many of the current subsidisation practices are incompatible with the German legislation. In the extreme, this would mean that a substantial part of German public transport is 'illegal' in that it should have been tendered competitively

rather than simply granted to the historic operator. To prepare for such an eventuality, some operators started to prepare by trying to be truly commercial so as to avoid the tendering obligation, some Verkehrsverbände started to orient themselves on competitive tendering and the Union of German Cities realised what the new position of authorities might (have to) become. Even if many favoured the status quo, the general expectation was that markets, eventually, would open up.

This case is extremely complex and impossible to present in details here. It is related to a dispute between a privatised, former communist, company (Altmark Trans, further AT) in the Eastern part of Germany and a newer public company (Nahverkehrsgesellschaft Altmark, further NVGA) pertaining to the attribution of a few route authorisations. Routes had been granted to AT in 1990 until 1994, these were then extended until 1996. NVGA wanted to be granted the authorisations after 1994, but was rejected by the Traffic Commissioner because AT was seen to fulfil all requirements and required the lowest level of subsidy, furthermore the law foresees the protection of the grandfather's rights, i.e. those of AT in this case. AT's authorisations were then extended until 2002. NVGA then complained to the traffic commissioner that AT did not fulfil the legal requirements to be granted a commercial authorisation as AT required subsidies, furthermore NVGA thought it was able to produce services more economically. After a rejection by the Traffic Commissioner, NVGA complained to the Administrative Court, which rejected the case. However, AT's authorisation were cancelled in appeal, as the court considered the services were indeed not commercial, due to the existence of subsidies. Furthermore, the Court found that since 1996 the European regulation 1191/69 applied to public transport in Germany, and that subsidies should accordingly have been granted by public service contract or obligation under the corresponding procedure for granting non-commercial authorisations. Yet, the local authority had established no contract, nor obligation. This also meant that NVGA could not either be granted the authorisations on a commercial basis, as they too required subsidy. AT then complained at the Federal Administrative Court (FAC), which found that some subsidies are compatible with national law, also for so-called commercial services. Yet, the FAC decided to ask pre-judicial questions to the European Court of Justice (ECJ) to clarify a few matters relating to the applicability of several European principles (state aid and public service obligations) to this case, as it was thought that European law would perhaps confirm the appeal.

In a nutshell, the ECJ ruled on 24 July 2003 that the existing EU-regulation 1191/69 (as modified by regulation 1893/91) pertaining to public service obligations and

contracts does apply but allows member states to exclude local public transport from its application. Germany made use of this right of exclusion until 1995 and could have chosen for a partial applicability of 1191/69 to non-commercial services only from 1996 onwards. However, the ECJ comes to the conclusion that the current German legislation may well not give enough legal certainty on that matter as operators, also in the opinion of the FAC itself, are free to choose either procedures (commercial or non-commercial). The ECJ refers this matter to be decided by the FAC, ruling that partial exclusion can only be allowed when legal certainty exists. The ECJ adds that in those cases where exclusions would be allowed, the German jurisdictions would still have to ensure that a number of other principles resulting from further European rules pertaining to state aid are respected, such that the granting of specific public transport subsidies would not constitute state aids and not require notification. The ECJ states four conditions that have to be fulfilled simultaneously: (i) public service obligations (PSOs) imposed upon the operator have to exist and be clearly defined, (ii) the parameters to calculate the corresponding subsidy have to be determined objectively and transparently beforehand, (iii) there shall be no over-compensation, and (iv) when competitive tendering has not been used to select the operator, the subsidisation level shall be determined by the typical cost of well-managed and equipped companies faced with similar obligations.

The consequences of this ruling are far from clear yet and it was interesting to see that, after the court ruling, all stakeholders saw in the judgement exactly what they wanted to see; a situation leading to contradictory comments. Some observers expect that, in a first time, politicians will keep quiet, believing that a status quo can be maintained. Whether the case will be continued by the FAC remains to be seen, but further court cases are likely to emerge, very much to the future surprise of many proponents of the status quo.

A first analysis could lead to the following considerations (though final conclusions have to be left to lawyers and courts). If the FAC reconfirms the freedom of choice for operators to ask for authorisations both under commercial basis and under non-commercial basis, this will lead to the general applicability of the 1191/69 regulation on all services. According to this, subsidies can only be granted when the imposed PSOs lead to specific costs. All subsidies then have to be granted by a public service contract or obligation. German legislation foresees in such a case a preference for contracts, leaving obligations to exceptional situations. Furthermore, such contracts, according to German legislation, have to be tendered competitively. If the FAC rules otherwise, then the four conditions stated by the ECJ apply, which boils down to a

similar regime in the German case as a pre-determination of both PSO and subsidy for specific services requires the existence of a contract, and the proof of non-over-compensation has, in German law, to be reached by preference through tendering. Average cost comparisons, as an alternative, would be notoriously difficult in this sector, unless adequate benchmarking could effectively be developed.

In view of these eventualities, one might expect a higher acceptance of the EC's proposal to replace regulation 1191/69. Yet, the German States (Länder) are still not unanimous about a more widespread use of contracting and tendering. It is nevertheless my opinion that the EC's proposal provides, in fact, a better fit with the existing German legislation, its economic principles and the aims of the EU-treaty in terms of open and fair competition by allowing explicitly both general non-contractual subsidisation and specific contractual subsidisation (see further). This feature of the German (and British) regimes is currently not foreseen in regulation 1191/69.

Other factors still may precipitate a movement towards contracting and tendering. First, the ECJ ruling made clear that the state aid principles of the EC Treaty are applicable to public transport and that problems may appear, including the repayment of state-aids. Then, the inter-utility cross-subsidisation arrangements, being payments ex post, seem difficult to combine with all pending requirements and are increasingly difficult to maintain in view of the liberalisation in the other sectors. Finally, prejudiced entrants may launch a frontal attack on this system, but whether this will even happen is uncertain as many still have weak positions or stand to lose in terms of reputation. On the other hand, expansionist municipal companies may also themselves force the opening of Pandora's box, even if this may backfire.

Despite all arguments presented above, it should be noted that the majority of the public transport sector in Germany still seems convinced that nothing will happen and that the status quo will be maintained. Future will tell which version is correct.

Note that in the meantime, the existing authorisations of AT have expired in 2002, and AT applied for and was awarded new authorisations under the commercial framework, but this time refusing any subsidy and bearing the deficits on the fortune of its owner, apparently to get rid of all the hassle!

- **Supply side**

On the supply side, the German market is still very fragmented, although a few German players, such as Sippel, are growing. Few international players have entered

the German market until now due to all the uncertainties. The main foreign participant for the moment is Connex, with a large variety of operations (local public transport, regional routes, regional railways, freight railways and even a few commercial long-distance services operated on open-access to the German rail network). The other is Rhenus-Keolis, a co-operation between the private German Rethmann Group (51%) and the French Keolis (49%), which is part of the SNCF group. British groups, such as Arriva, are trying to enter the market, but without success until now.

The main way to enter the German market is through the slight privatisation trend of municipal public transport companies. Connex only won its first bus tender recently, the rest of its activities are mainly the result of privatisation or take-over. The reason for privatisation lay not so much in pro-competition positions, but much more in urgent financial factors, such as the dear financial situation of many municipalities (especially in Eastern Germany), the pending loss of the possibility of cross-subsidising between public utilities due to further competition in the electricity sector (etc.), and further tax reforms. It is expected that the buyers will be both international players, a few more enterprising German municipal public transport companies, small to medium sized German private operators and, foremost, the German state railways (DB), the privatisation of which is envisaged for as early as 2005!

2.2.8. Belgium

Public transport legislation in Belgium changed considerably after the federalisation of the country in three regions (Flanders, Wallonia and Brussels) in 1990. The national bus company was split into two regional (Flemish and Walloon) operators. The remaining urban operators (Antwerp, Ghent, Liège, Verviers and Charleroi), owned by the state until 1989, were merged with their respective regional operators. The existing operator in Brussels (STIB/MIVB) was 're-created' as a separate regional transport company. Management contracts were signed between each regional government and its own operator(s). These contracts (usually for four years) mostly include specific aims related to the quantity and quality of service and include commitments from the authority as to the subsidisation budget available to the operator. In Flanders, this is complemented by voluntary agreements with municipalities who want to order additional services against payment and against additional infrastructural measures to ease traffic congestion. The experience of free public transport in the Flemish city of Hasselt is a result of this and has subsequently led to the introduction of free travel to elderly people all over the country.

About 30 to 40% of non-urban public transport in Belgium is traditionally operated by so-called 'tenants'. These small family companies operate under gross cost contracts and owe their position to historic rights rather than to competitive tendering. Their services are planned by the regional planner/operator. The Walloon company, operating in the southern part of the country, continues to operate according to this historical regime of negotiated contracts without competition. The position of the Walloon authority is rather against competition. The public operator there has even bought one of its tenants and is participating in bids elsewhere together with others.

While the Brussels company also seemed to be moving towards the Scandinavian model of gross-cost route tendering a few years ago, it now seems that only Flanders has made moves in that direction. The Flemish company, operating in the northern part of the country, has cancelled all existing contracts with the tenants and tendered them out competitively in 79 batches by 1 January 2003. The small size of the batches, together with a qualification procedure, were conscious attempts to keep the large international operators at a distance, to the advantage of the traditional local and familial transport operators. Even so, large international groups such as Connex have been growing by buying existing familial operators. The award criteria included quality aspects besides the price and two negotiation rounds were organised. Unfortunately, no information concerning the effects of this tendering has been disclosed until now other than that prices have been going both directions, partly due to changes in service levels. There is no intention to increase the share of tendering any further than 50% of operations. The rest of the operations remain in-house, to be benchmarked by the regional operator itself. Besides trade union pressures, they wish to maintain production expertise and bargaining power in view of the possible development of oligopolies.

2.2.9. France

The legislation introduced in 1982, and according to which control on public transport had been decentralised⁴⁶ to the Départements⁴⁷ except where (co-operating⁴⁸) municipalities had themselves taken over responsibility for their urban area, meant that the principle of authority initiative was gradually to replace all remnants of market initiative (some routes were/are still profitable in the countryside). According to this

regime, transport authorities have to contract services to operators unless they decide to retain their legal right to public production. This period saw a gradual spreading of contracting and tendering and sometimes the introduction of public private partnerships for the developments of new (underground) rail systems in provincial cities. Pure private financing hardly ever took place, however.

The usage of competitive tendering became compulsory only after 1994 but the legislation continued to allow authorities to provide services directly or through their own company. The competitive tendering legislation applicable to public transport allows for negotiations within the procedure; a main difference with the tendering legislation applicable to service contracts in France (and in Europe). An important discussion took place during the following years about its applicability to public transport. The question was whether usual public transport contracts had to be assimilated to simple service contracts in view of the high level of subsidisation (typically about two thirds of total production costs) and the low level of revenue risk incurred by operators in most (urban) cases. This long-standing French legal dispute delineating the borderline between two different kinds of competitive tendering procedures has been (partially) resolved by a new piece of legislation, confirming existing jurisprudence. The consequence is that contracts classified as 'service contracts' now fall under stricter tendering rules that do not, in principle, allow for negotiations within the procedure. Yet, further uncertainties relating to the extent to which negotiations may be used as last step in tendering procedures seem to remain and further court cases cannot be excluded.

No major changes took place on the tendering/contracting side recently as France remains in favour of the tendering of whole urban network, from smaller towns up to large networks such as Lyon (due for renewal in 2004) or Lille. Paris and Marseille continue to be run by authority-owned companies, though. There have been discussions on organising tendering by smaller batches (sub-networks) to favour competition, but no authorities have yet accomplished the step. In practice urban authorities mostly contract out the management of the whole of their network to one company. Installations, vehicles and staff are transferred if a new company wins the management contract. The investment budget is mostly managed by the authority, which also specifies rather precisely the

[46] The Paris region retained the older legislation. This case will not be discussed here.

[47] France is subdivided in Régions, Départements and Communes (municipalities).

[48] Authorities were given large freedoms to organise local co-operations to compensate for the small size French municipalities.

services to be offered under the contract. The winning operator is expected to participate in the development of the network (marketing, etc.) but its autonomy to do so is usually severely limited by the contract, leaving the last word to the authority.

Major changes could be observed on the supply side in France during the last four years, with quite a substantial concentration and a stronger influence of the state sector at the expense of the purely private sector. At the end of 1999 already, the French state railways (SNCF) entered in the urban public transport market by taking over, through their subsidiary SNCF-Participations, a share in the formerly private transport group VIA-GTI and merging it with its own bus subsidiary (Cariane). The resulting group, called Keolis, is owned for 43.5% by SNCF-Participations, 48.7% by a subsidiary of the Paribas banking group (former owner of VIA-GTI, but who is expected to sell this participation eventually) and 7.8% by competitor Vivendi, now Veolia. The new CEO comes from SNCF. Connex, the largest private group, part of the Veolia group (formerly Vivendi), now mainly active outside of France, took the French Verney group over in 2002, one of the last large private family-owned (Verney-Michelin) transport group. In 2001, the Italian San Paolo IMI banking group, through its subsidiary FINOPI, took 7% of the capital of Transdev, an other main player in France, owned by the government-owned banking group 'Caisse des Dépôts et Consignations'. In 2002, an alliance with the Paris public transport company (RATP), another main government-owned company, was signed, RATP entering for 25% into Transdev's capital. This was the result of RATP being allowed under a new legislation to operate or win contracts also outside of its traditional Paris area. Note that competition for services in Paris is still rejected by the RATP.

In the Paris region, the formal transport authority's powers over public transport were somewhat changed, allowing the regional authority to enter into the board controlling public transport in the Paris region (STIF). A contract exists since 2000 between STIF and RATP, replacing the former deficit-balancing subsidy by a gross-cost contract, and still only minute financial incentives on the revenue side. The contract is due for renewal in 2004.

The railway sector is not yet covered by tendering obligations but the contracting experiments for regional railway services started several years ago with monopolist SNCF are judged positively. Competitive tendering is to be expected, eventually, here too, now that not only other French transport groups but also SNCF has become active in tendered operations in several other countries. Yet the topic remains rather taboo.

2.2.10. Italy

Changes in legislation took place essentially in 1997 in order to decentralise public transport to the regions, introduce contracting and the ability to use competitive tendering, and put public companies at arm's length. A transition period of 5 years was adopted. The Italian regions have then started to develop their own framework, but further national legislation is going to impose the usage of competitive tendering. The changes introduced in Rome already before 2000, meaning a move towards the London/Copenhagen regime and introducing a first round of tendering, were apparently not followed by further action in later years.

Transdevit (Italian subsidiary of the French Transdev) has already won several contracts in the country, and Arriva has started to buy a major regional operator, but the expectation is that the market will only be truly open within a few years, although all reforms should be in place by the end of 2003. See (Marcucci, 2003) for more information.

2.2.11. Spain

Regional authorities are in Spain responsible for transport policy and for network planning, timetables and fares in public transport. Public transport is operated under a regime of authority initiative by own production or concession to private operators. A major change that has been carried through during the last decade is the introduction of contracts between these authorities and the national government in order to guarantee a clear relationship between the subsidies given by the government and the performances of the various public transport systems. Contracting with transport operators is gaining ground, as is competitive tendering in this context.

2.2.12. Portugal

Legislation dating back to 1990 in Portugal introduced some deregulation in public transport but this has not been followed in practice, such that older legislation is still active. According to the new legislation, operators are free, outside Lisbon and Porto, to provide services based on market initiative (authorisations regime). Yet, urban public transport and a number of other main services are considered a public service that can be operated either by the local authority or under a concession that can be granted without competition. However, one new suburban railway line in Lisbon has now been competitively tendered. Little changed in recent years, except a new law defining transport authorities in the metropolitan areas and new financing principles. This law, too, has not yet been implemented.

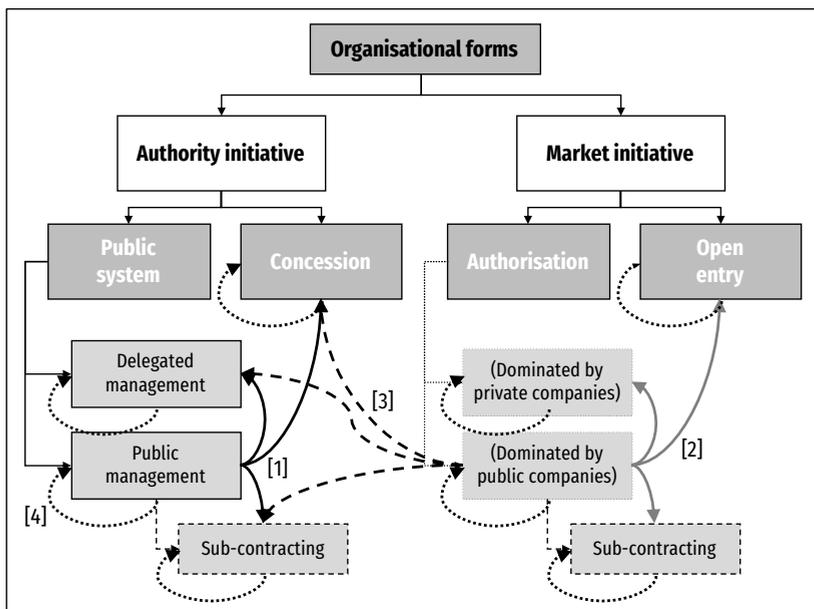


Figure 8 | Evolution of organisational forms (based on Van de Velde, 1999)

2.2.13. Eastern Europe

Public transport in Eastern European countries is faced with many challenges, the change of organisational forms from communist to more market-driven ones being only of those. Public transport still has a rather high market share and, in a number of cases, much of the population remains very dependent upon public means of transport, but a lack of financial means at all levels and an outdated infrastructure and rolling stock equipment pose formidable problems to these countries. Gleijm (2003) provides a further analysis of this situation and the way forward.

2.3. Recent evolutions: a simplified categorisation

The examples presented above illustrate the diversity of approaches adopted throughout Europe. Four main groups of evolutions can be distinguished. Figure 8 depicts a simplified categorisation of the various evolutions observed over the last two decades. The circled numbers in the graph refer to the adjacent group of arrows:

1. From public management under authority initiative towards an involvement of the private sector (black lines in the graph): either 'delegated management' of the public network, private 'concessions' with private investment in infrastructure and/or rolling stock, or 'sub-contracting' of centrally-planned services (as in a number of cases in France and Eastern Europe).

2. From public companies operating under market initiative towards a further involvement of the private sector (grey lines in the graph): either a return to a private ownership under a same market initiative 'authorisation' scheme (as in some German cases, mainly in the Eastern part), or a 'deregulation' by moving towards open entry (as in Britain outside London). A movement towards sub-contracting in this case maintains the position of the public company, but will in the extreme reach a situation identical to sub-contracting under authority initiative (as in London), except for some legal consequences.

3. From public companies operating under market initiative towards authority initiative with private involvement (dashed lines in the graph): a move similar to point 1, but with a different starting point and leading to the abolition of most or all market initiative possibilities (as in Denmark, Sweden or the Netherlands; see also London in point 2).

4. Reform of the existing regimes (dotted lines in the graph): This last category regroups all reforms of existing regimes. Fundamentals of the regime do not change here (market initiative or authority initiative remains), but new arrangements such as new contracting forms, new selection mechanisms, new incentives, better regulation, etc. are introduced (such as the replacement of negotiation by tendering

in Belgium/Flanders; the introduction of management contracts with the public companies in Belgium; the evolution of contractual forms in France or in London, adding several incentives).

[Sections 3, 4 and 5 removed]

REFERENCES

[See reference list at the end of the thesis]



Regulation and competition in the European land transport industry: recent evolutions (Extracts)

Van de Velde, D.M. (2007)

In: Competition and Ownership in Land Passenger Transport Selected Papers from the 9th International Conference (Thredbo 9) Lisbon, September 2005

Macario, R., J. Viegas and D.A. Hensher (editor), 2007, p. 81-94, Elsevier Science, Amsterdam.

1. INTRODUCTION

[Section removed]

2. OVERVIEW OF MAIN TRENDS

2.1. Development of traditional competitive tendering

Countries that initiated the usage of competitive tendering in public transport (such as Denmark or Sweden) continued on this path.

The Danish regime will, however, be submitted to a substantial reshuffle in the coming time as a thorough reform of local government means that the existing Counties will be disbanded and replaced by fewer Regions. This will also mean that the County Passenger Transport Companies (i.e. the central planners responsible for the competitive tendering of public transport, usually route-by-route) will be replaced by larger units. Municipalities will, however, be allowed to order additional services directly. The modalities of implementation of this new regime have not been fully developed yet.

Competitive tendering procedures have in a number of cases been modified. In Copenhagen, e.g., negotiations are now used although the practice remains to be centrally planned gross-cost route-by-route contracts. Other transport authorities across Europe have also refined or revised their practices. One could also mention the further development of vehicle by vehicle manufacturers, leasing including maintenance.

Competitive tendering is now also developing—although still at a rather slow pace—in the German bus sector. The State of Hessen (around Frankfurt) takes a forerunner position and has now submitted a large proportion of its regional bus services to competitive tendering. This is reported to have led to substantial savings. Other areas

in Germany are much more cautious, but bus tendering has now also developed in the outskirts of Munich and Hamburg.

Competitive tendering is also developing in Italy where both ideal-typical model of tendering can be seen: central-planning/route-based and network-based. The first is made possible by the reform of the transport companies carried out in the city and region of Rome. The latter took place, e.g., in Genoa where Transdev (a French transport group) won the contract under their favoured mixed economy setting (operator owned by both municipality and Transdev).

2.2. Development of functional/ tactical level tendering

The search for a possibility to give the operator more planning powers within a competitive tendering framework remains a difficult issue in which few authorities seem to engage. Several studies were carried out in Germany but with little effect to date. The evolutions in Sweden are also indecisive. The Helsingborg contract in Sweden has been re-tendered and seems to have returned to a more traditional approach of gross-cost with incentives, although the County of Halland has now moved towards a more functional contract.

Only the Netherlands seem to move resolutely towards a regime that is in principle based upon net-cost, tactical tendering. But, here too, some difficulties have arisen as in Sweden, and a very wide picture varying from gross-cost route tenders to net-cost network tenders with tactical powers is currently emerging. It is still too early to judge on the outcome as most interesting innovative contracts are still in their first years or will only start at the end of this year.

In relation to this issue, the shaping or calibration of the incentives remains an essential point for study. One can mention that Norway pursued its interesting experience, even if limited in size, with competitive tendering. A contract with so-called 'super-incentives' has been tried in Telemark.

2.3. Supply side

No new transport group has appeared at the European level in the bus sector, although several take-over or mergers may have taken place at the local level.

The British groups with the exception of Arriva, seem to concentrate their activities in other Anglo-Saxon countries, preferring the USA or Australia to further expansion on the continent. Uncertainties as to the legal setting and cultural differences seem to be the main cause of this. Arriva is the exception and is currently rather successful in expanding its activities across Europe with recent expansion or acquisitions in Italy, Spain or Portugal, besides its other activities in Denmark, Sweden, Germany and the Netherlands.

The French groups remain very active throughout the continent, being present from Sweden to Italy and from Britain to Eastern Europe. Connex is, in this respect,

perhaps the most active and the most international, although both Transdev and Keolis can be seen in a growing number of countries. Their preferred activity seems to be competitively tendered (network) contracts, in line with their core-experience in France.

Germany continues to be a potential reservoir of competitors without much national or international activity for the time being. The competitive tendering introduced in Hessen is reported, though, to have generated a substantial concentration in the rather traditional private German bus sector. Companies that had started to develop, such as Sippel, find it apparently difficult to finance their growth independently as this company was acquired by Arriva. This is a bit of chicken-and-egg problem, as long as the market remains rather closed.

[Sections 3, 4 and 5 removed]

REFERENCES

[See reference list at the end of the thesis]



Summary

The case studies summarised above revealed a number of interesting developments in relation to the first research question (What main institutional developments can we observe in the public transport sector since the start of the current era of reform in this sector, what main factors led to these developments and how were these reforms perceived?):

- ▶ As far as gross-cost route contracting was concerned, we could observe that learning from practice started to develop with, for example, the growth of quality management within gross-cost contracts in Copenhagen or in London at L3.2, leading to further contractual fine-tuning over time.
- ▶ Other areas just started their reforms. Flanders, for example, did so at L3.2 but attempted to change as little as possible while formally becoming compliant with rules at L2.1. Later, Frankfurt in Germany also introduced small-batch contracts at L3.2 but remained rather isolated within Germany in making that choice.
- ▶ Some areas could best be characterised as ‘undecided’ at the legal level (L2), muddling through in decision making, for example Ireland at L2.1, or Portugal at L2.2. Some engaged into huge debates between lawyers at L2.1 and L2.2, for example Germany with its pending law revision and the analysis of the so-called Altmärk-arrest.
- ▶ Evolutions towards other contract types were also visible. Some moving slowly, for example the trials with moving from gross-cost to net-cost contracts in Sweden at L3.2, some moving back to gross-cost later on. Some moved more rapidly, for example the Netherlands with a radical reform at L2, L3.1 and L3.2, changing radically the formal institutions, the local governance arrangements and introducing functionally tendered net-cost contracts, while substantial variations between authorities started to become observable (see Part III for more details).
- ▶ Some developments also took place autonomously i.e. without the trigger of legal change but in response to what was perceived as an unsatisfactory outcome of an earlier legal change, for example the development at L3.2 of non-statutory quality partnerships in Great Britain outside London. While these were essentially gentlemen’s agreements, a first feedback towards L2.1 took place subsequently making statutory quality partnership possible via the Transport Act 2000. At the same time, a conditional possibility for local authorities to abolish the free market was also introduced.
- ▶ Many areas decided to change little to nothing, both at L2 and at L3.

All-in-all, we continue to observe during this period a very diverse picture, both in term of institutional framework and in term of developments therein. Competitive tendering is gaining ground, deregulated regimes not. Tendering is spreading under different guises and a variety of contractual approaches develops. Learning is starting to appear although seemingly limited to authority-internal experiences, even though some national exchanges of experience between authorities could also be witnessed (Sweden in contracting, Britain in quality partnerships under the deregulated regime). Feedbacks from lower to higher institutional layers also started appearing.

A new regulation for European public transport

The efficiency concerns and the ‘spirit of times’ (the influence of neo-liberal thinking with its preference for competition-based regimes, and the ensuing development of NPM) evoked in Section 3.1 contributed to the competition-based developments described in the first section of this Chapter. With time, this led to an increased international visibility of alternative ways to provide public transport services using competition in one of its guises. This, in turn, led to a further international spreading of new ways of organising the provision of public transport services.

While these developments took place at the national level and, thus, appeared to be purely national, they also had an international implication as they led to the development of international operator groups. Public transport, that had traditionally been provided by local operators, whether private or public, increasingly came to be provided by operators based in other countries. The international groups of operators attempted to capitalise upon various advantages, such as a growing international experience with contracting and tendering, an increased commercial acumen as a result, and economies of scale in input procurement (vehicles, energy, insurances, etc.).

This development, combined with a lack of harmonised rules at the European level, led the European Commission to expect an increasing number of legal issues that would require being solved case by case by the Commission or by the Courts. A purely local issue, as the provision of local public transport had always been, thus ‘became’ a European problem with, in the eyes of the European Commission, a need for action and clearer rules at the European level. Consequently, the European Commission produced a first proposal for a Regulation in 2000 (European Commission, 2000). This was followed by a lengthy negotiation process and a substantial watering down of the proposal. Ultimately, the “*European Regulation 1370/2007 on public passenger transport services by rail and by road*” (known as the “*1370/2007 Public Service Obligation Regulation*”) was adopted in 2007, terminating a long period of incertitude as to what would ‘come from Brussels’⁴⁹.

Applicable since 2009, this is now the main legislation applicable to public transport provision in the EU. It constitutes a first major feedback from practices at L3 towards L2. The main steps in this process are presented in a paper included in Section 5.2.2 (Van de Velde, 2008). However, before moving on to that paper, it is necessary to go back in time a few years and look at a few studies that influenced the process that led to the adoption of EU Regulation 1370/2007. This is done in Section 5.2.1. The first consequences of the implementation of the Regulation are discussed in Section 5.2.3.

5.2.1 Studies for a new Regulation

The European Commission started reflecting on the issues related to the regulatory framework of local public transport already at the end of the 1990s with the publication of its

[49] Note that some countries had, before the adoption of the Regulation, taken steps to introduce competition-based regimes or new forms of contracting to be in line with what was *expected* to be included in the new Regulation.

Green Paper “*The Citizens’ Network - Fulfilling the potential of public passenger transport in Europe*” (European Commission, 1996a). It was already expressing a preference for a competitive tendering regime above a deregulated regime. This was followed by several related research projects and consulting studies⁵⁰ which eventually contributed to what became the new EU Regulation 1370/2007:

- ▶ “*Improved Structure and Organization for Urban Transport Operations of Passenger in Europe*” (ISOTOPE Research Consortium, 1997), provided a first inventory of public transport organisation and performance in Europe;
- ▶ “*Quality Approach in Tendering/contracting Urban Public Transport Operations*” (QUATTRO Research Consortium, 1998), looked at quality steering mechanisms within the contracting context;
- ▶ “*Examination of Community Law Relating to the Public Service Obligations and Contracts in the Field of Inland Passenger Transport*” (NEA et al., 1998), a consulting study commissioned by the EC prior to its first proposal, investigated in more detail existing arrangements and made proposals for the content of the new Regulation;
- ▶ “*Managing and Assessing Regulatory Evolution in local public Transport Operations in Europe*” (MARETOPE Research Consortium, 2003), studied in more detail barriers to change in local public transport organisation reforms;
- ▶ “*Integration and regulatory structures in public transport*” (NEA et al., 2003), a consulting study requested by the EC after its first legislative proposal, responded to some concerns that arose after the first legislative proposal in relation to service integration under various organisational forms.

Our involvement in each of these reports made that we had the chance to follow very closely the L2 developments at the European level. This included attending numerous presentations, discussions and other meetings linked to this topic, most of which were held in Brussels. This also gave the opportunity to conduct additional interviews to gather information needed to feed into these reports, their case studies and this thesis.

The following sub-sections report on the main findings and recommendations of these reports. A general overview is provided at the end of the section.

The Isotope study

The Isotope research project⁵¹ (standing for: ‘*Improved Structure and Organisation for urban Transport Operations of Passengers in Europe*’) had three main aims: (i) describe and compare existing legal status and organisational structures for public urban transport operations in Europe, (ii) analyse the pros and the cons of those structures in terms of effectiveness and efficiency, and (iii) appraise how these may be improved while respecting the

[50] The author of this thesis was involved as co-author of each of these reports.

[51] A research consortium composed of 18 partners from European universities, independent research institutes, operators and authorities was set up in 1995 under the leadership of OGM to carry out this research project initiated and financed by the European Commission within its 4th framework programme for research and technological development. The author of this thesis was responsible for the input provided by the Erasmus University Rotterdam, one of the partners associated in this research project.

political, legal and doctrinal frameworks of each country (ISOTOPE Research Consortium, 1997).

The analytical part of the research was composed of two parts. One part aimed at identifying the existing organisational frameworks and evaluating their effectiveness and appropriateness from the social and political points of view, and their capacity to contribute to the strategic objectives of the internal market and main European policy orientations. This was supported by a series of ‘city reports’ analysing in detail the institutional setup of 14 European urban areas (Van de Velde, 1997d)⁵².

The other part of the research aimed at evaluating the efficiency of the different organisational systems in both demand and supply side perspectives. Information gathering was based on a factual questionnaire (covering system description and economic and financial aspects) and an opinion questionnaire (covering the relationship between Authorities and Operators and its evolution). These were sent to the authorities and operators of the cities surveyed. 109 cities representing 16 countries returned the factual questionnaire and 57 returned the opinion questionnaire. Quantitative information from 207 operators from 108 cities could be used in the analysis conducted by Dr J. Preston (University of Leeds). This led, amongst others, to the quantitative findings summarised in Table 6 and the qualitative results summarised in Table 7.

One of the conclusions drawn in the report (see Table 6) were that deregulated markets appeared to have theoretical and empirical advantages in terms of efficiency of production (lower costs per vehicle-km); regulated markets theoretical and empirical advantages in terms of efficiency in consumption (higher vehicle occupancy); and limited competition markets some advantages of both.

Table 6 | Comparison of key indicators for urban bus services⁵³

	Revenue on cost	Passenger-km per vehicle-km	Vehicle-km per staff	Cost per vehicle-km
Deregulated	0.85	16.7	17 987	1.44
GB				
Limited competition	0.47	11.9	19 383	2.26
DK FR FI NO SE				
Regulated	0.47	27.0	16 387	2.97
AT BE DE ES GR IE IT LU PT NL				

Source: ISOTOPE Research Consortium (1997, p. 109)

Overall, the study found some support for the EC’s “Citizens’ Network” Green Paper’s preference for some form of limited competition model (European Commission, 1996a,

[52] This information gathering was coordinated by the author of this thesis through structured research and interview guidelines (Van de Velde, 1997c) that all participants had to use. The author carried out the case research for Copenhagen (Van de Velde, 1997e), Malmö and Helsingborg (Van de Velde, 1997f), and edited the research deliverable integrating all city reports covering Brussels, Copenhagen, Lyon, Rouen, Cologne, Greater Manchester, Preston, Dublin, Kristiansand, Setúbal, Madrid, Malmö, Helsingborg and Maastricht.

[53] The table, as the Isotope study, distinguishes between three modes of organization: deregulated, limited competition and regulated. This corresponds to modes of organization based upon the deregulated free market, provision of

p. 27). However, the main advantage of such models as identified by the study was not “to provide an environment which gives operators an incentive to raise standards whilst safeguarding system integration” as suggested by the European Commission (1996a, p. VI)—even though this is not impossible—but an increase in productive efficiency whilst maintaining or improving efficiency in consumption. The findings also suggested that reductions in unit operating costs of up to 50% were possible when redundancies and wage reductions could be implemented. These reductions would be reduced to around 15% otherwise. The study found that these are likely to be the main gains of introducing competitive tendering to commercialised but publicly owned and/or regulated operations. The study mentioned that these cost savings could in turn be used to improve the quality of public transport services, of other public services or to reduce taxation, but that reaping such gains may require to restructure the bus industry and develop and enforce appropriate competition policy.

Table 7 | Summary of Quality Indicators

	Regulated	Limited competition	Deregulated
Supply	-	0	+
Network Design	0/+	0/+	-
Effectiveness	0	0/+	-
Convenience	0	0	-
Environmental	0	0	-
Speed	0	0	0
Security	0/+	0/+	-
Affordability	+	0	-
Delivery	0	+	0
Customer Opinions	0	+	0

Source: ISOTOPE Research Consortium (1997, p. 110)

The study published its research findings and recommendations following the principles of the intermediate version of the reference frameworks presented in Chapter 4 (Van de Velde, 1997a). It concluded that (ISOTOPE Research Consortium, 1997, p. 10-15):

- ▶ The allocation of the initiative of creation and specification of public transport services is best left with the authorities;
- ▶ There is advantage in formally separating the strategic and tactical stages in service definition (even though this is seldom practised);
- ▶ The most appropriate territorial level of authority that should be responsible for the transport should follow the basic principles of subsidiarity and proportionality in financing;
- ▶ There is an advantage in including all aspects of urban mobility in the same administrative agency covering public and individual transport;

services on the basis of competitively tendered contracts (whether on a route or on a network base) and provision of services on the basis of local monopoly or direct award without competition. This classification, based on the intensity of competition, is coarser than that used in the rest of this thesis. The two-letter acronyms used refer to the ISO codes for the corresponding countries.

- ▶ While the deregulated regime is prone to give higher productive efficiency, it is incapable of adequately providing the necessary integration and stability of supply (especially in the installation phase);
- ▶ A regulated system of in-house operations has a higher risk of complacency between authority and public company and the higher production costs it entails may imply a slower adaptation to the evolution of customer and city needs unless there is a strong financial basis for continued public expenditure;
- ▶ As a consequence, if the political will and technical competence of the authority are present, a competitive tendering regime is the best choice for maintaining the stability of the system at lower costs and with improved prospects for permanent improvement;
- ▶ Competition under deregulation raises problems of integration, instability and inequity, may lead to oligopolies and make the realisation of policy goals more difficult to achieve, yet these drawbacks can be partially compensated by giving a stronger legal protection to the quality partnerships between authorities and operators that develop in that environment;
- ▶ In-house operation raises problems of inefficiency that can only be compensated with instruments of indirect competition (longitudinal or cross-sectional through benchmarking);
- ▶ Competitive tendering regimes may lead to conflicting objectives between authority and operator, stressing the need for technical and managerial competences on both sides;
- ▶ Net cost contracts may give authorities the option of specifying what they want to achieve and get it at a fixed price, leaving to the operator some space to adapt to the wishes of the market, thus improving chances of higher revenues; however, medium-term risks impose caution before preference is given to a net cost contract over a gross cost contract: the authority needs to have a proper and stable tradition of information gathering and processing; measures need to be taken to avoid regulatory capture as such contracts may reduce competition (although division in sub-networks with separate operators and integration clauses may help) and need to have a longer duration.

The Quattro study

The Quattro research project⁵⁴ (standing for: '*Quality approach in tendering urban public transport operations*') had three main aims: (i) identify emerging quality management practices in contracting and tendering in the public transport sector; (ii) evaluate these practices and figure out how existing quality management practices in other fields could be implemented in public transport; and (iii) suggest guidelines on issues of tendering, contracting and performance monitoring (QUATTRO Research Consortium, 1998). It eventually developed a standardised performance measurement process that subsequently

[54] A research consortium composed of 25 partners from European universities, independent research institutes, operators and authorities was set up under the leadership of OGM to carry out this research project initiated and financed by the European Commission within its 4th framework programme for research and technological development. The author of this thesis was responsible for the input provided by the Erasmus University Rotterdam, one of the partners associated in this research project.

was adopted into the “European public transport service quality definition, targeting, and measurement norm” (EN 13816) (Ryus et al., 2010, p. 10).

The project, using the same intermediate version of the reference frameworks as used in the Isotope study, showed how a greater emphasis on quality could be included in tenders and contracts, including ways to share contractual risks between parties, making the tendering process a series of opportunities for applying quality management principles, encompassing the interests of both passengers and other stakeholders. For success, it stressed the importance of a consistent overall strategy involving both authorities, operators and even the manufacturing industry (QUATTRO Research Consortium, 1998, p. 7-14).

The report also noted (QUATTRO Research Consortium, 1998, p. 148) that the examples of quality standards in tendering and contracting procedures are mostly found in cases where only the operational level of decision is contracted out, and not when it comes to tendering and contracting planning and design (tactical level)⁵⁵. As for deregulated models, the report notes that few opportunities exist to actively promote service quality, even though passengers’ charters and quality partnerships (in Great Britain) may be used, but that these instruments are relatively weak as compared to contractual pressure.

Advisory study on a revision of Community law

The advisory expert study “*Examination of Community Law Relating to the Public Service Obligations and Contracts in the Field of Inland Passenger Transport*” was produced for the European Commission in 1998 (NEA et al., 1998)⁵⁶ had as central objective to examine the application of Community law in Member States in relation to the aims of European policy in this field and suggest a possible revision. Besides market access and public procurement rules, the practical usage of Council Regulation 1191/69 on “*Actions by Member States concerning the obligations inherent to the concept of public service in the field of passenger transport by rail and road*” (and its amendment by Regulation 1893/91) were at the centre of the study as they formed the core of the European legal framework of the time as far as services of general interest in the transport sector were concerned.

In line with the EC’s request, the expert study produced a review of public transport organisation in all 15 EC Member States. It updated the overview produced by the ISO-TOPE Research Consortium (1997) report and complemented it with interviews with and reports from specially appointed member states legal experts. This provided for an additional check of the validity of the Isotope information as well as further details on the legal setting of those 15 countries (which constituted additional case information for this thesis). Both the report and the case reporting made extensive use of the intermediate versions (Van de Velde, 1997a) of the reference frameworks presented in Chapter 4.

[55] This difference and related issues are discussed in Part III.

[56] This study was realised under the leadership of NEA, with as partners Erasmus University and two further consultancies, TIS and OGM. The author of this thesis, working at the time at Erasmus University, was one of the authors of the study, with a particular contribution in the theoretical framework used, including the reference framework presented in Chapter 4 of this thesis.

This study paved the way for the European Commission's first proposal for a new Regulation by delivering the recommendations to modify the existing EU legislation (NEA et al., 1998, p. 15-17). These can be summarised as follows:

- ▶ To update the legal framework to guarantee the open, transparent and fair granting of exclusive rights and public service contracts;
- ▶ To balance the requirements of the single European market and free competition (including the freedom of establishment across the Union) with general interest objectives for the transport system;
- ▶ To retain the power for competent authorities to define public service requirements (quantity and quality) to guarantee general interest objectives;
- ▶ To retain the power for competent authorities to grant operators exclusive rights, protecting them from competition, especially in relation to guaranteeing network integration and continuity of service; although this should be limited to what is insufficiently produced by the market and upon the condition that operators benefiting from exclusive rights are subject to sufficient performance pressure;
- ▶ To limit the granting of exclusive rights to what is proportionate to the general interest pursued (limiting them to a five-year period unless non-transferable investments are made);
- ▶ To replace former public service imposition preferably by incentivised public service contracts between authorities and operators;
- ▶ To maintain, in the interest of subsidiarity, the freedom to choose between methods of awarding exclusive rights and contracts;
- ▶ To submit the award of exclusive rights and contracts where a subsidy is awarded (other than compensations available to all operators) to competition following a uniform tendering procedure (above a minimum threshold) in the interests of the single European market and free competition and of the efficiency and effectiveness this promotes;
- ▶ To allow authorities to award exclusive right to operators requesting such rights without using a tendering procedure in cases where no subsidy would be required (other than compensations available to all operators); in such cases, competing operators should be allowed to propose alternative service arrangements when existing rights expire (and, if authorities so choose, also during the period for which exclusive rights have been granted) with the choice between competing proposals being made fairly, openly, transparently and according to a uniform procedure (in the absence of such alternative procedure the study recommended to use a tendering procedure)⁵⁷;
- ▶ To apply the renewed legal framework in due time to all operators such that 'in-house' operations should gradually be tendered, with relationships between publicly owned operators and authorities being governed by public service contracts in the meantime and such operators, while protected from competition in their home market, being prevented from access to other markets to avoid distortions of competition; and
- ▶ To apply the new legal framework to all modes of inland passenger transport.

[57] The report includes a more elaborate discussion, developed by the author of this thesis as co-author of the report, on modalities to grant such rights ('authorizations') (NEA et al., 1998, p. 119-128).

The European Commission eventually published its first version of a “*proposal for a regulation on action by Member States concerning public service requirements and the award of public service contracts in passenger transport by rail, road and inland waterway*” in July 2000 (European Commission, 2000). It followed rather closely the suggestions made by the expert study summarised above (the paper included in Section 5.2.2 provides further details on this process).

The Maretope study

The Maretope research project⁵⁸ (standing for: ‘*Managing and assessing regulatory evolution in local public transport operations in Europe*’) investigated the impacts of change and barriers to change in the public transport institutional framework. It was based on country surveys updating existing knowledge on legal and organisational settings in European countries and 31 case studies⁵⁹. The report focussed on institutional developments, following a logical sequence starting from factors influencing regulatory change, impacts on performance, evaluation of barriers to change and identification of tools to facilitate change. The strongly perceived need to improve performance in public transport played a continuous role in the background of the study. The findings are reported upon in a handbook including tools to facilitate change (MARETOPE Research Consortium, 2003).

Carried out in the 2000-2003 period, i.e. just after the publication of the first proposal for a new Regulation, the project aimed at providing more information in particular on those reform processes that already included a competitive element akin to what was suggested by the proposed Regulation. The intention was to deliver a better understanding of their achievements, but also on the barriers hampering their implementation.

Although the amount of quantitative information was limited due to the small number of cases for which a sufficient time lag had passed after the implementation of the reform to allow measuring the full extent of the impacts (MARETOPE Research Consortium, 2003, p. 5), the report found that evidence from the case studies led to support the ideas that competition-based regimes and the allocation of production and revenue risks to operators resulted in lower unit costs and higher efficiency. Yet, no general statement could be made as to the size of that influence, which was found to vary according to the case studied. The results were less clear-cut concerning the level of service supply and market effectiveness. Here competition-based regimes did not necessarily appear superior and institutional reforms did not appear to have a direct impact. The report also sustained the

[58] A research consortium composed of 16 partners from European universities, independent research institutes, transport authorities and consultants was set up under the leadership of TIS.PT to carry out this research project initiated and financed by the European Commission within its 5th framework programme for research and technological development. The author of this thesis was responsible for the input provided by the Erasmus University Rotterdam, one of the partners associated in this research project.

[59] While the author of this thesis started this case study coordination at Erasmus University, this task was subsequently, and due to health reasons, transferred to Peran van Reeve and Robert Offermans at the same university. The reference framework (Van de Velde, 2000), data and interview guidelines used by the consortium members in carrying out the data collection was based on the published version of the reference framework introduced in Chapter 4 (Van de Velde, 1999), in addition to further elements such as the concepts of levels of institutions and barriers to change developed in Van de Velde and Leijenaar (2001). The Maretope consortium ultimately used these in slightly amended versions.

idea that, whereas the competitive tendering experience had led to more productive efficiency, it had also resulted in the authority effectively taking the role of ‘entrepreneur’. Yet, more was expected from operators to respond to growing expectations in term of urban living conditions improvement. In line with this, a general movement from gross to net cost contracts was observed.

The research highlighted that the main driving force for change was cost coverage of public transport, which was regarded to be too low and the amounts of money involved through subsidies too high. Additional driving forces for change observed were the perceived need to improve service quality if the objectives of the Citizen’s Network policy document were to be met, and the expected adoption of the new European Regulation.

The detailed assessment of barriers and tools to overcome barriers, as undertaken within the case studies, indicated that no general conclusions could be drawn as to the acceptability of specific reforms and their perceived impacts. Yet, the specific implications of the introduction of competition *per se* appeared to be a key concern across all case studies—and thus a major barrier to change—far above the perspective of organisational reforms that appeared less of a barrier to the stakeholders (MARETOPE Research Consortium, 2003, p. 5-9).

Advisory study on integration and regulatory structures in public transport

The first proposal for a new Regulation introduced by the European Commission and the ensuing discussions led to various lobbying activities towards the European institutions. A major concern was related to the spectre of competition, as promoted by the European Commission in its proposal, which was widely perceived in professional and political debates as antinomic with the ideal of public transport integration⁶⁰ that had for several decades been a cornerstone of public transport policy in several European countries⁶¹. Note that this discussion also referred to the heavily disputed issue of coordination in transport⁶² where proponents of the British-style deregulation of bus services essentially argued that coordination was anti-competitive and unnecessary, while traditional public transport planning wisdom found that integration was highly beneficial to public transport attractiveness. As a consequence, ticketing, information and service integration gained in relevance in the policy debate. They were included in the White Paper “*European transport policy for 2010: time to decide*” (European Commission, 2001) that stated that such integration is determinant for the attractiveness of public transport, and thus instrumental in realising the sustainability, modal split and traffic safety goals of the White Paper. Besides

[60] See the observations made earlier by Gwilliam and Van de Velde (1990) on this topic.

[61] This was most notably the case in Germany with the creation of the Transport Associations (*Verkehrsverbände*) since the end of the 1960s, for example the creation of the Hamburger Verkehrsverbund in 1965. Many regions followed to reach a currently almost total coverage of the German territory, even though the institutional setups of those associations are currently substantially different from the original institutional setups. The Netherlands, Sweden and Denmark had also organised or re-organised their public transport services according to similar integration principles since the 1980s and 1990s though in rather different institutional setups.

[62] This issue has been a disputed for several decades. See Van de Velde (2005a) for a detailed discussion of this issue.

this, the European Parliament's first discussion of the proposal led to a very substantial list of amendment (see Section 5.2.2). The Commission replied with an amended proposal (European Commission, 2002) that explicitly, though perhaps not convincingly, referred to a compulsory role for integration in selection and award criteria for public service contracts.

It is in this context that the European Commission requested in 2003 an additional consulting study on "*Integration and regulatory structures in public transport*" (realised by NEA et al., 2003)⁶³ to address the topics of ticketing, information and service integration and answer the following research questions: What is integration and is it beneficial? What is the actual level of integration and is it sub-optimal? Why does optimal integration not appear autonomously (assuming that integration is desirable)? And how do we reach more integration (assuming that only a sub-optimal level of integration appears autonomously)?

The study defined integration as: the organisational process through which elements of the passenger transport system (network and infrastructure, tariffs and ticketing, information and marketing etc.) are, across modes and operators, brought into closer and more efficient interaction, resulting in an overall positive enhancement to the overall state and quality of the services linked to the individual travel components. The report based its findings upon a discussion of four theoretical perspectives on service integration in public transport, an overview of 14 case studies, a tentative cost-benefit analysis of the impact of integration on patronage and customer satisfaction, and the results of two workshops held with stakeholders (authorities, operators and associations). The case studies reviewed features of integrated transport services, barriers to integration, incentives for operators (public or private) to participate in integration, implications of integration on commercial decisions of operators and regulatory powers held by the authorities to address these issues.

The report found that there is no simple answer as to the optimal level of integration from a theoretical point of view, but that the main challenge is to induce a continuous optimising process. Existing integration levels were found to be quite varied and often sub-optimal. The possibilities for measuring the specific impact of integration measures in terms of costs and benefits appeared limited. The available evidence was, however, rather supportive of a positive impact (more attractive services and higher usage). The report recommended measures⁶⁴, some immediately implementable, others needing further debate and research:

- ▶ Securing political commitment and bringing the long-term advantages of integration in the spotlight;
- ▶ A clear role division between parties on the basis of a regulatory framework (general responsibilities), an 'Integrated Network Statement' (code of conduct for all operators) and a regulatory and institutional framework with standardised approaches to public transport 'rules of the game' and a close link between users and decision takers;

[63] This study was realised under the leadership of NEA, with as partners Oxford University and Erasmus University and three further consultancy bureaus TIS.PT, OGM and ISIS. The author of this thesis, working at the time at Erasmus University, was one of the authors of the study, with a particular contribution in the theoretical framework used to analyse the integration issue (in cooperation with P.A. van Reeve from Erasmus University) and in the development of the case study template and guidelines for information collection (case studies) that had to be used by the study partners.

[64] The ten measures recommended are restructured here into six main themes for the sake of clarity.

- ▶ Striving towards service compatibility in market organisation and in technological terms and developing an open mind for less common structures of ownership and market organisation (such as co-ordination through common institutions, purchasing infrastructures that hamper integration);
- ▶ Developing an active policy at all authority levels to co-ordinate concessions while taking into account cross border effects, and using integration in tendering award criteria and integration incentives in contracts, while monitoring performance and preventing financial mechanisms that hamper integration;
- ▶ The authority playing in the short term a strong co-ordination role in the implementation of integration, with the active participation of operators and, over time, the development of proper 'integrative rules of the game' to allow the authority to take a more passive role whilst ensuring a high level of integration;
- ▶ Authorities to develop a critical awareness on the level of network integration, based, for example on a SWOT analysis, and refining scoring indexes to measure integration and developing benchmarking to compare performances.

Overview of studies

Let us provide a short overview of these five studies before discussing EU Regulation 1370/2007, which followed upon and was strongly influenced by these studies:

- ▶ The Isotope report recommended dismissing deregulated regimes and implementing competitive tendering regimes instead. It hesitates, however, between recommending small and short gross-cost highly-specified contracts and recommending larger and longer net-cost contracts giving more freedom to the operators. It reflects that both come with their specific requirements: the gross-cost contracts with specific technical and managerial needs on the side of the authority, the net-cost contracts with problems related to the functioning of the competitive regime (ISOTOPE Research Consortium, 1997).
- ▶ The Quattro project showed that competition, in particular competitive tendering, could be the occasion to introduce quality management techniques to the sector, but that this was at the time mainly observed at the operational and not at the tactical level of contracting, and that it required that proper attention be paid to tendering procedures, contractual contents and overall strategy. The project also concluded that quality management tools were at the time rather weak or absent in deregulated markets (QUATTRO Research Consortium, 1998).
- ▶ The report on the revision of EC law advocated strongly for a contractual regime, applicable to all modes of inland passenger transport, based on the awarding of exclusive rights through competitive tendering and combined with a high level of subsidiarity in the determination of public service obligations. Importantly, the report also opened a door for a regulated form of market-initiative with various levels of performance-based exclusive rights, as an alternative to a universal competitive tendering regime (NEA et al., 1998).
- ▶ The quantitative findings of the Maretope report appeared to confirm those of the Isotope report. Competition, and in particular competitive tendering, appeared to impact

positively upon efficiency, even though caveats had to be formulated due to the wide variety of cases and circumstances. A first shift from gross-cost to net-cost contracts started to be visible, in link with the high expectations placed upon operators and ‘competition’ as a tool. Yet, while the sector appeared to realise the pressing need to address its inefficiency issues, and while organisational reforms seemed in principle acceptable, the introduction of competition as reform element still seemed unacceptable for many stakeholders (MARETOPE Research Consortium, 2003).

- ▶ The study on integration and regulatory structures, attempting to summarise and evaluate pro-integration arguments, concluded mainly positively about integration. It stressed the difficulty of conducting a full and proper quantitative research on this topic⁶⁵, though, and it pointed to the probable absence of a simple and single solution to integration. It did, however, formulate a set of recommendations which—interestingly—contains many aspects that can be applied both to authority-initiated tendering regimes and to market-initiated regimes⁶⁶ (NEA et al., 2003).

5.2.2 EU Regulation 1370/2007

These reports and developments discussed above led the European Commission to believe in the necessity to revise and complement the existing European legislation pertaining to the awarding of exclusive rights and financial support in the public transport sector. The paper included in this Section describes the appearance of “*European Regulation 1370/2007 on public passenger transport services by rail and by road*” (known as the “*1370/2007 Public Service Obligation Regulation*”) and the main steps on the 10-year long road that led to the adoption of this Regulation. The paper⁶⁷ includes some comments on the results reached, further comments are presented after the paper.

[65] For a further discussion on these issues, see Van de Velde (2005a) and Preston (2010), who was responsible for the cost-benefit analysis part of this report.

[66] The point mentioning the importance of striving towards service compatibility in market organisation and in technological terms could be seen as premonitory in relation to the current ‘Mobility-as-a-Service’ discussions, as evoked in Part V.

[67] This paper is based on sections of earlier conference papers (Van de Velde, 2001; 2005b; 2007) presented at Thredbo conferences.

A new regulation for the European public transport

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Abstract - Authority intervention in the public transport sector has a long history and has led to a growing corpse of legal texts in European countries. These texts are often divergent, if not incompatible. This was no problem until the rather recent internationalisation of the sector. With this internationalization the European Commission decided to address this issue. This article describes what has led to the appearance of this new Regulation and the main steps on the 10-year long road that led to the adoption of the new Regulation. The article also formulates some comments on the results reached.

1. INTRODUCTION

Authority intervention in the public transport sector has a long history. Behind substantial disparities in legal regime (e.g. free market regimes vs. authority provision), it is nevertheless possible to observe, at least for European countries, a number of similar salient features that occurred during the last century. The allocation of exclusive rights to operators in the 1930s was one such feature that can be observed in various countries at a similar period in time. The appearance of a general subsidization of the sector in the 1960s is a second such feature.

These public interventions in the sector have led to a growing corpse of legal texts in European countries. Many of these texts are embedded in their cultural and national legal traditions, often making them divergent, if not incompatible with one another. This was no problem as long as the public transport sector remained a purely locally organised business. But the rather recent internationalisation of the sector on the suppliers' side, as we will see further, meant that these disparities started or were expected to lead to legal issues.

This whole topic is classified as the intervention of authorities in the passenger transport sector to secure the realization of 'public service obligations'. A 'public service obligation' is defined by the recently adopted European Regulation (EC) 1370/2007, Art. 2 (e) as:

"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".

With this internationalization and the declared aim of the European Commission to address this issue, we could observe that the 'public service obligation' came to dominate the international debate of many public transport specialists for the last 10 years, eventually leading to the adoption of a new European Regulation. This article aims at describing what has led to the appearance of this new Regulation that regulates the way in which competent (transport) authorities can 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.

The next section describes the main steps that have led to this new European Regulation, which constitutes the corner piece of the European legal framework for the organization of public services obligations in the passenger transport sector. It starts with a brief presentation of the old Regulation and the reasons that have led the European Commission to propose a new Regulation. After presenting some main features of the institutional setting and reforms occurring across Europe, this section closes with a short overview of the proposals for a new Regulation made by the European Commission. As we will see, a long road had to be taken between the first proposal for a new Regulation by the European Commission and the new Regulation that was finally published in the Official Journal of the European Union in December 2007. The third section presents in more detail the main steps on that road by summarizing the main features of each successive version of the proposal and some of the reasons that have led to these successive steps. The last section formulates a number of observations on the results reached.

2. TOWARDS A MODIFIED EUROPEAN LEGAL FRAMEWORK

2.1. The old regulation and the arguments put forward by the European Commission for the need to develop a new regulation

The current European Regulation 1191/69, dating back to 1969, allows transport authorities to impose public service obligations upon operators when they deem such obligations necessary to ensure the provision of adequate transport services (tariffs, continuity, regularity or capacity). This regulation then requires reimbursing operators for their additional costs incurred in fulfilling these obligations. The regulation enumerates forms of compensation that are compatible with the EC treaty. Detailed rules for calculating allowed compensations are included and the regulation exempts such compensations from the Treaty's 'state aid' notification procedure.

While essentially meant for the railway sector, the field of application of the Regulation was extended in 1991 to local transport services by Regulation 1893/91. This modification also amended its basic framework by establishing 'public service contracts' as the normal method of securing the fulfilment of public service objectives, while still leaving room for the imposition of obligations.

However, this amended Regulation did not address the question of *how* to award public service contracts; neither did it address the question of the (international) opening of markets. Other European texts already regulated at that time the award of certain public service contracts, such as the directives on public procurement (92/50/EEC and 93/38/EEC), but many contracts—notably those classified as concessions—were not subject to those procedures.

One has to remember that competition and contracting issues were hardly relevant at the time. Public transport markets were mostly not opened to competition and operators were exclusively national or local. A major share of public transport was provided by public administrations or publicly owned companies holding monopoly positions. In other words, the intra-community trade was not affected by the existing practices and the European Institutions were not involved.

This situation changed considerably during the last decade of the 20th century as several member states introduced some elements of competition—mostly

competitive tendering—in their legislation. Operators originating in other member states made increasing use of these opportunities, resulting in the appearance of international operators⁶⁸.

This led the European Commission (2000) to the conclusion that clearer rules were needed at Community level to promote legal certainty and harmonise key procedural aspects across member states such as to avoid having to resolve legal questions case by case by the Commission or the Courts. The Commission also meant that a new text was needed to remove the obstacles that the 1969 Regulation placed in the way of modern approaches to public transport. For example (European Commission, 2000): enabling ticketing and information integration with long-distance services, simplifying the rules on the calculation of compensations and on separate accounting, clarifying how authorities can lay down general 'rules of the game' applying to all operators without having to conclude public service contracts with every single operator, and clarifying how authorities can protect existing employees in situations where public service contracts change hands.

Note also that some of the argumentation of the European Commission related to the Treaty (Van de Velde, 2005b). Firstly, the Treaty requires member states to ensure freedom of establishment, but allows also restriction of this principle when necessary for the operation of 'services of general interest' and when 'proportionate'. The Commission considered that no text provided sufficient guidance to assess, with a degree of legal certainty, when an exclusive right is proportionate. Secondly, while the existing Regulation exempted compensations from the Treaty's compulsory state aid notification, it did not provide for mechanisms to assess the proportionality of such compensations. While that may have been, in the eyes of the Commission, appropriate at the time, the gradual emergence of a single market for the provision of public transport meant that it was both the national and Community interest to prevent abuses. Moreover, as the Treaty requires that public financing distort neither competition nor the freedom of establishment, the Commission considered that fair, open and non-discriminatory procedures were needed to avoid over-compensation. In that respect, the Commission referred to the Isotope study (ISOTOPE Research Consortium, 1997), according to which competitive tendering has the advantage of leading to substantial improvements in cost-effectiveness, while attractiveness improvements

[68] The European Commission (2005) also explicitly referred to the appearance of groups, like Connex or Arriva, that seek to win contracts outside their country of origin, but also to the activities of public sector operators, such as the Paris operator RATP winning contracts outside its traditional area, or the Dutch railway NS winning a railway franchise in Liverpool.

(ridership increases) can simultaneously be reached. That study also concluded that larger cost-effectiveness improvements could be reached by full deregulation but experience (in Britain) was not matched by simultaneous increases in ridership. Closed markets regimes, while reaching improvements in attractiveness too—although smaller—were at a substantial disadvantage in terms of cost-effectiveness. Additionally, the European Council of Lisbon of March 2000 asked to speed up liberalisation in areas such as transport, which was additional support for the general principle of the development of competition for the provision of public transport services.

2.2. Institutional reforms in European public transport markets over the last 20 years

Substantial institutional changes have taken place in the European public transport scene over the past 20 years. An overview of those changes is provided in Gwilliam and van de Velde (1990) and more recently in van de Velde (2003; 2007). The spreading of the usage of contracting replacing more direct or informal public intervention in the management of publicly owned operators, the usage of lump sum subsidization to replace open-ended regimes, the gradual implementation of competitive tendering practices to replace direct award or grandfather's rights and the privatisation of municipal operators are general characteristics of those institutional changes.

Competitive tendering and privatization, however, are still by no means dominant features of the local public transport world in Europe, although their usage has been rapidly growing in recent years in numerous places in Europe. Direct award and historical rights to municipal operators (or other operators owned by authorities) are far more dominant in countries like Germany, Austria, Switzerland, Spain, Italy, Belgium, Ireland, Poland, etc. Competitive tendering, on the contrary, is dominant in Sweden, Denmark, the Netherlands (except in the main cities), France (outside Paris) and London; albeit in considerably diverging implementations (tendering for routes or for networks; service design freedom for the operator or not; awarding procedures; contractual content and incentive mechanisms).

Deregulated markets remain the exception in local public transport with the major exception of Great Britain outside London. However, free markets can often be encountered in interurban traffic, such as in Sweden, Norway or Britain and growingly also in Eastern Europe. And although urban transport is still dominated by

public operators, free competition with minibuses is also a feature of many Eastern European states of the post-communistic age. Legal or not, these free entrepreneurial systems can now be encountered in many cities, especially in suburban and regional connections.

A recent overview and analysis of these institutional evolutions and a deeper analysis of the current contracting practices can be found in a recent report for the European Commission (Van de Velde et al., 2008a). This study contains a detailed presentation of a set of about thirty contracts selected to cover most typical situations across Europe. These include contracts set up under various institutional regimes (market initiative, authority initiative, with or without public planning agency), including contracts with various forms of risk allocation (cost risk and revenue risk, with gross-cost, net-cost and super-incentive contracts) and various kinds of awarding procedures (direct award, and various types of competitive tendering procedures). These contracts, classified and analysed, provide a basic set of illustrative practices for the newly adopted European Regulation on Public Service Obligations. This makes the study a wide contracting guidebook for public transport authorities to develop practices that are compatible with the new Regulation 1370/2007, as finally adopted by the European Institutions at the end of 2007.

2.3. Short history of the proposals made to reform the existing Regulation⁶⁹

The first version of the proposal was published by the European Commission in July 2000 and titled “proposal for a regulation on action by Member States concerning public service requirements and the award of public service contracts in passenger transport by rail, road and inland waterway” (European Commission, 2000). This version of the proposal followed rather closely the suggestions made by an expert study commissioned by the European Commission to prepare the reform (NEA et al., 1998)⁷⁰.

This proposed Regulation then entered the so-called ‘co-decision’ procedure involving both the European Parliament and the Council, and was discussed in the European Parliament on 14 November 2001, based on its report from May 2001 (European Parliament, 2001). It led to 77 suggested amendments, mainly aiming at weakening the consequences of the proposed Regulation in the various countries.

[69] See also van de Velde (2005b) for more details.

[70] The author of this chapter was co-author of this study.

It was striking to see that many amendments actually contained elements that one could consider out of place in such piece of legislation as then went further than guaranteeing fairness by including several elements of political 'guidance'. Some amendments were clearly superfluous, addressing questions that could easily be solved within usual tendering and contracting procedures. Some amendments illustrated the (mis)conceptions that determine the debate and the evolution of organisational forms in public transport in Europe. Some amendments even showed a blatant factual misunderstanding of the instruments suggested by the proposal. Few amendments actually pointed at possible true problems, most aimed at weakening the proposal; illustrating the controversial character of the issue and the lobby power of the establishment.

It was also interesting to see how much these amendments related to existing national legislation, trying to a large extent to maintain a legal status quo at the national level or trying to protect incumbent public operators from new competitive threats. With the risk of being caricatural, one could distinguish three types of wishes in the amendments suggested. French wishes, having a rather political content, and pertaining to social aims in public transport, protection of the labour force and respect of local democracy. German wishes, having a rather conservative content, and aiming at a status quo in the rather complex organisational forms developed in Germany. British and Dutch wishes, having a rather procedural or fairness content, and aiming at ensuring fairness in the transition from existing contracts to new contracts, at ensuring fairness in international competition (reciprocity) and at ensuring exemptions for truly exceptional situations (see Van de Velde, 2001 for a detailed discussion of these suggested amendments).

The Commission reacted by sending an amended proposal (European Commission, 2002) to the Council of Ministers on 21 February 2002. The successive Spanish, Danish, Greek presidencies of the Council (all opposed to the proposal for various reasons) did not put the topic on the agenda of the Council such that the proposal rested. During this period, both the Commission and other stakeholders also awaited the outcome of the highly relevant so-called "Altmark case"⁷¹ that was pending before the European Court of Justice. This judgment was published in 24 July 2003 but the following Italian,

Irish and Dutch presidencies that were perceived to be more favourable to the proposal did not either bring the proposal any further. The following Luxembourgian presidency was rather opposed. As a result, the proposal seemed to be stalled.

The European Commission then produced a new proposal on 20 July 2005 (European Commission, 2005)⁷². The British presidency put the topic on the agenda of the Council of Ministers for the autumn of 2005, but discussions were limited to an orientation debate. The following Austrian presidency spent considerable effort in bringing the Regulation further, but it was not until the end of 2006 under the German presidency, and after the Finnish presidency, that the European Council of Ministers did adopt a common position (Council of the European Union, 2006).

From then on things went faster, as the document returned to the European Parliament who finally approved a slightly modified text in May 2007 in its second reading (European Parliament, 2007). The text then returned the Council of Ministers who approved it in second reading in September 2007. The new Regulation was finally published on 3 December 2007 as "Regulation 1370/2007" after almost 10 years (!) of discussions since the start of the background study that led to this piece of legislation.

3. MAIN EVOLUTIONS OF THE PROPOSAL

Let us review the main features of the various versions of the proposal before making a few observations on the compromise reached by the European institutions.

3.1. The 2000 proposal

The regulation as first proposed by the European Commission (2000) laid down the conditions under which competent authorities could compensate operators for the cost of fulfilling public service requirements and the conditions under which they may grant exclusive rights in public transport⁷³:

- In that version, public service contracts had to be concluded for the award of all exclusive rights and/or for the payment of all financial compensations for public service requirements. However, compensations paid for compliance with general rules for public

[71] See Van de Velde (2005b) for a detailed presentation of the Altmark case.

[72] This publication is said to have been postponed such as not to influence negatively the referendum on the European constitution in France. The thought was that the proposal may have been perceived in France as another attack by 'Brussels' on the French *service public*. In the end, the referendum rejected the proposed constitution anyway.

[73] Only essential features of this version of the regulation are summarised here. See van de Velde (2001) for more details.

transport operation (general ‘rules of the game’) were also allowed.

- As a general rule, public service contracts were to be competitively tendered for a maximum of five years but specific investments could be taken into account to lengthen this period.
- The direct award of contracts was authorised in a number of cases:
 - After Commission approval, for specific cases in rail-bound activities when rail safety standards could not be fulfilled in any other way or when co-ordination costs between infrastructure and operations would otherwise exceed potential benefits. Bus activities of an operator could be included in such contracts when these were fully integrated⁷⁴;
 - For contracts of less than Euro 400 000/year (Euro 800 000 when an authority includes all its services in one contract), measured by the total payment to the operator and ticket revenue not transferred to the authority;
 - ‘Once’ when an operator wanted to propose a new service where none existed and that this service did not require financial support through public service contract.
- Public service contracts could also be awarded for individual routes according to a simplified ‘quality comparison’ procedure after publication of a notice inviting proposals, but this only when the award of an exclusive right was not to be subject to financial compensation.
- Authorities could also specify general rules or ‘minimum criteria’ to be respected by all operators (‘rules of the game’) in a specific area and include corresponding compensations available to all operators. However, these could not limit tariffs for all categories of passengers and the amount of compensation could not exceed 20% of the value of the services considered. Furthermore, the corresponding additional costs, revenues and compensations had to be identifiable and the absence of transfers to others activities had to be guaranteed.
- Various other restrictions applied: an authority could require from an operator to subcontract up to half the value of the services covered by the contract, an operator could be excluded from contract award if that

would give him more than one quart of the relevant market and in the award of exclusive right contracts, an authority could require from the winning operator to offer to staff previously engaged the same rights as what would have been the case in application of Directive 77/187/EEC⁷⁵. A transition period of three years (six years in cases of investment in rail infrastructure) was given.

3.2. The European Parliament’s reaction in 2001

The proposal was discussed in Parliament in its first reading, which led to a rather long list of 77 amendments (European Parliament, 2001). The Amendment Report (AR) gives a clear view on the points of view and (mis) conceptions that determined the debate on further evolutions in organisational forms in public transport in Europe. In many cases, elements similar to existing national regimes were suggested, aiming at weakening the consequences of the proposed Regulation in the various member states, illustrating the controversial character of the issue and perhaps also the lobby power of the establishment. Overall, the discussion was dominated more by political aims that could or ought—according to some members of Parliament—to be achieved with the provision of public transport services, rather than by a fundamental discussion on the necessities of developing a new European legal framework that would solve the existing legal uncertainties identified by the Commission. This becomes rather clear when considering the origins of the amendments and their link with corresponding national situations.

Amongst other issues, the following main points came out (see Van de Velde, 2001 for a more detailed discussion of the suggested amendments):

- The AR was clearly opposed to the compulsory usage of competitive tendering and seemed to follow rather strictly the principles of the French public transport legislation according to which authorities can produce service themselves or decide to contract these out in which case specific tendering rules should apply. The AR also aimed at increasing the number of cases for exemption from competitive tendering and suppressing all approval procedures by the Commission.
- The AR suggested abolishing all limitations of the additional subsidisation for minimum criteria (i.e. general ‘rules of the game’).

[74] Defined as: same pool of employees having the same contractual status, single operating account, information service, ticketing and timetable.

[75] This Directive pertains to the rights of employees in transfers of undertakings or businesses.

- The AR aimed at avoiding competitive tendering by enlarging the concept of ‘integrated service’ from those provided by one operator to all services provided by several operators, presumably as an attempt to prevent the application of the proposal to integrated multi-operators in German agglomerations (Verkehrsverbände). It also tried to prevent the ‘dismantling’ of integrated operators.
- The AR defined a new category of ‘territory-bound operator’, created to provide services in a specific territory and not allowed to participate in competitive tendering for service contracts in other areas (principle of reciprocity).
- In terms of procedure, the AR tried to remove the preferential position of the European procurement directives.
- The AR added several items to the list of selection or award criteria, it attempted lengthening the contracts to eight years, sentences were rewritten such as to ensure that authorities retained powers to dictate service characteristics to operators and a whole range of elements were added in a list of elements to take into account when selecting operators and awarding contracts. The AR also tried requiring similar or better rights when staff is transferred to a winning operator. Several additions, seemingly aiming at more decision power for the authorities, probably rested on misunderstandings and most were, strictly speaking, superfluous as the original text did not anyway limit competent authorities in the specification of service requirements that operators had to fulfil. This gave the impression that many of the elements added were in fact of a highly political nature and tended to impose specific intervention aims to (local) authorities rather than fulfilling a general purpose at the European level.
- Public service contracts have to define clearly the PSOs and geographical areas concerned. Parameters to calculate the compensations must be established in advance, be objective and transparent. Compensations may not exceed their net cost of provision. Contracts may not exceed 8 years (bus) and 15 years (rail), but may be increased by 50% under specific conditions depending on the nature of the investment. Authorities may require selected operators to grant transferred staff the same rights as if there had been a transfer in the sense of Directive 2001/23.
- New was that authorities were allowed to provide public transport services themselves, or to award it directly to an internal operator. This possibility came with severe restrictions as such operators (and any entity over which it exerts even a minimal influence) were then limited to perform all their public passenger transport activity within the territory of the competent authority providing the direct award. Furthermore, such operators could not take part in competitive tenders outside that territory (reciprocity principle).
- The proposed Regulation established a general framework for the award of public service contracts without prejudice to the obligations resulting from the procurement Directives (in particular Directive 92/50/EEC as modified by Directive 2004/18, and Directive 93/38/EEC as modified by Directive 2004/17). These texts regulate the award of certain public service contracts, but many contracts—notably those classified at the European level as ‘concessions’—are not subject to those procedures. More clearly, this meant that service contracts in the bus and tramway sector where the operator has no substantial revenue risk are submitted to the (stricter) Directive 92/50 (as modified). Other services (metro and other rail-based systems) and contracts with ‘substantial’ revenue-risk for the operator would then fall under the award requirements formulated in the proposed Regulation. Contracting out should then take place through open, fair, transparent and non-discriminatory invitations to tender. Negotiations may be engaged after pre-selection such as to meet complex requirements that public transport networks may necessitate. Small bus contracts (below €1 million or 300 000 km per year) may however be awarded directly. Another important change with this proposal was that all regional and long-distance rail transport could also be awarded directly, i.e. without competitive tendering.

3.3. The 2005 proposal

This version of the proposal was considerably simpler and shorter than the 2000 version. It counted only 12 articles instead of 21. With this new version, the European Commission (2005) wanted to provide more flexibility and take greater account of the subsidiarity principle. In a nutshell, the Regulation as proposed in 2005 established the following framework (see Van de Velde, 2005b, for a more detailed presentation):

- All exclusive rights or compensation for any public service obligation (PSO) must be established within the framework of public service contracts. However, a PSO aiming only at reducing fares (for all or a group) may also be the subject of general rules, that also have to be financially compensated.
- The proposal stipulated that operators have to keep separate accounts for compensated public service activities and other activities and that “the method of compensation must promote the maintenance or development of effective management by the operator,

which can be the subject of an objective assessment, and the provision of transport services of a sufficiently high standard". How this would have been implemented, remained unclear though. Authorities had to publish once a year a detailed report that allows monitoring performance and quality. Authorities were required to publish at least one year in advance in the Official Journal of the EU their intention to invite tenders or to award directly.

3.4. The 2007 compromise

After two years of discussion and various lobby influences, the European Parliament finally reached an agreement on 10 May 2007 amending in fact only slightly the 2005 version. This text (European Parliament, 2007) was adopted by European Council of Ministers after slight modifications in September 2007. It is now published as "Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing council regulations (EEC) Nos 1191/69 and 1107/70" (Official Journal of the European Union, 2007).

Here are the main characteristics of this new Regulation, which is now going to come into effect on 3 December 2009:

- The purpose of the Regulation is to define how authorities may act to guarantee the provision of services of general interest that are more numerous, safer, of a higher quality or at a lower cost than those that market forces alone would have allowed.
- The Regulation keeps to the basic principle that was already included in the 2000 proposal that authorities, when intervening to realise public service obligations, compensate operators for costs incurred and/or grant exclusive rights in return for the discharge of public service obligations, and that these obligations are organised in a contractual framework (where 'contract' is to be interpreted in a large sense to cover various kinds of legally binding acts). The only exception being for the setting of maximum tariffs for categories of passengers which may be arranged through general rules.
- The Regulation also keeps to open, fair, transparent and non-discriminatory competitive tendering as the basic principle to award contracts. Procedures including reselection and negotiations are allowed and countries

are free to establish their own awarding rules as far as complying with these principles. However, complexities of the European legal framework, require that bus and tram contracts which do not take the form of service concessions (i.e. with only limited or no commercial risk for the operator) have to be awarded as defined in Directive 2004/17/EC or Directive 2004/18/EC. This relates only to the awarding procedures to be followed, the rest of the text of the Regulation remains applicable.

- Importantly, and as already requested by the Parliament in 2001 and suggested by the amended proposal in 2005, authorities may now also award contracts directly in three cases:
 - A local authority (individually or in group of authorities providing integrated services), may provide services itself or to award contracts directly to a distinct entity over which the authority (or one authority within the group) "exercises control similar to that exercised over its own departments" (internal operator). Note that only dominant influence and not 100% ownership by the authority is required, allowing for various forms of PPP. But, such internal operator (and all its participations) are then prohibited to perform transport activity and participate in competitive tenders outside the territory of the authority (notwithstanding some outgoing lines). Furthermore, the internal operator shall be required to perform the major part of the services itself, limiting the possibility for subcontracting.
 - Direct award is allowed to any operator where average annual value is less than EUR 1 million or less than 300 000 vehicle-km (EUR 2 million or 600 000 kilometres when awarded to a small or medium-sized enterprise operating not more than 23 vehicles).
 - Direct award to any operator is allowed where they concern transport by rail, with the exception of other track-based modes such as metro or tramways. Such contracts may then not exceed 10 years.
 - A very important caveat is that the Regulation authorises member states to reject these three direct award possibilities in their own national law.⁷⁶
- The general principle of the Regulation remains that overcompensations has to be prevented. Public service

[76] This was a request from the Netherlands who had such a requirement in its national law. However, the adoption of this Regulation by the European Parliament, together with other (political) events in the Netherlands, led the Dutch Parliament in the Autumn of 2007 to request the Minister to amend these national provisions such as to allow the provision of services by internal operators.

contracts and general rules shall therefore clearly define the obligations and the geographical areas concerned, establish in advance in an objective and transparent manner the parameters to calculate the compensation payment and the nature and extent of any exclusive rights such as prevent overcompensation. Compensation resulting from a direct award or a general rule must be calculated in accordance with specific rules to correspond to the net financial effect equivalent to the total of the effects (both positive and negative) of compliance with the public service obligation on the costs and revenue of the operator. The effects have to be assessed by comparing the situation where the obligation is met with the situation which would have existed otherwise.

- An interesting requirement of the Regulation is that each authority will have to publish once a year a report on public service obligations, their selected operators, the compensation payments and exclusive rights granted. This report (distinguishing bus and rail) should allow the performance, quality and financing of the public transport network to be monitored and assessed. Note also that, when so requested by an interested party, authorities will have to forward its reasons for choosing direct award.
- Invitation to tenders and announcements of intended direct awards will have to be published one year in advance in the Official Journal of the European Union, except for small contracts below 50 000 vehicle-km. Additional information is requested after granting direct awards in rail, including besides usual descriptors the ownership and control of the operator, the parameters of the financial compensation, the quality targets with rewards and penalties applicable and the conditions relating to essential assets.
- The Regulation imposes further restrictions. Contracts shall be limited to ten years for bus and fifteen years for rail-based services. An extension by up to 50% can be allowed when the operator provides significant assets or in “outermost regions” (which is a rather vague concept). Further extensions are permitted for amortisation purpose but only after approval by the Commission. Authorities may require the selected operator to grant transferred staff the rights to which they would have been entitled if there had been a transfer within the meaning of Directive 2001/23/EC. Subcontracting is regulated, requiring selected operators to perform the major part of services themselves. However, a public service contract covering at the same time design, construction and operation of public passenger transport services may allow full subcontracting for the operation of those services.

- Being a Regulation, this text has immediately force of law in all member states; contrary to a Directive which would first have to be transposed into national legislation. Nevertheless, the Regulation determines that it will only enter into force two years after its publication in the Official Journal, meaning 3 December 2009. Furthermore, a transition period of 10 years is foreseen with specific measures to ensure gradual compliance with the provision of the Regulation.

4. CONCLUSIONS: COMMENTS ON THE COMPROMISE REACHED

When considering the text from its first version in 2000 until the compromise that has now been reached, one has to observe a considerable weakening of competitive requirements made. Many of the amendments initially suggested by the European Parliament have been accommodated. The result is a text that has lost most of its dogmatic–“always competitive tendering”– character. From an extensive and theoretically rather pure proposal, the text become shorter, simpler and more consensual. While this legislative file was first managed by a British civil servant of the European Commission, it was in the course of its history transferred to a French civil servant of the Commission. The responsible Commissioner for Transport was first British then Spanish and finally French. It is of course difficult to identify the exact influence of these transfers, but one has to observe that the resulting Regulation is a text that is substantially closer to the existing French legal regime in public transport than prior versions of the texts (Van de Velde, 2007).

Proponents of the amendments for a status quo that were accommodated in the current Regulation will find the text corresponding to their needs. Proponents of a stricter competitive stance, looking for ways to impose more efficiency in the sector, will be disappointed by the numerous exceptions to stricter awarding procedures. They may even argue that in fact most current contractual practices in public transport in the EU have now been accepted—whether promoting the efficient spending of public money or not. While a more detailed analysis of the specific legal situation in all member states would be required, it is probably true to say that the new Regulation effectively imposes pretty little fundamental change in most member states. The main changes imposed by the new Regulation concentrate around requirements for more transparency and some procedural requirements.

Indeed, the right of own production by authorities has now been recognised, direct award to such operators remains possible, and direct award to small operators and railway operators can be made, without compulsory

competitive tendering. The limitations on the possibilities for compensations for fare rebates, as first suggested, have been removed and the strict efficiency requirements in the payment of financial compensations without competitive tendering have been considerably loosened. As a counterpart for the whole of this, protected authority-owned 'internal' operators will not anymore be allowed to compete with other operators elsewhere.

The compromise reached is also a much simpler text than the original proposal from 2000. Most of the political character of the Regulation—in the sense of a choice for high quality and other social aims—has vanished and the text focuses more than the earlier versions on setting the necessary legal framework allowing specific policy choices to be made by transport authorities at the local level. One of the reasons that facilitated this approach is the European enlargement. This led, especially in the Eastern part of the European Union, to a wider scope of economic conditions for authorities that would not always have allowed supporting the high quality standards present in the West and advocated directly or indirectly in earlier versions of the proposal.

The main advantage of the current text, though, is the clarification of the European legal situation as far as financial compensations and the granting of exclusive rights in the context of the realisation of public service obligations is concerned. Even if the resulting compromise is not the most logical or elegant construct, this was probably the most of what could realistically be achieved at the European level at this moment.

This text should then, perhaps, be considered as a first step as the new Regulation foresees to evaluate the situation reached after the end of the transitional period when the Commission will establish a report assessing the development of the quality of public passenger transport services and the effects of direct awards. This will be accompanied, if necessary, by appropriate proposals for modifying this Regulation.

Finally, we have to remember that this Regulation is only valid in the case of payment of compensations for public

service obligations or of granting of exclusive rights for the realisation of public service obligations. The text is of more limited relevance in those cases where no exclusive right is granted. This is can be encountered most notably in Britain outside London, but also in some cases in Eastern Europe. It is rather likely that authorities in those areas will sometime in the future come to the conclusion that they need and want to improve public transport quality over and above the result of the free market process through coordinative measures yet without doing away with the fundamental principle of a deregulated 'free market' regime. Such coordinative measures would than probably include timetable coordination, fare integration, information integration, etc, and be aiming at realising network advantages that do not appear out of a simple market process. The problem with the Regulation as adopted is that such coordination is likely to be interpreted as providing some form of, perhaps temporary, (semi)exclusivity to the operators involved⁷⁷. Unfortunately, such actions do not seem either to be allowed or even foreseen by this Regulation. This is probably a missed opportunity as it could have been promising and of high relevance in some new member states of the European Union.

The absence of adequate attention for this topic is probably to be put on the account of a lack of an organized lobby for this option. The strongest lobbies, in the context of this proposal, were the lobby of established interests such as municipal operators that were afraid to loose their protection from competition, and the lobby of new international operators that specialise in transport contracts under competitive tendering (mainly the French transport groups). International operators that specialize in free markets, i.e. deregulation and market initiative, (mainly the British bus groups) did not engage into much lobby action promoting the development of an alternative to competitive tendering option in the form of a more clever form of deregulation than the dogmatic way in which it was implemented in Britain outside London⁷⁸.

REFERENCES

[See reference list at the end of the thesis]

[77] Some would call this 'light touch regulation'.

[78] Such an alternative would probably have to include integrative measures favourable to the public transport as a whole rather than taking every cooperation as anti-competitive behaviour that should be prevented by competition authorities.

Observations: A watered-down regulation, and what about market initiative?

To put the main features of EU Regulation 1370/2007 in a nutshell—and at the expense of completeness and legal precision—one could say that the Regulation starts from the point of view that the free market competition is the reference situation. When this institutional framework is in place, the Regulation does not apply. However, if a transport authority wants to realise more transport services than what appears from pure ‘free market’ commercial possibilities, for example for realising additional ‘public services obligations’ that an operator would not provide on the basis of its own commercial interest, then the Regulation’s prescriptions need to be followed. In that case, if an authority wants to give exclusivity to an operator and/or pay an operator to allow him to realise those public service obligations, then two main instruments are available: contracts and general rules. Contracts can be used to give an operator a temporary exclusive right (and/or a payment) to operate certain public passenger transport services. Contracts have in principle to be competitively tendered, even though several exceptions are allowed. General rules essentially create the possibility to give fare rebates to groups of users, in particular in free market circumstances, and compensate operators financially via payments that have to be available to all operators in the area that would like to make use of them.

It is interesting to compare the main features of the Regulation with the recommendations formulated nine years earlier (NEA et al., 1998) which formed the basis for the first version of the proposal for a Regulation published seven years earlier (European Commission, 2000). From this comparison, we already observed in the paper that the extensive discussions and lobby activities that developed prior to the adoption of the Regulation—a substantial part of which aimed at maintaining the status quo in the country of the corresponding lobby group—succeeded in their endeavour to limit the compulsory character of the usage of competitive tendering and, thus, led to a watered-down proposal and Regulation. Leiren (2014b) later analysed this process in greater detail and confirmed that the subsidiarity argument and extensive lobbying by sub-national interests bypassing their national governments had been effective in watering-down the Commission’s proposal.

The first proposal by the European Commission expressed a strong preference for a regime based on competitive tendering. This preference was weakened but did not change fundamentally with the amended proposals and the adopted Regulation.

The advisory study on the revision of Community law (NEA et al., 1998, p. 119-127)⁷⁹ had suggested to devise a specific granting procedure for authorisations that would be less constraining than competitive tendering procedures. The idea behind this proposal is that this would avoid the annihilating effect of competitive tendering procedures on market initiative, while still allowing for the granting of some level of exclusivity that was perceived to be beneficial in some cases. That idea had to some extent been retained in the first proposal but was ultimately removed from later proposals and the resulting Regulation. The idea to allow authorities to devise a wider set of ‘rules of the game’ besides only fare compensations was not either developed in the proposals. This could have been used to

[79] This was a specific contribution by the author of this thesis to that report.

address through coordination perceived market failures linked to network effects. It could also have addressed further social purposes through targeted subsidisation (for example for realising environmental standards, vehicle accessibility, peak-hour service provision, etc.)

As a result, the Regulation left the free-market option essentially unregulated except for the possibility of compensating fare rebates obligations. The European Commission was of the opinion that the awarding of all other financial support and exclusivity rights ought to result from competitive tendering. This was, in our opinion, illustrative for the more neoclassical approach of the Commission, as opposed to what might have resulted from a more entrepreneurship-based 'Austrian' approach. In addition, we could add that this stance was facilitated, as mentioned in the conclusion of the paper, by the absence of any organised lobby for the development of such a specific regulatory framework for areas that would choose for market initiative. In other words, the circumstances were not conducive to further reflections and legislation on these issues.

As a consequence, the main alternative for member states not choosing for the authority initiative with competitive tendering was to implement what seemed to be a rather dogmatic deregulated form of market initiative (i.e. no exclusivity, essentially no service regulation, some possibility to generate services through financial compensation of imposed fare rebates). Time would tell whether this proved to be an important shortcoming in the Regulation or not. In the meantime, we could observe that the need to regulate the free market continued to resurface. This was finally addressed in Great Britain in the Local Transport Act (2008) and in the Bus Services Act (2017), which reintroduced coordination possibilities in the free market outside London. Interestingly in this regard, is the fact that Great Britain managed to realise this within the resulting EU framework. We can only conjecture about whether a more developed EU framework would have led to an earlier or to different arrangements. The issue of free market regulation will be discussed again in Part IV of this thesis.

Guidebook for the implementation of the Regulation

Following the publication of Regulation 1370/2007, the European Commission ordered an advisory report on "*Contracting in urban public transport*" (Van de Velde et al., 2008a)⁸⁰. This report was meant by the European Commission to be a guidebook for the implementation of Regulation 1370/2007, illustrating the level of subsidiarity allowed by the Regulation through showcasing the wide variety of arrangements existing across Europe that were compatible with the Regulation. Published on the website of the European Commission, the report was addressed at inexperienced authorities, in particular in Eastern Europe due to the then recent 2004 enlargement of the Union. The report made extensive use of the frameworks developed in Chapter 4, it presented a set of case studies and summarised the main ideal-typical institutional frameworks and their recent evolutions in Europe, in particular the growth in usage of competitive mechanisms as part of their components. The report guided transport authorities through most main questions that need to be ad-

[80] The author of this thesis was the coordinator and leading author of this report, in cooperation with a group of experts from KCW, RebelGroup, TØI, SDG, TIS and NEA, who all had an extensive experience in prior reports for the European Commission on this topic. Arne Beck was the second main author of this report..

dressed when organising the provision of public transport services⁸¹ by providing step-by-step advice on setting up relationships between authority and operator, market organisation, and public service contract (aim-setting, contract drafting and awarding).

An appendix to the report provided a detailed presentation of a set of 35 case studies, covering a wide diversity of situations encountered across Europe (Van de Velde et al., 2008b). This demonstrated the wide variety of arrangements compatible with the Regulation, which was meant to contribute to its acceptance. The redaction of this appendix involved collecting extensive source material, such as contracts and other documents via transport authorities and operators. Interviews were used to clarify contracting practices and their evolutions, which provided additional case material for this thesis. Cases covered were: public service obligation contracts with public operators (self-production or in-house operators); competitively tendered route contracts with central planning of the services; competitively tendered authorisations for route contracts; competitively tendered network management contracts; functional tendering of network contracts; private concessions including infrastructure; open entry regimes with additional quality partnerships; and supply of non-commercial routes by competitive tendering in addition to a commercially viable deregulated market. All cases were presented using a standardised template allowing for an easy comparison of institutional regime, risk allocation and awarding procedures.

5.2.3 The practice after EU Regulation 1370/2007

We can now turn to the impact that this new Regulation (located at L2.1 at the international level) has had at L2 at the national or regional level, and further at L3. Several reports have been produced since the adoption of the Regulation. A first report was realised for the European Commission, shortly after the adoption of the Regulation, to provide an overview of its application by Member States and authorities, and to provide an overview of the ways in which it was implemented. That report (Maczkovics et al., 2010) focused primarily on legal issues and covered the experience of 15 Member States. It aimed also at exchanging best practices, at identifying difficulties that have arisen in the implementation of the Regulation and at formulating solutions:

- ▶ The report, first of all, confirmed the existence of a considerable variation in public transport institutional frameworks across Member States and authorities. It concluded that it was impossible to provide more than an illustrative sample of the state of play in regulatory and contractual practices without being exhaustive (Maczkovics et al., 2010, p. 7).
- ▶ The study also reported a substantial list of problems. There were many interpretation problems related the provisions of the Regulation (both from the side of authorities and operators), weaknesses in national legislation, cases of non-application of the Regulation, cases of under-compensation, the existence of several competent authorities in the same territory, financial frameworks geared on the short term, disadvantages of public transport versus other modes, insufficient powers of regulatory bodies, lack of fair com-

[81] Arne Beck, the second main author of this report, made extensive use of this part of the report in his own thesis (Beck, 2012a).

petitive processes, lack of effective review procedures and lack of incentives to provide efficient and quality services (Maczkovics et al., 2010, p. 13).

- ▶ That report also noted the “considerable complexity of Regulation 1370/2007” (Maczkovics et al., 2010, p. 6) and its implementation options, leading to a substantial level of confusion among public transport professionals about the exact requirements included in the Regulation.

The observed variation in institutional frameworks, the perceived considerable complexity of the Regulation and the (resulting) list of problems led to several other studies and reports in the following years. Several examples can be given:

- ▶ The association of European Metropolitan Transport Authorities (EMTA) commissioned a detailed guidebook for transport authorities from a legal specialist to explain how to implement the Regulation (Avanzata, 2011). Note that the expert-consultant who authored this report was actually one of the main civil servants involved in the writing of the Regulation.
- ▶ In the Netherlands, the Ministry of Infrastructure and the Environment wished to have more clarity on the ways in which other Member States went about awarding operational rights to operators and implementing EU Regulation 1370/2007. It commissioned a report to us to provide that overview (Van de Velde et al., 2011)⁸².
- ▶ The European Commission replied a few years later to the numerous concerns and questions related to the interpretation of the Regulation’s text by publishing a “*Communication from the Commission on interpretative guidelines concerning Regulation (EC) No 1370/2007 on public passenger transport services by rail and by road*” (European Commission, 2014). Note that this constituted a feedback from practices at L3.1 and L3.2 towards L2.2 (regulations)—this ‘interpretative communication’ does have the force of law—in a first step towards possible later amendments to the Regulation (L2.1).

The UITP provided during those years several updates of their report on the organisation and major players of short distance public transport in Europe (UITP, 2015) and the European Commission continued to follow up with the implementation of the Regulation and commissioned a report focussing on the economic and financial effects of the implementation of Regulation 1370/2007 (SDG, 2016)⁸³. Let us summarise a few of its main findings:

- ▶ That report found the sector highly fragmented and differing in many crucial aspects with large variations between countries in legislation, funding, market structure and procurement (SDG, 2016, p. iii).
- ▶ The report produced fiches gathering information and, when possible, data on public transport organisations and trends in each Member State. The authors complained about the limited availability and lack of comparability of data on passenger-kilometres, vehicle-kilometres and revenue, which prevented realising the comparisons of econom-

[82] Using a standard template, we covered 26 EU-countries, out of which 16 in more detail. We capitalised upon prior expertise, used desk research, studied relevant pieces of country legislation, organised semi-structured phone interviews with authorities, operators, national experts and consultants.

[83] The report refers to several of our studies (for example Van de Velde et al., 2008a; Van de Velde, 2012a) and includes a presentation we made in the context of this review undertaken for the EC (Van de Velde, 2015a).

ic and financial performance of the sector across Member States as requested by the European Commission (SDG, 2016, p. 10-12). They also mentioned the limited availability of sources of information related to the state and nature of competition and a very limited reporting on the evaluation of the economic performance of public service contracts; despite all obligations included in the Regulation. The report attempted but had trouble providing a clear overview of market structure. It reported an 'unclear' situation in 8 countries, clear competition-based arrangements in only 7 countries, 7 countries were reported with having essentially directly awarded contracts and 6 in various stages of transition towards competitively awarded contracts (SDG, 2016, p. 16-18).

- ▶ It showed that there was little consistency between Member States in terms of capabilities and number of transport authorities. It mentioned that some national authorities did not appear familiar with all aspects of the legislation and that some local authorities even were unaware of it. A concern expressed by interviewees was that many authorities did not have sufficient resources, skills and experience to carry out their responsibilities, as required by the Regulation. As a result, the authors of the report noted that the suitability of the collected best practices for adoption by other authorities will depend significantly on local and individual circumstances and therefore may not be appropriate for adoption as universal best practices (SDG, 2016, p. 164).
- ▶ Interestingly, the authors observed that the implementation of the Regulation has at least in two Member States (Estonia and Italy⁸⁴) resulted in allowing the direct award of contracts, while competitive tendering had previously been compulsory in those areas (SDG, 2016, p. iii). Such development can be seen as contrary to the intention of the Regulation.
- ▶ The study also identified some benefits, such as a better definition of policy objectives, greater transparency, reduced uncertainty and more effective incentives in public service contracts.
- ▶ The report confirmed the limited impact of the Regulation, as a little under half of their respondents⁸⁵ expressing 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. Of the remaining respondents expressing a view, in general there were more positive responses than negative ones (SDG, 2016, p. 127).
- ▶ As to the economic impact of the Regulation, the respondents found in 30% of the cases no impact and in 41% of the cases an unclear impact. As to the financial impact of the Regulation, the respondents found in 22% of the cases no impact and in 48% of the cases an unclear impact. A positive impact was reported by 15% (economic) and 11% (financial) of the respondents (SDG, 2016, p. 129-131).

A few summarising observations can be made in view of the findings from the two studies produced for the European Commission. The Regulation is perceived by its 'users' to be

[84] Note that the Netherlands should have been added to this list as direct award was made possible under the Dutch legislation following upon the adoption EU Regulation 1370/2007, whereas the original version of the Dutch legislation (WP2000) did not foresee this possibility.

[85] The respondents were representatives of ministries, transport authorities and operators.

complex or confusing⁸⁶; it is likely that its consensual character, which had led to accommodating a larger variety of options for institutional arrangements in the Regulation, is contributing to this perception. Yet, this complexity is also contributing to numerous implementation issues and this also confirms the possible presence of a difference between structure and practice: some authorities are not aware of the existence of the Regulation, lack knowledge about its content, or lack resources and skills to implement it, and its users perceive its economic and financial impact to be limited. An important warning was made on the danger of suggesting best practices for adoption by others⁸⁷ and, unexpected side effects have also occurred, such as the replacement of competitive tendering by direct awarding. Finally—confirming our earlier concerns—data availability and comparability remains very problematic. More surprisingly, perhaps, obtaining a clear overview of the actual institutional situation across Europe remains a very difficult task, even in the context of such large studies.

[86] We could observe such issues at first hand in the context of work carried out in various countries.

[87] Note that this is in line the remark on 'nirvana economics' (Demsetz, 1969) we made earlier.

6 Conclusion

Complex and diverse institutional changes took place during the past three decades in the European public transport sector, with in particular the instruments of contracting and competition playing a growing role. It all started in the 1980s with lagging performances, suspicions or evidence of inefficiencies, scarcity of public money, the rise of neo-liberalism and new public management (with behind that new or alternative approaches to the competition concept within economic theories) and a growing experience with market-based reforms in a number of countries and sectors that started being copied elsewhere. We reported on these developments in Chapter 3, exploring the period covering the 1980s until the 1990s. Our focus was on exploring developments in institutional frameworks with a particular attention paid to the instrument of competition. We showed that diversified reform paths had started to appear at the end of the 1980s (deregulation, competitive tendering, governance reform, etc.), even though much scepticism was present and local bus services were still operated under monopoly arrangements in most countries examined.

While opinions on reform options diverged, the conduct of our case studies showed that a clear overview of reform options was lacking. There was a need for the development of typologies that could help bringing more clarity in the debate on institutional reforms and facilitate presentation and comparison. We realised this in Chapter 4 through the establishment of three typologies of institutions. Two reference frameworks were developed to help alleviate the observed confusions and knowledge gap. One focussed on the issue of the ‘appearance’ of passenger transport services (who has the ‘right of initiative’ to create services). The other focussed on the layered involvement of various actors in relation to the creation, conception and realisation of services. This Strategic-Tactical-Operational (STO) framework proved useful and quickly gained the interest of many other researchers, in particular within the Thredbo conference series that recently recognised it as its centrepiece in understanding the various roles of stakeholders (Wong and Hensher, 2018). In this Chapter we also refined Williamson’s four layers of economics of institutions such as to better grasp the particularities of the public transport sector reforms studied in this thesis with further distinctions within layers 2 and 3, in addition to the addition of a dynamic perspective as already introduced in Part I.

Debates around competition in its various guises burgeoned for good in the 1990s and Chapter 5 then covered the more recent period during which the usage of the competition grew. Those years illustrated a further diversification in approaches adopted. For example: delegated management, private concessions, sub-contracting of centrally planned services, privatisation and deregulation, switching from public companies operating under market initiative towards authority initiative with private involvement through competitive tendering, but also the continuation of existing monopoly arrangements either with or with-

out governance reform. While the majority of services was probably still provided under regimes characterised by public monopoly operations, especially in urban areas, the usage of competition-based institutional frameworks continued growing. Our case explorations also revealed that some dynamics had started to appear in areas where competition has already been introduced. Existing arrangements were being reformed with the introduction of new awarding and contracting arrangements, including more or different type of incentive; in other words, 'learning' was becoming apparent. Later this would also lead to feedback to higher level institutions (from L3 to L2).

The process leading to and the enactment of EU Regulation 1370/2007 itself constituted a feedback from L3 to L2. We described that process and our involvement in the research that led to this reform in Chapter 5. The adopted text constituted a main event for the institutional fabric of public transport at Level L2.1 and it was expected to be the next main reform impulse for public transport institutions in Europe. All existing national (or regional) legislation (L2.1) and regulations (L2.2) as well as all governance (L3.1) and contractual arrangements (L3.2) had—within a transition period of 10 years—to be made compatible with its requirements. However, the watered-down character of the Regulation compared to the first proposals by the European Commission meant that this challenge was more limited than what some might initially have expected. Exceptions left aside, the amendments needed at the national level to bring national or regional institutional frameworks in line with European requirements were often limited to amendments in procedural issues and contractual details, without the need for fundamental changes at L2 or L3. Nevertheless, official studies conducted for the European Commission three and nine years after its adoption showed that the continued array of highly varied institutional frameworks still had trouble to get a grasp on the Regulation and adapt to it in view of its perceived complexity, which arguably resulted from its consensual nature.

Towards Parts III and IV

Our analysis showed that two main institutional frameworks resulted in European public transport sector since the pressure for a wider usage of competition that appeared in the 1980s, answering the first main research question formulated in Part I.

The first competition-based institutional framework is based on the transport authority taking the initiative to create services, with competitive tendering of the right to become the operator as its centrepiece. The case studies on which we reported within this Part revealed the existence of substantial differences between, on the one hand, the option of awarding relatively small contracts, tightly specifying the services to be provided and attributing only the operational cost risk to the operator and, on the other hand, the option of awarding rather large contracts, with a more functional definition of the services to be provided and attributing both the production cost and the revenue risk to the operator. A preference for the second of these two options was witnessed in some countries, in particular in the Netherlands.

The second competition-based institutional framework is based on autonomous entrepreneurs taking the initiative to create services, with transport authorities potentially playing two main roles: one complementing the results of the market process with additional (ten-

dered) services created for social purposes, and one guiding the market through regulations and subsidies.

The next main question, as formulated in Part I, is: How have these institutional frameworks fared since their introduction? Part III and IV will provide an answer to that question for, respectively, institutional frameworks based on authority initiative (competitive tendering) and institutional frameworks based on market initiative (deregulation). In the process, we will carry out some comparisons and discuss some institutional developments that could be observed.

The focus of this thesis is on the experience of European countries and regions where institutional reforms led to the introduction of competition, with the intention to gain a deeper understanding of the variety of competition-based institutional configurations that have appeared and their development. As indicated, some areas have introduced no reforms or chose to reform only the governance of their monopoly public sector operators. Due to our focus on competition, those options are not covered by our research. Studying such regimes representing a large part of European public transport would however assuredly deliver useful additional insights on the 'direct award' option now made possible by EU Regulation 1370/2007. Furthermore, other types of competition-based reforms than those covered here are conceivable. Competitive regulation, such as yardstick competition is an example. It was suggested by Estache and Gómez-Lobo (2005) as an attractive alternative to competitive tendering. It is used for the regulation of the Japanese railway sector (Mizutani et al., 2009) where private operators benefit from perpetual rights but are regulated on the basis of a yardstick formula (besides other features). Such arrangement was uncommon in European public transport but would nowadays also be difficult to reconcile with EU Regulation 1370/2007 and will not be studied in more detail within this thesis.

Part III

Competitive Tendering

7 Introduction

This Part of the thesis focuses on public transport institutional frameworks based upon the principle of authority initiative in which operators have to win operational rights through competitive tendering. As shown in Part II, substantial differences exist within that framework between, on the one hand, the option of awarding relatively small contracts, tightly specifying the services to be provided and attributing only the operational cost risk to the operator and, on the other hand, the option of awarding rather large contracts, with a more functional definition of the services to be provided and attributing both the production cost and the revenue risk to the operator. The route-based contracting approach can best be illustrated by the London or Copenhagen approaches. The network-based contracting approach can best be illustrated by the French and Dutch approaches.

The following research sub-questions are addressed:

- ▶ How has this institutional framework fared since its introduction?
- ▶ What developments can be observed and what can be said about them?
- ▶ Can recommendations be formulated?

We will focus first and extensively on the Dutch experience in Chapter 8. We will discuss the path that led to the introduction of competitive tendering and the choice for its specific configuration of ‘functional tendering.’ We will then move on to study the difficulties encountered on that path before formulating a number of recommendations. This essentially answers all three sub-questions for the Netherlands. One published paper is included and extracts from a report are summarised and translated.

Van de Velde, D.M., W.W. Veenman and L.R. Lutje Schipholt (2008), “Competitive tendering in The Netherlands: Central planning vs. functional specifications”, *Transportation Research Part A: Policy and Practice*, 42, 1152–1162.

(Translated and summarized extracts from) Van de Velde, D.M. and D.A. Eerdmans (2013), “Modelbestek van de toekomst, op weg naar meer flexibiliteit en innovatie in de contractvormen in het openbaar vervoer”⁸⁸, Kennisplatform Verkeer en Vervoer (KpVV), Utrecht, 56 pp.

To widen our understanding of the diversity observed in Part II, Chapter 9 will then briefly explore how institutional frameworks based on competitive tendering have fared during

[88] Translated: “Terms of Requirement of the Future, towards more flexibility and innovation in contract forms in public transport”.

the last few decades in a few other countries. It will compare these with the experience of the Netherlands, attempting to discern whether pattern similarities can be observed. Chapter 10 concludes.

8 Competitive tendering in public transport in the Netherlands

Local and regional public transport in the Netherlands was historically based upon the principle of free market initiative. The reform introduced with the enactment of the Passenger Transport Act 2000 (*Wet Personenvervoer 2000*) constituted a major change compared to the previous regime by turning this regime upside down; a fact that is not always sufficiently acknowledged. Although it was enacted in the context of what was called in the Netherlands “the introduction of market forces” (in Dutch: “*de invoering van marktwerking*”), it is probably more precise to state that the possibility to use true market forces was abolished through the enactment of this new legislation. Indeed, the traditional market initiative based authorisation regime, which in principle entitled operators to autonomously create services, was replaced by a regime based on authority initiative. A competition element was however introduced through the obligation put upon the newly created regional transport authorities to use competitive tendering to award temporary exclusive (i.e. monopolistic) contracts—called ‘concessions’ under Dutch law—to operators. Interestingly and differently from the competitive tendering regimes that had been introduced in the preceding years in Northern Europe and which focussed on production efficiency, the new Dutch regime aimed at stimulating innovation in service design.

Section 8.1 discusses the path that has led to the introduction of competitive tendering in local public transport in the Netherlands in 2001, i.e. institutional reforms enacted at level L2 by national legislation. The functioning of that regime in the ensuing years, the diversity of approaches that developed at levels L3 within the broad framework determined at L2, and the extent to which the legislator’s intention to introduce ‘functional tendering’ was realised are addressed in Section 8.2. This includes some of the difficulties encountered, possible reasons behind the disappointments observed, the perceived tendency to over-specify contracts, changes in the allocation of the tactical function and more recently observable shifts towards mitigating hybrid arrangements. Section 8.3 gives an assessment of the effects of the reform. General observations, including a comparison to other countries, are given in Chapter 9.

8.1 The path towards competitive tendering

This section will shed more light on the transition from an institutional framework based upon the principle of market initiative to one based upon authority initiative. This is done in three steps. The first sub-section presents the prior institutional setting. The next sub-section discusses the steps that have led to the adoption of a regime based upon com-

petitive tendering. The last sub-section describes the first competitive tendering experiments held and the regime as ultimately adopted by legislation.

8.1.1 Prior institutional frameworks⁸⁹

Local and regional public transport in the Netherlands was historically based upon the principle of free market initiative. This means that operators were in principle supposed to be private “for profit” entrepreneurs. The legislation regulated the ways according to which an entrepreneur could be recognised as transport operator and subsequently allowed to take initiatives to create services where they saw gaps in the market. The actual regulation of the public transport markets changed on several occasions throughout the last two centuries. For example, the obligation to have an authorisation to provide public transport services was abolished by the 1880 Act on Public Means of Transport (*Wet op de Openbare Vervoersmiddelen*). Yet, it was reintroduced in 1926 for bus transport due to—as perceived at the time—excessive competition between bus operators and also between bus and rail (Brouwer and van Kesteren, 2008, 465-468). This change was also linked to the existence of public service obligations for railways that were not imposed to buses. That situation, which was perceived as unfair to the rail sector, led to the prohibition of intermodal competition. A change in approach was introduced later on with the 1937 Regulation and the 1939 Act on Passenger Transport (*Wet Autovervoer Personen*). From then on, bus operators were granted exclusive rights based upon the idea that economies of scale existed in the sector and that a concentration of supply was desirable in order to realise those economies. Furthermore, this approach was also seen as a way to sustain unprofitable services through internal cross-subsidisation. This led to the gradual appearance of regional monopoly operators (the *streekvervoerders*), as wished for by the Commission charged by that legislation with the issuance of the authorisations (*Commissie Vergunningen Personenvervoer – CVP*). The operations and network that resulted from this remained viable until the 1960s. After that, growing suburbanisation, car ownership and increased in drivers’ salary led to the appearance and rapid growth of a general subsidisation requirement in order to sustain those services.

In sum, the authorities’ role varied substantially throughout those years⁹⁰. Since the 1930s an increasing regulation could be observed within the authorisation regime. This continued after the 1960s with growing subsidisation needs. For the sector, this process meant (*de facto*) a gradual move away from the principle of free market initiative, as practice evolved towards authority ownership of operators and substantial levels of regulation. Yet, the legal regime remained (*de jure*) based on the principle of market initiative. Incumbent operators benefited from a large degree of stability, while most private operators had in the process gradually been taken over by the public sector⁹¹. By the 1970s the Dutch public transport regime had gradually evolved into an ossified authorisation regime controlled by heavily

[89] Texts in this section are summarized from Van de Velde (1995c), van de Velde et al. (1996, p. 7-8) and Van de Velde and Leijenaar (2001). See those publications for further details. The interested reader can find additional historical details in Brouwer and van Kesteren (2008).

[90] See also Kuiler (1949).

[91] This was to a large extent realised via daughter companies of the national railway company NS.

subsidised state-owned and municipally-owned companies. Private entry did not occur, and private sector participation had become marginal.

The 1988 Passenger Transport Act was implemented to simplify the regulatory framework and give a formalized basis for subsidisation. This was seen as a limited deregulation⁹² and was meant to improve the possibilities to co-ordinate services (in particular regional and urban services) and give the authorities ways to control the growing deficits of the sector (Teeuwen, 1989). It included the implementation of a lump-sum subsidisation regime while the nation-wide ticket and zonal fare integration system introduced in 1980⁹³ was maintained. Regional transport companies, owned by the state or local authorities, were amalgamated in 1989 into one large group (*Verenigd Streekvervoer Nederland – VSN*) such that, by the end of the 1980s, almost all local public transport services by bus outside the main urban areas was provided by subsidiaries of that company. Only few historical private operators remained, all of them very small. Municipally owned operators provided local public transport services by bus (some also with tram and metro) in the eight largest urban areas. In 48 smaller urban municipalities services were contracted to the local subsidiary of VSN; none of these contracts were submitted to competitive tendering.

Operators had under the 1988 legislation to submit their routes and timetables to the Ministry on a yearly basis for approval. Using the integrated national fare system was a condition to be granted subsidies. Outside the urban areas, subsidies were given directly to operators while national regulations determined under what conditions subsidised operators could modify services. These regulations effectively attempted to maintain pre-existing services unless passengers had dropped below a certain threshold. In urban areas above 50 000 inhabitants lump sum payments were transferred to the municipality and earmarked for local public transport. The subsidies were based both on sectoral average unit production costs per passenger-kilometre and on past fare revenues of the operator concerned⁹⁴. The subsidisation regime itself was composed of complex and repeatedly fine-tuned mechanisms. As a result, it evolved from a supply norm base, via a passenger-km base to a passenger revenue base, and it gradually became crippled, as a result of consensual negotiations, with exceptions and time lags that weakened its incentive power.

[92] Note that this law was enacted in 1988 while the deregulation, privatization and liberalisation of public transport by bus outside London took place only two years before that date.

[93] Public transport fares and tickets (single tickets, multi-ride tickets and seasonal passes, known as *strippenkaarten* and *sterabonementen*) were integrated at the national level and determined by the Minister of Transport. This allowed passengers to use the same ticket and fares anywhere in the country. This attractive system from the point of view of the passengers was however problematic for the operators as all fares had to be apportioned to all operators in the country according to area-based keys determined by passenger enquiries held at large intervals. As a consequence, sales increase realised by one company benefited all companies in the area until a new enquiry was held, effectively watering down the operators' incentives to increase revenues.

[94] For example, the average unit production cost per passenger-kilometre for 1993 was calculated on the basis of total 'efficient' costs of 1992 (as calculated after an audit of the operators by consultants) corrected for inflation and divided by the number of realised passenger-kilometres in the year 1991/92 (resulting from a national public transport usage enquiry). This gave unit production cost norms per passenger-kilometre for each technique (urban bus, regional bus, urban tram, regional tram and urban metro) that were used for several years and corrected for inflation. In urban transport an amount per inhabitant was added to compensate for the lower cost-covering ratios in those areas. The Ministry set a yearly revenue goal for each operator, based on its historical revenues but amended to take account of national fares changes and substantial service changes. The subsidy paid by the Ministry to an operator was then the difference between its calculated cost norm and its revenue goal.

It is important to note that, during this whole period, the autonomous supply of commercial (i.e. non-subsidised) public transport services by private operators remained legally possible even though few cases occurred. This was mainly due to the fact that the implementation regulations of the Passenger Transport Act 1988 made that such services would not be authorised when deemed to compete with existing subsidised bus services. The criterion of prohibition of ‘parallelism’, in particular, meant that very few gaps in the market could be found and few services ever started. Those that did eventually all stopped soon after their introduction⁹⁵.

8.1.2 Towards competitive tendering

The general performance of the sector was, by the end of the 1980s, still perceived to be problematic. Figure 9 shows that although public transport had by the 1990s kept its 1950s market size, its market share had sharply decreased⁹⁶ from about two thirds in 1950 to about a half in 1960 and only 15% of passenger-kilometres by 1993 (10% for the train and 5% for the rest of public transport). That share was estimated to be higher (around 30%) in larger urban areas. In the same period, public transport’s cost-covering ratios decreased (Figure 10) while a fast increasing amount of subsidy was spent to maintain services (Figure 11). Although this deterioration slowed down and stopped after 1980 when deficit covering was replaced by lump sum subsidies, the continued decline in public transport’s market share made the high subsidisation level increasingly problematic from a political point of view, in particular as national government was imposing further budget cuts to the public sector.

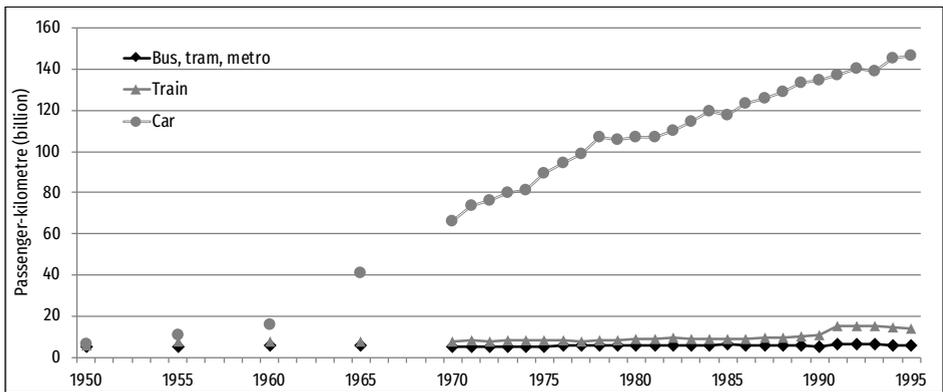


Figure 9 | Passenger-km in the Netherlands 1950-1995 (Data source: CBS)

[95] The few examples of such bus services were a fast service from Rotterdam Kralingse Zoom to Dordrecht, a service from Katwijk/Noordwijk to Schiphol and another from Enschede to Groningen (this services, mainly targeted at students and attractive for them due to the absence of a fast rail connection between both cities, was stopped after the introduction of the national scheme giving free access to public transport to students, as they could then travel for free by train). Interestingly, the latter connection is one of the few national bus services provided since recently by commercial operator Flixbus.

[96] This could also be observed in many other European countries.

This relatively poor performance in relation to the amount of subsidisation, and the growing car traffic and congestion problems were seen as main issues to be tackled. In reaction to this, the Second National Transport Plan (Ministerie van Verkeer en Waterstaat, 1988; 1991) required the Ministry to develop policy measures aimed at a more selective car usage and at an increase of the modal share for public transport in total mobility. The aims set by the Plan led the Ministry to conclude that a revised public transport regime was needed. Two expert Committees were subsequently created by the Ministry of Transport and Water Management. These played crucial roles.

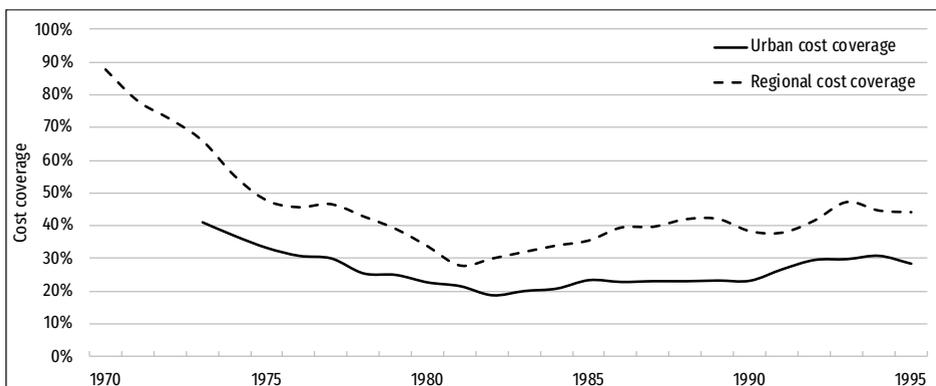


Figure 10 | Cost-covering ratio Dutch public transport 1970-1995 (Data source: KNV)

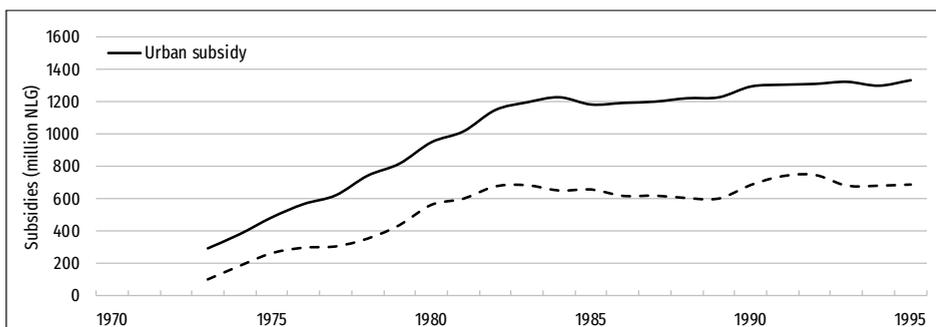


Figure 11 | Subsidies to public transport 1970-1995 (Data source: KNV)

The Houben Committee

The need to revise the public transport regime was advocated by the Houben Committee (Commissie Houben, 1990), created jointly by the Ministry of Transport and the public transport sector to develop recommendations on public transport governance such as to enable the realisation of the sectoral aim of doubling its output through a more effective and above all more integrated organisation. The doubling aim originated in an ambition formulated by the public transport sector itself in the context of the targets set by the draft Second National Transport Plan (SAMOVE, 1989).

The Houben Committee suggested that this could be realised through regionally integrated public transport planning. This would be based on a platform integrating the plans of the operators, a platform of authorities that would evaluate those plans, and an overarch-

ing regional political board that would determine the regional public transport aims and ultimately approve the proposals made jointly by the two platforms. Other components of the advice were to merge urban and regional bus operators, to replace the cost-based subsidy norms by differentiated passenger-based subsidy norms and to create an interregional co-ordination commission. The increased monopolization that would result from that setup was to be mitigated by ‘tendering’ (in Dutch “*aanbesteding*”), according to the Committee’s recommendation. This was the first appearance of this concept in the policy debate. Note, however, that *competitive* tendering was not recommended by the report. Rather, the proposed regime advocated regional cooperation, coordination and integration with a light form of competition where ‘tendering’ would in effect only be a form of yardstick competition. In that system, incumbent operators would be disciplined by a peer-based comparative average deficit norm (in Dutch “*vergelijkende tekortnorm*”)⁹⁷, which was seen as a first step to the introduction of incentives for more effectiveness and efficiency.

This advice was based on the advisory report (McKinsey & Co, 1990) that stood behind the Committee’s recommendation. Interestingly, this report did mention the possibility of using competitive tendering, as already used in a few other countries⁹⁸, but it advised against its generalized usage. Several points have to be mentioned here. First, in choosing between line-based and network-based tendering, the report advised in favour of the first, and preferably on lines with a rather high service frequency. The reasoning was that such line-based tendering would have the advantage of avoiding influencing the ‘network configuration’⁹⁹ (if not too many lines were to be tendered) and would give more options to optimise services by allowing tendering individual lines selectively. Secondly, it considered that competitive tendering had many disadvantages besides its advantages. It estimated that, although competitive tendering could improve cost-effectiveness and service reliability, it would have a stronger negative effect on the ‘integral network approach’ that was deemed necessary. Further negative effects were that it could lead to a waste of capital goods (due to a difficult transfer of existing rolling stock to new operators), to an undesirable competition in employment conditions between companies and to strong cultural differences between operators leading to a lack of uniformity in the way public transport would be presented to the customer¹⁰⁰. Thirdly, it recommended a selective usage of competitive tendering to prevent disadvantages outweighing the advantages. According to this,

[97] The report notes that the regional public transport subsidisation regime was already based on average cost norms, though not yet on average deficit norms.

[98] The report refers to London and Sweden, both being examples of small gross-cost contracts. Larger tendered net-cost contracts, as already used in France (Van de Velde, 1992b), were not discussed.

[99] This concept remains somewhat vague in the report but appears to be mainly related to the operational setup of services in terms of vehicle and personnel planning; which is referred to in the public transport jargon as ‘interlining’. The main argument is that tendering in (too) small units may lead to an efficiency loss in vehicle and personnel planning in relation to possible losses of economies of scale. Interestingly, the advice seems partially contradictory to this argument, as tendering of networks rather than lines would in fact allow realizing such economies of scale, while tendering of lines is more likely to hamper the realization of these economies of scale.

[100] Note that the two first elements (rolling stock and employment conditions) can rather easily be solved, as future developments will show. More interestingly perhaps, the last argument (cultural differences and service uniformity) is completely at odds with what would become one of the main aims of the pending reforms, i.e. to generate innovation and thus difference, through competition and realize performance improvements through this.

only those lines should be competitively tendered were could be shown that costs were substantially above average and potential tendering savings could be expected to outweigh the ensuing losses of economies of scale (due to less efficient vehicle and personnel planning resulting from line tendering). Finally, and on the basis of the preceding points, the report concluded that competitive tendering was not an attractive option for Dutch public transport, in particular in view of the report's conviction that the advocated comparative average deficit norms could sufficiently simulate a competitive situation. It did however, in a closing note, mention developments on the side of the European Commission that might lead to a future obligation to use competitive tendering in such situations¹⁰¹.

The Brokx Committee

Following the Houben advice, the Ministry constituted in 1991 a second advisory committee known under the name of its chairman, Mr. G. Brokx. It was charged with the preparation of an advice for such a reform. Following the Dutch compromise tradition, the Committee was composed of both regulatees and regulators. It included representatives from the Ministry of Transport, local authorities, the incumbents (urban transport companies, the National Bus Company and the National Railways); later representatives of taxi and private coach operators were added in order to include potential entrants.

A special issue of the Dutch scientific journal *Tijdschrift Vervoerswetenschap* (Journal for Transport Science) dedicated to the changing relations between government and public transport came out shortly after the creation of the Brokx Committee. It contained a paper, written on personal title by the secretary of the Brokx Committee. In this paper, titled "Between plan and market" (van Delden, 1992), the author sketched that the desired increase in modal share of public transport was complicated. On the one hand, this would require additional financial means, but governments appeared no longer prepared to increase their financial contributions to the sector. On the other hand, one had, according to the author of the paper, to expect that European rules, among others, would lead to a market opening¹⁰² whereby both Dutch and international companies would get the opportunity to enter the Dutch public transport markets, while Dutch companies had to make an attempt at obtaining market shares elsewhere. This *expectation* of market opening is particularly interesting as there was at the time no obligation from European legislation to open up public transport markets. Concrete proposals in that direction only came later. The European Commission wrote "*The Commission considers that contracting concessions should be based on transparent, Europe-wide public tendering and will look at ways of pro-*

[101] Note that, while this report was published in 1990, the EC did not publish such proposal until 2000 and European legislation was not adopted until 2007. See Part II and Van de Velde (2008).

[102] This assertion is interesting as there was at the time no obligation from European legislation to open up public transport markets. Concrete proposals in that direction came only later. The European Commission wrote "*The Commission considers that contracting concessions should be based on transparent, Europe-wide public tendering and will look at ways of promoting the concession system*" in its Green Paper on "The Citizen's Network" only four years later (European Commission, 1996a) while the first concrete European proposal in that direction was not published until 2000 and not enacted until 2007 (Van de Velde, 2008). However, policymakers were apparently 'expecting' such a move from the European institutions (see also the previous note). This issue was reviewed later by the Dutch national council for the environment and the infrastructure (Raad voor de Leefomgeving en Infrastructuur, 2015, p. 73-79), including a workshop in which the author participated.

moting the concession system” only four years later in its Green Paper on “*The Citizen’s Network*” (European Commission, 1996a), and the first concrete European proposal in that direction was not published until 2000 and not enacted until 2007 (Van de Velde, 2008), i.e. fifteen years later. This shows, however, that policymakers were ‘expecting’ such a move from the European institutions. This issue would later be reviewed by the Dutch National Council for the Environment and the Infrastructure (Raad voor de Leefomgeving en Infrastructuur, 2015, p. 73-79)¹⁰³.

Van Delden also sketched a number of problems, such as the high level of subsidisation of the sector (up to 75%), the perceived subsidy focus rather than the customer focus of operators, the absence of competition between operators¹⁰⁴, the “closed circuits” of actors involved with diffuse role allocation and responsibilities, their incapacity to deal with new actors, the focus of operators on cost and supply cutting (through ‘efficiency’ measures) rather than market growth (‘effectiveness’ measures) when confronted with subsidy cuts. Addressing these issues would, according to him, require a “disentanglement and professionalization” of the relationships between transport companies and governments, together with a change in the functioning of both companies and governments.

The Brokx Committee wanted, according to van Delden, to put the customer at the centre of all concerns and considered that the transport operators were the actors best able to judge how to provide and market to passengers and potential passengers services that would be more competitive to the car. This would require them to move from an internal focus to an external focus and to develop new relationships with other operators, including more cooperation, coordination, joint ventures, mergers, etc. This would also require a more coherent and clearer policy and a more effective government, which could best be realised at an appropriate regional level rather than at the local level. Realising this would require a clear separation of tasks, competencies, responsibilities and risks between operators and authorities. Van Delden and the Committee thought that operators ought to be responsible for determining the services to be provided to passengers as well as their price, but also for producing these services and for marketing them. The existing intensive immixture of transport authorities with the production of passenger transport services had therefore to be substantially reduced, while authorities would have to focus on creating conditions that would encourage the public transport market to flourish via a supportive transport policy, the realisation of transport infrastructures, etc.

Van Delden formulated several implementation directions¹⁰⁵, which he characterised as being ‘between plan and market’. A new ticketing system would be required to apportion more precisely passenger revenues. Municipal operators would have to be corporatised. Monopolization would have to be prevented and competition would have to be introduced—interestingly, it was stressed that competition had been present in the Dutch public transport regime earlier on, but that this had gradually been transformed into a planned approach. However, unlimited competition on the street was not perceived to be in the

[103] This included the organisation of a workshop on this topic, in which we participated.

[104] Note that competition is seen here as an aim in itself, which is arguably illustrative of the spirit of the time.

[105] Van Delden stressed that these were only indicative and still had to be discussed by the Committee. These views do, however, give a glimpse on the input given to the Committee’s discussions.

interest of the passenger, according to van Delden. Furthermore, it was seen as incompatible with maintaining an ordered and integrated public transport supply. Instead of unlimited competition, the legal instrument of ‘concessions’ was suggested to grant services to operators that would fulfil conditions set by the authorities¹⁰⁶. Authorities would also have the possibility to order—for social reasons— additional services that would be missing in the supply provided by the operators, and these additional services could be tendered¹⁰⁷. Authorities would pay for transport infrastructures and for some operational expenses, in particular in the non-rail business, preferably in relation to realised output (such as the number of passenger-kilometres). Authorities would also have to engage in policy measures directed against car traffic. Both these payments and measures would then be fixed in multi-annual contracts, reducing risks for operators. Value capturing could also play a role in the funding of infrastructures. Note that this regime, calling for more cooperation and coordination and for a more regional level of governance, was very much in line with the Houben Committee’s advice. However, the choice in favour of competitive tendering that burgeoned here (although not adopted by the Committee until later) started to distance itself from Houben’s advice.

The Brokx Committee made a field trip to Great Britain to learn from the experiences gained with the introduction of competition in local public transport in that country a few years earlier. Prof. K. Gwilliam¹⁰⁸ helped organising this trip. He also published a paper summarising the British public transport reforms in a paper in the *Tijdschrift Vervoerswetenschap* (Gwilliam, 1992), drawing the following conclusions for the Netherlands. Competition on the road would, according to him, have given the best opportunities for rural areas, giving the possibility for commercial initiatives and innovation. The survival of integrated fares would probably have required their imposition as rule of the game. For the urban areas, Gwilliam suggested implementing a regime based on competitive tendering akin to that in use in London, i.e. a route-based tendering regime with central network planning. He advocated rather small tendering units, splitting and privatising large national monopolies, corporatising municipal operators, and creating a cartel authority to control the functioning of these markets. In the same journal issue, Van de Velde (1992b) published a paper suggesting that regulatory capture had probably taken place in Dutch public transport and that the perpetual nature of the authorisations, as introduced by the 1988 Passenger Transport Act, had only worsened the problem. It argued for an analysis and reconsideration of the incentives included in the regulation, which the paper perceived as perverse. This was advocated in order to avoid the inefficiencies the regulation seemed to generate and allow bringing the incentives more in line with policy aims, which

[106] The way to award such concessions was not specified in the text. The formulation used by Van Delden suggests that several operators could potentially be granted a concession simultaneously. However, the focus put on order and coordination elsewhere in the text makes this interpretation doubtful.

[107] Here too the concept of ‘tendering’ is not entirely clear (similarly to what was the case with the advice by the Houben Committee). However, from the fact that the need to contract additional services was formulated, one could assume that the provision of services through ‘concessions’ would not have been competitively tendered, but only regulated via general subsidies and generic rules; the nature of those rules is however not made clear in the text.

[108] Professor Gwilliam was formerly appointed at the Institute for Transport Studies of the University of Leeds (Great Britain) and had moved to Erasmus University Rotterdam (the Netherlands) in 1988 where he became professor of transport economics. He had been heavily involved in the British academic debate on the relative merits of competition ‘on’ and ‘for’ the road in local public transport (see, e.g., Gwilliam et al., 1985a).

were themselves perceived to be in need of clearer formulation. The paper provided foreign examples, describing the French regime and the positive efficiency incentives included in its tendering regime; the German regime and the lack of incentives included in the regulation; and the Swedish and Danish regimes and the efficiency incentives included in their route tendering regimes.

Soon thereafter, the first intermediate report of the Committee (Commissie Brokx Openbaar Vervoer, 1993) advocated a 'business-like', contractual approach involving a decreased involvement of authorities into the daily operations of the operators, such as to help increase the orientation of the operators towards their main client, being the passenger and not the authorities. Competition on the road as implemented a few years earlier in Great Britain outside London (1986), which had been very briefly studied in the Committee's field trip, had quickly been ruled out as too unstable. That regime was also seen as reminiscent of the 1920s' regime in the Netherlands, which had been replaced by monopoly regulation to avoid what was perceived to be the excessive or destructive competition it had entailed. Furthermore, it was also perceived to be incompatible with the integration policy advocated by the Second National Transport Plan (Commissie Brokx Openbaar Vervoer, 1993, p. 18). Also, it is likely that the incumbent operators were 'scared' by the perspective of a full deregulation as implemented in the Great Britain, even though the Committee did recognise the benefits of competition on the road in term of efficiency.¹⁰⁹ Gradually, competitive tendering gained acceptance amongst the members of the Committee. It was better fitting with the consensus mindset that characterises Dutch society, allowing to combine a choice for competition, fitting the spirit of times, with maintaining an orderly way to organise public transport, fitting the traditions of the sector. At a contrast with the position taken by the Houben Committee, the choice in favour of competitive tendering quickly became a central feature of the reform advocated by the Brokx Committee. Note that this was in line with the NPM ideas that were in vogue at the time, though that term may not have been used by the Committee.

The Dutch government published in 1994 a first cabinet position paper on the series of advisory reports produced by the Brokx Committee (Tweede Kamer, 1994). This document showed the government's agreement with the analysis of the Committee according to which the realisation of a larger role for public transport required a fundamental change in the allocation of tasks, competencies and risks between authorities and with operators, as well as a more business-like setup of those relationships. The cabinet agreed that this should take the shape of competition between operators, in particular via the competitive tendering of concessions and additional contracts. This effectively gave the idea of competitive tendering a first seal of approval by government.

While the Committee became increasingly convinced of the efficiency problems that were present in the sector, observers and stakeholders in the sector did not all share that opinion. Furthermore, there were concerns both on the side of authorities and operators as to the extent to which competitive tendering could actually usefully be introduced in public transport. This scepticism, however, was mainly based on scant information about the na-

[109] The Committee also undertook a field trip to the far east and later commissioned the Erasmus University with a report on the regulation of public transport in Japan, Honk-Kong and Singapore (Van de Velde and Westeneng, 1993) but this did not have any perceptible effect on the Committee's advice.

ture of foreign reforms and their actual results. Therefore, building upon the compromise in favour of competitive tendering that the Committee had reached, it decided to fill this informational gap by providing financial support to speed up the realisation of a piece of research on the introduction of competition in public transport that had already been initiated at Erasmus University by the author of this thesis. The study was limited to experiences with competitive tendering, despite the suggestion made by the author of this thesis to include all competition-based options in the research. That would have included options based on market initiative regimes, which would have fitted with the market principles embedded in the Passenger Transport Act 1988, but the Committee showed no interest in including such institutional options. The resulting report (Van de Velde and Westeneng, 1994) described competitive tendering experiences, covering their usage, appearance, results, perceptions by actors and expectations as to further institutional developments in case of observed dysfunctionalities. It covered experiences in Great Britain, France, Germany, Denmark, Sweden and Norway such as to cover experiences ranging from countries with much tendering practice to countries that were only considering its introduction. For each country, the legislation, market structure, tendering procedures and contract types were described. The information collected was based on desk research and field trips during which semi-structure interviews were conducted with representatives of authorities, operators and research institutions. The resulting report was probably the first and most extensive report on competitive tendering practices across Europe at the time.¹¹⁰ General findings were formulated concerning the functioning of each tendering regime, as well as the resulting efficiency, customer orientation and competition levels. The report formulated general observations and conclusions linked to the shaping of a tendering regime. It did not, however, formulate a general recommendation as to the best option for the Netherlands.

Academic review of the first proposal

The Committee decided to ask four professors to comment upon the first advices and position papers produced (Commissie Brokx Openbaar Vervoer, 1994). A joint discussion session¹¹¹ was held on 11 October 1994 to discuss whether and how competition ought to be organized and introduced in the public transport sector. The advices formulated (briefly summarised hereafter) are interesting as they reveal a number of concerns that are also central to the analysis conducted in this thesis:

- ▶ Prof. R. in 't Veld, as public administration expert, expressed his doubts about the tendering model suggested by the Committee. Important points were that the resulting contract would fix services rather than facilitate the desired entrepreneurial flexibility, and that it was doubtful whether an adequately formulation of what was expected from the operator and an expert choice between diverging bids could be expected from a political body with no inherent expertise on the matter. Prof. in 't Veld favoured instead

[110] The information collected through desk research and semi-structured interviews for the purpose of this report constituted a first major set of case studies for this thesis, together with the information gathered during the interviews conducted while writing two earlier papers (Gwilliam and Van de Velde, 1990; Van de Velde, 1992b).

[111] The author of this thesis participated to this session, together with 10 other participants from the Committee and senior civil servants from various ministries.

to loosen the control on operators and introduce continuous improvement incentives in other ways, while also trying several paths for improvement and learning from them in a stepwise approach, instead of introducing one radical change as suggested by the Committee.

- ▶ Prof. H. de Ru commented, as lawyer, on the suggestion to use the competitive tendering instrument. He recommended in particular a gradual approach with preferably smaller and shorter contracts and pointed at the importance of high level of expertise needed on the side of the tendering authority, something that he did not expect to be present inside the regional transport authorities that the Brokx Committee recommended creating. He therefore suggested allocating the tendering responsibility to the Ministry instead.
- ▶ Prof. L. Sleuwaegen, as an industrial economist, commented upon the lack of a clear reference framework in the Brokx advice that made a choice for a principal-agent approach (tendered contracts) while its background reasoning (need for more demand focus, entrepreneurship and innovation) would actually be better suited to a market approach. He suggested a free market approach instead, based on Baumol's contestability theory but with an additional focus on access regulations guaranteeing a high level of supply and the respect of clear and simple 'rules of the game' while preventing oversupply. He regretted that such approach was rejected by the Committee. As to the tendering regime advocated by the Committee, he expressed concerns, just as the other experts, in relation to impossible or costly formulation of contract awarding criteria, with the ensuing risk of an excessive subjectivity and political rationality. If that regime was to be adopted, he recommended starting with awarding commercial services, in possibly overlapping networks, before tendering additional non-commercial services.
- ▶ Prof. A. van der Zwan, as academic in the field of management, commented upon state intervention and public interest. He saw several practical complications to the implementation of the Committee's advice (such as financial aspects, cooperation between operators, or incentive calibration) and recommended instead to organise regional pilots stimulating innovation at that level, while using direct award in a first phase and generating effectively interregional competition by emulation.

The discussion that was conducted between the participants concluded a few things as to the most commendable competition regimes. It found that continuous competition could lead to more innovation and a faster adaptation to changing demand, that tendering of only operations would be very beneficial for productive efficiency but not be in line with an enhanced customer focus, that a mix of the French and Danish regime could perhaps address that problem and that the first tendering experiments that were being prepared by the Ministry were very important in this respect, but that it could not be excluded that tendering the development function would still be inferior to the results of continuous competition on the road. Accordingly, the experts recommended including the possibility of 'competition on the road' in any future regime resulting from the Brokx advice (Commissie Brokx Openbaar Vervoer, 1994, p. 61-62).

First tendering experiments

While the Brokx Committee prepared its advice, additional pressure arose when private operators (active in private hires and excursion services) indicated to the Minister in June 1992 their intention to formulate competitive bids in fifteen areas scattered throughout the country. This constituted for the Ministry an additional element supporting the presumption of inefficiency that rested on the incumbents, as well as the idea that competition could be an option. Discussions with these operators were held at the end of 1992. Four private operators, with operational bases spread across the country, subsequently announced their intention to create a common company (*Personenvervoer Nederland – PVN*). In the same period the municipal operator of the city of Maastricht, which had been corporatised in 1994, also indicated to the Minister its desire to submit a bid for the rural transport around its traditional territory of Maastricht city.

Eventually, the Ministry of Transport decided to organise two experiments with competitive tendering in 1994 to gain some experience with that regime, even though the Brokx Committee had yet to produce its final report. The Ministry had established a roadmap to select candidate areas for these experiments already in early 1993 (van Dijk, 1995). Several discussions were held with various stakeholders, including incumbent operator VSN. The Ministry eventually selected two small areas in June 1994 (out of a potential list of about fifteen), one in Southern Limburg and one on an island of Zeeland and chose to use a tendering regime whereby the ‘best’ bid would win, based on supply-related selection criteria. This specific choice was partly determined by the first advice of the Brokx Committee but also by the idea that tendering had more chances to be accepted by local authorities if it could result in more public transport for the same subsidy. The existing regulations on ticketing, fares and subsidies limited the contractual freedom of the Ministry but a net cost contract situation could nevertheless be approximated, with the amount of net subsidy based on historical data of the area for the first year and a half, after which the past performances of the new operator would determine further subsidisation levels¹¹².

A first external evaluation commissioned by the Ministry soon these experiments after stated that the Ministry had better wait for the final advice of the Brokx Committee before organising these experiments. The Ministry pointed in response to the fact that the Brokx Committee had already quite clearly taken position in favour of competitive tendering and that there were no reasons to expect it would come up with a different conclusion in its final advice (van Dijk, 1995). Van de Velde (1995c) and van Dijk (1995) concluded that the experiments showed competition was possible despite the presence of a nearly monopolistic national operator, as five bids had been delivered and one new operator had appeared. Both experiments showed a significant potential for improvement in level of service at the same subsidy level. This supported the perception of inefficiency of the incumbents, even though the awarding criteria had led to much of the additional supply being realised off-peak—filling service gaps previously allowed or even imposed by national regulations—with presumably rather empty buses, while little innovation was realised in the peak where the main transport policy related problems were perceived to be. Additional findings were

[112] See Van de Velde (1995c), van Dijk (1995) and MuConsult (1999) for a more detailed description of this case.

that existing national regulations blurred the real potential of tendering, while the asymmetry of information between bidders potentially hampered competition. This indicated the importance for tendering authorities of being able to obtain and disclose past ridership levels. This also pointed to several other issues. One was the need for more tendering expertise as it was observed that imperfections in the procedure had led to problems (CVOV, 2000b). Another was the need to better consider the incentives included—consciously or unconsciously—in the regulatory regime, and the barrier to entry that this represents for potential entrants (for example, the national fare system and the likelihood that it could be replaced by only ticketing integration without fare integration). A recommendation was that it might be advisable to start using tendering as an instrument to reach more productive efficiency before using it as an instrument to improve quality, as incumbent operators had difficulties evaluating revenue-related risks. Behind this lay the idea that having an increased number of productively efficient operators could provide a better base for future quality competition under the expected development of international competition. Van de Velde (1995c) also pointed to the asymmetry of information between operators, between operators and authorities¹¹³ and between the potential passenger/voter as principal of the local politician and the politician as agent of the voter in the context of tendering (with behind this a lack of clear definition of the social aims of public transport).

The official evaluation study held later showed that the experiment had led in South-Limburg to an increase of 15% of vehicle-km between 1994 and 1997 and an increase of 14% of passenger-km between 1995 and 1998 (while ridership dropped in neighbouring areas), to a drop in cost-coverage due to the increase in off-peak services, and to an increased punctuality (MuConsult, 1999). However, innovations were mainly limited to the introduction of self-managing drivers' teams, while innovations in service concepts were below local expectations. It was found that the size of the tendered area was too small to allow for specific investments in network development by the operator; leading to a recommendation to use larger areas in future tendering. The results in Noord-Beveland (Zeeland) were much less positive with a 50% reduction in passenger-km and ultimately a replacement of regular buses by demand-responsive services after budget cuts by the authority (CVOV, 2000b).

8.1.3 Towards new legislation

The Brokx Committee gave its final advice to government in 1995. The advice clearly recommended functional network tendering. A long period of discussions in Parliament and society ensued before the Brokx advice being, more or less in its original form, enacted by Parliament in 2001.

Functional tendering recommendation

In its final report in February 1995, the Brokx Committee recommended the introduction of a form of 'managed' competition through the competitive tendering of regional public

[113] This issue was also mentioned in the evaluation held a few years later by MuConsult (1999).

transport concessions whereby operators would be charged with both the development function (*'ontwikkelingsfunctie'*) and realisation function (*'uitvoeringsfunctie'*) of the services, including the commercial risk associated with those services. This would take place within the framework of a policy function (*'beleidsvoeringsfunctie'*) pre-determined by regional tendering authorities rather than by central government and main cities (Commissie Brox Openbaar Vervoer, 1995).

The advice stressed the importance of decentralising policy to an appropriate regional level in line with the transport markets to be served, while making sure that the to-be-created transport authorities were appropriately skilled. This was based on the idea that local authorities are in a better position than the Ministry to draw local public transport policies¹¹⁴. Operators would thus be made responsible for both the tactical and operational levels, giving them more control on service design. Behind this stood the idea that operators have a better knowledge of potential passengers' preferences and should therefore have all instruments in hand to adjust services to meet these preferences. There was also a belief that production costs would sink if operators could organise services according to their vision while respecting only strategic guidelines set by authorities to fulfil public duties.

The advice also stressed the importance of having a sufficient number of competitors and avoiding situations where losing operators would have to retract from the market altogether. The Dutch government accepted this advice and communicated its decision to the Parliament (Tweede Kamer, 1995).

Debates

A long period of discussions in Parliament and society ensued before the adoption of the new legislation in 2001. Parliamentary debates showed that—on the whole—left wing parties tended to be opposed or very critical to competitive tendering, while right wing parties were much more favourable. That period was also characterized by numerous misunderstandings on the nature and potential of the competitive tendering instrument. While concerns expressed in Parliament revealed some of the main public values pursued, the discussions conducted also showed the superficial level of information that had reached Parliamentarians and society in general as to the competitive tendering instrument. Several publications issued during this period attempted to enlighten the debate. For example, Van de Velde (1995a) published a column in the Dutch professional magazine *Economisch Statistische Berichten*. The intention was to defuse some of the misunderstandings in the on-going debate, while pointing to issues that were arguably more important but had remained undiscussed in that debate. The column, seeing competitive tendering as a politically neutral instrument (in the sense that tendering can help realise both 'left-wing' and 'right-wing' public transport policies), tried to draw the attention to a number of misunderstandings and responses that could be formulated: "operators would cherry-pick, leading to a weakening of the social function of public transport", while tendering gives authorities all powers to define the social function in call-for-tender and contract; "competition would come at the expense of the labour force in the sector", while maintaining

[114] While municipal authorities were already responsible for local transport, interurban transport had remained controlled by central government until 1998 and most regional train services would be decentralised only later on.

employment conditions can easily be imposed if desired; “competition would lead to a loss of economies of scale, leading to cost increases”, while foreign experiences showed that operational economies of scale were more limited than expected and that financial economies of scale could be realized through a geographically dispersed contract portfolio; “five-year contracts would lead to insufficient investments in rolling stock and personnel”, while foreign experience had shown that this was not necessarily the case if lease markets could develop; “competition would lead to lower quality buses and less safety”, while tendering procedures give all possibility to define and monitor the required quality; “competition would not be needed anymore after all audits and budget reductions”, while even accepting that the threat of competition can indeed have a strong effect, one could doubt about the continued long-term effect of such threat; “less subsidies would lead to higher fares”, while tendering provides the authority with a full control on fares if so desired; and “competition would lead to authorities having to relinquish their steering power on public transport and to a restriction in the policy freedom of the authority”, while tendering and contracting does actually increase the steering power and policy freedom of the authority compared to the previous regime.

The column concluded that one of the sources for the worries and related misunderstandings was probably the confusion between the strategic and tactical levels that was endemic in public transport policy at the time. It pointed to the importance for authorities to actually define explicit public transport policy goals at the strategic level instead of simply attempting to maintain existing levels of service. This supported the Brokx Committee’s plea for a stricter delineation of the strategic and tactical levels. Importantly, it did also point to the lack of foreign experience with tactical tendering, as envisioned by the Committee, and the resulting urgent need to investigate the conditions under which this would be feasible.

Another contribution to the Dutch debate was published in the *Tijdschrift Vervoerswetenschap* (Van de Velde, 1995b)¹¹⁵. It focused on the choice of tendering regime and contract form. It concluded that the search was for a complex optimum, and that this stood at a sharp contrast with the simplistic yes-or-no discussion ‘in favour’ or ‘against’ competitive tendering, as observable in the Netherlands at the time. The paper also observed a lack of exchange of experience between countries contemplating the introduction of a competitive tendering, leading to much ‘reinvention of the wheel’. The paper further pointed at the available evidence concerning the positive effect of competitive tendering on productive and cost efficiency but stressed once more the lack of clear evidence on the effect of competitive tendering on innovation.

In the same period, and looking at the proposed reform from both a general economic and a public management perspective, Van de Velde and Veeneman (1995) pointed to a paradoxical issue. The government, observing the past and the low public transport market share realized, first concludes that its earlier intervention has not been successful, and consequently intends to move to a regime where operators—who are assumed to have a

[115] While the Brokx Committee finalized its advice, the material collected for the background study (Van de Velde and Westeneng, 1994) to the Committee’s advice had been used to write a paper for the World Conference on Transport Research in Sydney (Van de Velde and Sleuwaegen, 1995; 1997), elaborating further on the competition in public transport, on the choice of intervention form and looking in particular at the search for optimal contracting in the context of competitive tendering. The main conclusions from that work were summarized in this Dutch contribution.

better view on the customers' needs—are granted more initiative space. However, that very regime requires the authority to choose the bid that is best able to satisfy market needs. The authors also drew the attention to two other issues: the importance of a proper, yet difficult, delineation of the borderline between strategic and tactical level, and the importance of the authorities' skills in formulating goals and transposing them into awarding criteria in the context of tendering.

Simultaneously, the Dutch Ministry of Economic Affairs developed a research program, carried out through the research centre for financial-economic policy (OCfEB) at Erasmus University Rotterdam, studying competition in various economic sectors. Within that program, a study on the potential role of competition in the Dutch public transport sector was commissioned to Erasmus University with the intention to contribute to establishing a framework that could be used to develop of a pro-competition policy in the sector (van de Velde et al., 1996, p. 8). The resulting report, titled "*Competition in public transport. A review*" ("*Marktwerking in het openbaar vervoer. Een verkenning*") (van de Velde et al., 1996), analyses in a detailed way the various ways in which competition could be introduced in the sector. It includes case studies of the British free market including a comparison of performances in two cities of similar size: York (Great Britain) in the deregulated free market and Den Bosch (Netherlands) in a regulated, non-competitive regime; and cases of competitive tendering in France, Denmark, Sweden and Australia. While it did not explore non-competitive options, the report explicitly studied both competition 'for' the road and competition 'on' the road, thus filling the gap left open by the report realised for the Brokx Committee¹¹⁶.

Controversies continued in Parliament during this period. This ultimately led to a parliamentary request to the Ministry of Transport and Water Management to develop an additional implementation report that had to address the various concerns and disagreements remaining amongst the parliamentarians as to the desirability of and way to implement competitive tendering. Those contentious issues included the length of the concessions, the position of municipally owned operators, the protection and transfer of existing labour, the position of the national bus company (VSN), the specific tendering procedure to be used and the position of socially desirable but non-commercially attractive services. That implementation report (Ministerie van Verkeer en Waterstaat, 1996) was based on a consultancy report¹¹⁷, various seminars and even a study tour to Sweden organized for a group of Dutch civil servants and politicians¹¹⁸. An additional report on competitive tendering in public transport (Van de Velde and van Reeve, 1996) was also commissioned as input to the Ministry's implementation report. It included several theoretical and legal

[116] There was arguably some level of competition of ideas between the Ministry of Economic Affairs, that adopted a very pro-competition stance and strongly promoted those ideas, and the Ministry of Transport and Water Management that was perceived by some at the Ministry of Economic Affairs to be less universally convinced of competition-based solutions.

[117] This was carried out by B&A Groep in cooperation with Goudappel Coffeng and Erasmus University (D. van de Velde and P.A. van Reeve).

[118] The author of this thesis was charged with accompanying the group and providing guidance on the interpretation of the cases visited.

considerations, the description of several illustrative foreign cases¹¹⁹, a sketch of six conceptual regimes (two based upon the free market, one on operational tendering and three on tendering regimes based on a more or less extensive delegation of the tactical level to the operator), four sketches of various implementation options for urban public transport in the Netherlands (using the concrete case of Rotterdam¹²⁰ as illustration) and three sketches for regional public transport; all seven sketches were presented using the STO framework (Van de Velde, 1992a).

The Passenger Transport Act 2000

Ultimately, an agreement was reached in Parliament, enacting the “Passenger Transport Act 2000” (*Wet Personenvervoer 2000*) in 2001. This ended a lengthy debate that had started in the early nineties with the recognition that public transport was at a loss in competition with the car while a modal shift towards public transport had become a main policy aim, and the perception that unchallenged monopolies had led to inefficiency and insufficient customer focus.

The main principles of the Act are:

- ▶ Public transport concessions are required to operate bus and/or regional train services;
- ▶ Concessions confer an exclusive right to operate the services included in the concession area;
- ▶ Competitive tendering of these concessions is mandatory under a regime that aims to utilise the operators’ creativity and knowledge by giving them at least some service design freedom—the advocated ideal being a functional specification of the services to be provided¹²¹;
- ▶ The power on local and regional public transport is decentralised to local authorities charged with developing a regional public transport policy at the strategic level and defining public transport concessions with conditions set at the tactical level;

[119] Several of these cases (such as case boxes on Adelaide and on Copenhagen) and sketches of alternative tendering regimes found their way into the implementation note and its appendixes.

[120] This was a further elaboration based upon three options for the Rotterdam region presented at a Trail research school colloquium (Van de Velde, 1995d): the free market, network tendering, and route tendering. In the latter option the incumbent municipal operator was to be split into a network planning agency and several operators. This option would re-appear later again as the so-called “Rotterdam’s model” in local debates between the public transport operator RET in Rotterdam and the public transport authority in the Rotterdam region.

[121] The *Memorie van Toelichting* of the Passenger Transport Act 2000 states: “De ontwikkelingsfunctie betreft onder andere het beleid ten aanzien van de tarieven, de lijnvoering, de dienstregeling en het voertuigtype. De aanbesteding van ontwikkelingsfunctie is meer complex van aard, met name omdat het formuleren van gunningscriteria voor een dergelijk aanbod op kwaliteit meer aandacht vergt. Het is echter ook denkbaar dat de concessieverlener stapsgewijs wil groeien in het proces van aanbesteden. Bovendien is de scheidslijn tussen de beleidsvoeringsfunctie en de ontwikkelingsfunctie niet haarscherp aan te geven. Op basis van deze overwegingen zijn de tot concessieverlening bevoegde overheden in het onderhavige wetsvoorstel vrij om te bepalen of naast de uitvoeringsfunctie ook de ontwikkelingsfunctie wordt aanbesteed en zo tot de verantwoordelijkheid van de vervoerder behoort. Vanwege de grotere innovatieve stimulans ter verbetering van de kwaliteit van het openbaar vervoer, is het streefbeeld dat ook deze functie niet bij de tot aanbesteding bevoegde overheid ligt. De ontwikkelings- en de uitvoeringsfunctie kunnen dan separaat – bij voorbeeld aan een derde partij – of tegelijkertijd worden aanbesteed.” (Tweede Kamer, 1999).

- ▶ Winning contracted operators have to take over operational staff from losing operators; and
- ▶ Passenger representative organizations are granted a legal advisory position.

The implementation of this regime was accompanied by a reform of the public operators. VSN was split in 1998 and parts were privatised in 1999 and 2001 to generate competitors for the pending tendering regime. Municipal operators had their governance revised; privatisation was not made compulsory but a requirement of independence from contracting parties was introduced—with the expectation that this would lead to privatisation—and municipal operators were prevented from bidding in other markets, unless their own market had been opened up to competition, such as to prevent unfair competition.

This new regime realized a decentralisation of power, as the state relinquished its power on regional public transport to the Provinces, while municipal authorities that had public transport powers in the former regime initially retained those powers. This resulted in 35 public transport authorities. This initial decentralisation was followed by a slight centralisation when the power of most cities was transferred by law to the Provinces in 2004. The situation was slightly different where the new 7 city regions (*Stadsregio's*) were created in 2006 (following a temporary status), as this constituted both a decentralisation from the corresponding province and a centralisation from the participating municipalities. This resulted in 19 transport authorities. These were further reduced to 14 when the city regions were abolished again in 2015, except for the two transport regions (*Vervoerregio's*) in the Amsterdam and Rotterdam-The Hague areas.

The concessions were originally meant to last for a maximum of 8 years. This was later extended to 10 years, in line with the framework set by EU Regulation 1370/2007 (with a possibility to extend to 15 years in tendered concessions for rail or with substantial asset investments by the operator).

The tendering obligation was introduced gradually: 35% of the local and regional public transport services by January 2003, followed by an evaluation and Parliamentary decision to move to 100% from 2006 onwards (2007 for municipal transport as it was felt that municipal authorities required more time to privatise their transport companies). National rail was exempted.

The originally foreseen general tendering obligation was subject to various policy reversals in the following years. Various arguments for exemptions were put forward: organisational difficulties in transferring the ownership of the municipal operators, relative inefficiency of these operators and—consequently—the need for a longer time to adapt to the new setting, political support for public ownership, trade-union opposition to competition, or the greater complexity of public transport in main cities hampering the usage of tendering (large volumes of passengers, coordination issues between different modalities, etc.). This was followed by several radical policy changes meant first to implement a tendering obligation in those cities as well, but this was—ultimately—replaced by a freedom of choice. As a result, tram and metro services are (so far) not tendered in Amsterdam, Rotterdam and The Hague, while buses services are tendered in Rotterdam and The Hague but not in Amsterdam. It is only in Utrecht that all services have subsequently been tendered (Veeneman, 2010; Van de Velde and Savelberg, 2016).

The reform did not initially modify the funding regime for earmarked public transport subsidies from national government to regional authorities. The way to apportion the monies amongst authorities was however gradually transformed to become independent from historical passenger revenues and to become dependent upon structural characteristics of the region concerned (degree of urbanisation and number of households).

8.2 A difficult path to functional tendering

Many Dutch transport authorities attempted to follow the idea of giving service development freedom to operators through implementing a regime based on functional tendering as sketched by the Brokx Committee. However, the ensuing experiences showed that this was perhaps not that easy a path to follow. A lot of trial-and-error, learning, muddling through and fine-tuning could be observed, and can still be observed. This will be the focus of this section, hence its title.

This section summarises or includes papers that we published since 2001. These give a picture of the functioning of the Dutch regime since its implementation, contributing to answering the first and second sub-questions. The main papers referred to or included in this Section focus on what is so-called the ‘development function’ in the Dutch policy jargon (i.e. the ‘tactical level’ in the vocabulary introduced in Part II) and on the evolutions in the attribution of elements of this function to authority and operator. This issue is crucial in the Dutch context as it represents one of the core components of the regime, which was given this function to the operators in order to induce innovation and service improvement. Further sources of information for this analysis lie in numerous interviews conducted with transport authorities and operators over the period concerned. A part of this knowledge is reported upon in case studies included in various earlier publications, most of which are referred to in this Section.

Section 8.2.1 sketches the burgeoning diversity of approaches that developed at levels L3.1 and L3.2 right after the inception of the new regime and that authorities did not all follow the functional tendering ideal suggested by the reformed legal reform introduced at L2. In an attempt to better understand this, it suggests a typology of barriers that may have been responsible for this.

Section 8.2.2 looks further into the trial-and-error that took place in the allocation of the tactical functions between contracting parties. It observes a number of disappointments and distrust in the sector, and also shifts both towards and away from the functional tendering ‘ideal’. The paper published in *Transportation Research Part A* (Van de Velde et al., 2008c) brings together findings from earlier papers and summarises experiences until 2006. It also contributes to a better understanding of the complexity of arrangements that had by then developed by developing a grid of analysis distinguishing between various allocations of the tactical function. That grid also allows to describe succinctly the evolutions that could be observed.

Section 8.2.3 goes deeper into analysing the disappointments that were observed in the sector after the first rounds of tendering, and the learning and fine-tuning that ensued, leading to a growing usage of hybrid arrangements. This section also provides a list of

recommendations that we formulated to reach more flexibility and innovation in public transport contracting in the Netherlands (Van de Velde and Eerdmans, 2013), answering the third sub-question.

8.2.1 A burgeoning diversity of approaches

The period following the implementation of the Passenger Transport Act 2000 (*Wet Personenvervoer 2000*) saw the transport authorities experimenting with the relatively large degree of freedom attributed to them by legislation (L2) in term of local governance arrangements (L3.1) and contractual relationship (L3.2) with their operators. A diversity of approaches developed, right from the inception of the new regime. Some authorities attempted to give service development freedom to the operators while not always managing to realise this aim, but many others—in line with their legal freedom—preferring alternative arrangements with partly or fully pre-determined services.

This section starts by summarising parts of the official evaluations of the new regime held on behalf of the Ministry of Transport and Water Management in the period covering 2001 until 2004. It then moves on to report on an analysis conducted by the author during the same period which, in comparison to the official evaluation studies, had a stronger focus on this burgeoning diversity. This resulted in suggesting a typology of barriers to realising the regime of competitive tendering of the tactical function drafted by the Brokx Committee and the ensuing legislation.

First evaluations

Parliament had during the legislative process requested an evaluation of the new public transport competitive tendering regime during the first stage of its implementation as a condition for giving its agreement to generalize the tendering obligation to all public transport concessions. That evaluation study would focus on changes in ridership, quality and costs. To make this evaluation possible the Passenger Transport Act 2000 stipulated that at least 35% of the services had to be submitted to competitive tendering by January 2003, with the possibility for the Minister to take necessary action if this quota was not met. Parliament would then decide whether competitive tendering would be made compulsory from 2006 onwards (from 2007 onwards for municipal transport services as it was felt that municipal authorities required more time to privatise their transport companies) (Van de Velde and Leijenaar, 2001).

The first early report on the implementation of competitive tendering was published by CVOV (2001)¹²². This gave first impressions and reported successful results from the point of view of the tendering authorities in the first four tendering cases (Leeuwarden, South-Holland islands, Wadden islands and eastern North-Brabant). The first official evaluation report was not published until 2004 (see Appelman et al., 2004). It was based on

[122] The *Centrum Vernieuwing Openbaar Vervoer* (Centre for Innovation in Public Transport) was set up in the context of the implementation of the Passenger Transport Act 2000 to facilitate the transition to the tendering regime by stimulating the exchange of knowledge.

interviews with public transport authorities relating to the experience of the 2001-2003 period. Unfortunately, this was still rather soon after the 2001 implementation. This made it difficult to evaluate all consequences of the new Act, in particular in relation to choices made in the allocation of the tactical level. Four main conclusions should be mentioned though:

- ▶ Firstly, they found that about one third of the concession areas had indeed been tendered by 1 June 2004. In about one third of those cases, the incumbent lost its position. However, most authorities preferred waiting for the result of experiences by other authorities before introducing tendering in their own areas. Where tendering had been organised, it had resulted to more services (timetable-hours) for the same amount of subsidy.
- ▶ Secondly, it observed that the tendering process and the contract management stage entailed a more intensive authority commitment than the earlier institutional framework. Also, the researchers reported the difficulties encountered by both authorities and operators in their getting used to the more 'business-like' environment that was supposed to be created. The burgeoning diversity at L3.1 and L3.2, while fitting within the boundaries given to transport authorities at L2, often led to choices that were at odds with the intentions that stood behind the new legislation (Appelman et al., 2004, p. 38), which pointed to the possible existence of barriers to the realisation of those intentions.
- ▶ Thirdly, no increase in ridership could be observed, although there was some growth on main routes and a decrease on other routes). Despite of the fact that supply had increased (8-10% on average compared to non-tendered areas), a decrease in revenue (7-10%) was observed, yet the level of public spending remained more or less identical. This indicated a growth in the average efficiency of production of a timetable-hour (about 6%) even though the aim of increasing the level of cost-coverage was not realised. Similar conclusions were drawn by the second official evaluation report by MuConsult (2004a) and later by Groenendijk et al. (2005) in a follow-up study commissioned by the Ministry to evaluate the Act's effect and effectiveness after five years of enactment.
- ▶ Fourthly, the overview produced by Appelman et al. (2004, p. 38-40) on the basis of interviews held with most authorities, reported that about 81%¹²³ of tendered concessions allocated the service development function mainly to the authority and that the interviewed authorities kept elements of the tactical level more than they originally expected on their side. This also confirmed our earlier conclusions drawn on the basis of interviews (Van de Velde and Pruijboom, 2003; 2005)¹²⁴. This general opinion in the sector at the time was corroborated by evidence collected in MuConsult (2004a). One should however also note that the interviews conducted by Appelman et al. revealed that the interviewed operators did not believe this was a trend that moved fully away from the original intentions of the legislation as they noted that some authorities did actually attribute the development function to the operators.

[123] About 23 out of 75 concessions were tendered when that report was published. The authors do not, unfortunately, report on the method used to allocate a case to a specific category.

[124] This piece of research was presented at the 8th Thredbo conference in 2003 and published in an Elsevier book in 2005. This work is presented in the latter part of this section.

In its official position statement based on these official studies, the Government (Ministerie van Verkeer en Waterstaat, 2004; Tweede Kamer, 2004) concluded that the competitive tendering regime scored neutrally or positively on the official evaluation criteria formulated in the transition path, despite the lack of general growth in ridership and the lack of growth in cost coverage. Also, a growth in supply and thus quality could be observed, as well as decreased or constant costs for the authorities, while the levels of employment and accessibility were maintained (see also Stoelinga and Hermans, 2005).

Case analysis

A detailed analysis and reporting on individual tendering cases would have been desirable to understand more fully the processes and considerations that were at play and that may have hampered the allocation of the tactical function to the operators that was supposed to develop under the new legislation. Unfortunately, the details of concrete cases remained largely unreported at the time and the official evaluation studies reported only partially on this topic. As a result, a complete overview of the features and effects of all initial tendering cases cannot be provided. However, two papers based on research realised in the same time period as the official studies did have a closer look at a few cases, thus usefully complementing the official analyses of the new regime. These are reported upon below.

Immediately after the implementation of the new regime, in a paper for the 7th Thredbo conference, we described two cases of urban public transport networks that were about to be tendered under the new legislation (Van de Velde and Leijenaar, 2001). The city of Leeuwarden began by developing a new bus network concept, thus deliberately choosing to keep service design as a prerogative of the authority¹²⁵. However, the procedure allowed the operator to suggest options for improvement above a bid on the reference 'base case' network. The city of Amersfoort, on the contrary, gave more service freedom to the operator by specifying only functional requirements, such as maximum walking distance to bus stops and minimum frequencies per period of the day and week. Both cases allocated the revenue risk to the operator. These two radically different cases, together with the intentions declared at the time by further authorities, illustrated that a diversity of approaches was developing. While this was in line with the L3 leeway included at L2 in the legislation, it also showed that a discrepancy existed between practice and the main intentions behind the new legislation.

Two years later, we updated the Amersfoort case after its tendering and added two further cases (Van de Velde and Pruijboom, 2003; 2005)¹²⁶. The case of Amersfoort illustrated an approach that gave the most extensive service planning power to the operator at the tendering stage. The case of Utrecht-Northwest, on the contrary, gave practically no freedom to the operator. Finally, the case of South Holland illustrated an intermediate arrangement. All three cases gave the revenue risk to the operator but different financial incentives to the operator. All three authorities worried about objectivity in selection and the realisation of a level-playing field but chose different procedural features to address these concerns.

[125] Note that the redesign of the network had been contracted out to a consultant prior to tendering the operations of the network.

[126] The paper presented at the 8th Thredbo conference in 2003 was published in an Elsevier book in 2005.

Amersfoort chose to evaluate network bids using a transport model, South-Holland asked for bids based on the existing network with a redesign freedom given to the operator one year after the start of operations, while Utrecht chose for a pre-determined network with however a possibility for the bidders to suggest changes during the concession, although with less freedom than in South-Holland.

These cases illustrated the existence of a continued discrepancy between practice and the intentions behind the new legislation. Semi-structured interviews were conducted in the summer of 2003 with the main civil servants involved in the competitive tendering of these networks such as to shed more light on the reasons that stood behind these divergent choices, but also as an attempt to gather information on possible barriers to the realisation of functional tendering (see Van de Velde and Pruijboom, 2003; 2005).

All three authorities interviewed reported a satisfaction with the service improvements and relationship resulting from the tendered contracts. However, Amersfoort expressed some concerns linked to the reappearance of a passive behaviour ('not doing enough' or 'blaming the other party') which was perceived to be connected with a possible overbidding of the winner to win the concession 'at any cost' for strategic reasons. The interview with BRU (*Bestuur Regio Utrecht* – public transport authority for the Utrecht region) revealed that the authority disliked the fact of having had to use tendering, due to the commotion it caused, and that it would rather have used tendering only as a threat. Amersfoort's arguments for giving tactical freedom to the operator were mainly based on a belief in market forces as such and a belief that operators are better placed to respond to market demand than an authority that was perceived to be the actor that ought to be responsible for defining social requirements.

The tricky problem of comparing and choosing between network bids at the time of tendering¹²⁷ was addressed in Amersfoort using a model-based evaluation. This choice was motivated by a desire for objectivity, avoiding expert judgements. In South-Holland, despite earlier thoughts of using a 'freer' tendering regime, a pre-determined network was imposed for the first year of operations based on the idea that this network had been well developed during many years of operations, and that passengers were accustomed to it and did not want change. Note that the choice to give a regulated tactical freedom after one year was seen as a compromise that was directly inspired from the experience of the city of Sundsvall (Sweden) reported in the Netherlands by us in a sectoral newsletter issued by CVOV (2000a). This choice also gave certainty to the authority, which did not want to be accused by the inhabitants of providing bad public transport. This was also linked to the authority's belief that operators would, even under tendering, stick to the old network anyway and that new operators would not have enough time to properly design a new network anyway. This argument was also related to the perceived need for creating a level playing field. Furthermore, the authority considered that formulating awarding criteria for a new network would be too difficult and time-consuming, preferring objectivity and simplicity to prevent procedural difficulties as certainty was an important political motive. These arguments can be seen as evidence of behavioural barriers to more daring solutions.

[127] The complexity of this issue had often been mentioned during the discussions preceding the reform. This had not led to the development of concrete tools. Even the ministry's 'implementation note' on competitive tendering (Ministerie van Verkeer en Waterstaat, 1996) only postponed the issue.

In the case of BRU, the interview with the authority revealed that the argumentation for the chosen form of tendering was largely similar to that in the DAV-area in South Holland: the existing network was perceived to be good with little improvement possible, existence of few other available connecting roads in the area such that routes would be rather fixed anyhow, and inhabitants accustomed to the existing network and not wanting changes. Several behavioural barriers to change were present. The authority reported that, due to the inertia of the former operator, it had little hope that other operators would behave otherwise. Similarly, the usage of a bonus/penalty system had been rejected based on past experience that had led to a perception that the operator did not react to incentives; note that the calibration of incentives was not perceived as a potential cause of this state of affairs. The authority wanted to create a level playing field for competitors. Finally, it preferred certainty about the services offered, fearing later customer complaints in case of service changes.

Observing those examples and additional evidence in the Netherlands reviewed by others (Appelman et al., 2003, p. 4; Nijssink, 2002), we concluded that the large majority of competitive tendering cases in the Netherlands by 2003 were far remote from the regime that the proponents of the reform and the legislator had in mind, as service design (i.e. the tactical level) was in most cases largely pre-determined by the tendering authority (Van de Velde and Pruijboom, 2005).

Barriers to change

The case information collected, enriched with further own observation of changes in institutional frameworks in public transport, both in the Netherlands and elsewhere¹²⁸, led to the insight that various elements appeared to hinder change in the sector. To represent these, we refined a framework of analysis developed earlier on (Van de Velde and Leijenaar, 2001; Van de Velde and Pruijboom, 2005)¹²⁹. This resulted in a typology of barriers, distinguishing between factual, informational and behavioural barriers at each of the four institutional levels distinguished earlier. In this approach, ‘barriers’ are defined as elements that hamper the implementation of a specific institutional feature—in this case functional tendering—in an attempt to elucidate the observed discrepancy between reform aims and reality. The approach suggests a typology of barriers according to a continuum, varying from more ‘objective’ barriers to more ‘subjective’ barriers, distinguishing three broad and partially overlapping groupings:

- ▶ *Factual barriers* are those resulting from objectively identifiable institutional features that make the realisation of the reform aims difficult, unlikely or illusory. A few examples are given (Van de Velde and Leijenaar, 2001): the choice for an excessive procedural strictness in tendering that could, under certain conditions, impose frustrating restrictions to the tendering authorities when letting contracts (barrier at L2.2 having consequence at L3.2); the choice for a specific subsidisation regime that could hamper some developments in terms of tendering of service design (barrier at L2.2 having con-

[128] See Part II.

[129] Note that we use here the enhanced typology introduced in Part II. The original papers on which this section is based used a different numbering: L3.1 was L3, L3.2 was L4. That, however, prevented a separate discussion of actual interactions, which constitutes L4 in the enhanced typology.

sequence at L3.1 and L3.2); the choice for an inefficient risk and prerogative allocation between contract partners that could lead to too expensive contracts and to a situation where the freedom given to the operators remains unused (barrier at L4); a lack of adequately skilled operators that could frustrate the realisation of the aims of the reform (barrier at L4).

- ▶ *Informational barriers* are those resulting from a lack of information available to actors as to the extant institutional features and their potential. Examples are a lack of information at the level of tendering authorities on the exact content and possibilities offered by the new legal framework and additional regulations, but also a lack of information on the array of governance arrangements and contracts that are feasible with the institutional context, or a lack of information about the expectable effects of specific incentive regimes.
- ▶ *Behavioural barriers* are those resulting from subjective features linked to the behaviour of the actors involved and linked to their experience or psychology. Examples are: the rejection of the new regime by some authorities as a matter of principle; an opposition to the delegation of the service design powers to the operator due to fears for potential political consequences; doubts in the authority's own ability to use contracting and tendering properly (that may be linked to disappointing past experiences); actors subject to misconceptions about the motives and behaviour of the other players; or the simple desire to retain full direct control on public transport for various motives (such as electoral motives). The paper noted that this third type of barrier tended to dominate the public debate and was reinforced by the presence of hidden factual and informational barriers that ought to be distinguished from behavioural barriers.

Table 8, Table 9 and Table 10 were setup to present our results from this approach (Van de Velde and Pruijboom, 2005)¹³⁰. The information given here is based on information available until 2003. It includes various case references, findings from other reports, such as the Appelman et al. (2003) report commissioned by the Ministry of Transport, the conclusions drawn by Nijssink (2002) in his study about factors for success and failure of competitive tendering, and general information available to professional observers of the sector.

A few additional remarks have to be made here to facilitate reading the tables:

- ▶ t-1 refers to the discussion period that preceded the enactment of the new regime.
- ▶ t0 refers to the period shortly around enactment, though before the actual implementation of tendering.
- ▶ All other items refer to the period when competitive tendering was implemented.

Note that not all points included in the table are elaborated upon here. The items presented at L1, L2.1 (t-1 and t0) and L2.2 (t0) do not refer directly to barriers to the introduction

[130] The effects of changes at L2 on L3 and L4 could also have been classified according to their impact on strategic, tactical and operational decision levels or alternatively according to actor level effects and system level effects. Such an approach was adopted within the Maretope research (2003) ("Managing and Assessing Regulatory Evolution in local public Transport Operations in Europe") within which this framework of analysis was brought in by the author of this thesis. This was the basis upon which a similar, though wider, exercise covering 31 cities was conducted at the European level to analyse factors influencing regulatory change, assess the impact of change on performance levels, evaluate barriers to change and identify tools to facilitate change (see Part II for more details on this European research project financed by the EC's 5th RTD Framework Programme).

of functional tendering but to the general choice for a tendering regime. They are included in the table to understand some linkages within the functioning of the Dutch regime. At L3.1 and L3.2, two kinds of barriers have been identified: those relating directly to an item present at L2.1 or L2.2 and indicated as such in front of each item, and those without such a direct link to a higher level.

Table 8 | Barriers to functional tendering, results Dutch experience 2002/2003 (Part 1)

	← Objective barriers		Subjective barriers →
	FACTUAL Impossibility	INFORMATIONAL Lack of knowledge	BEHAVIOURAL Psychology of actors
	<i>Barriers due to objectively identifiable feature in laws, regulations, governance or contract, which makes delegation illegal, impossible or not workable</i>	<i>Barriers due to lack of information for actor(s) concerning the regime, its possibilities or lack of information on the market</i>	<i>Barriers due to subjectively determined features in the behaviour of involved actors. Remark: these barriers are reinforced by the presence of factual and informational barriers</i>
LEVELS			
1 Customs, traditions			<ul style="list-style-type: none"> ▶ Business ethics in the Netherlands is characterised by a tendency towards consensus building, as opposed to the stricter (Anglo-Saxon) contractual enforcement approach with tendency to lawsuits. Competitive tendering and strict contracting is at odds with ethics and traditions in the public transport sector.
2.1 Formal institutions <i>The laws to which public transport is submitted</i>		<ul style="list-style-type: none"> ▶ t-1: The Brocx Committee did not have information on possible alternative market initiative model to the British deregulation. Furthermore, the actors expected that competitive tendering would, sooner or later, be made compulsory by the EC. 	<ul style="list-style-type: none"> ▶ t-1: Representatives of operators in Brocx Committee wanted more entrepreneurial freedom, but were shocked by British deregulation, considered too extreme. ▶ t-1: Brocx, as committee chairman, strived at consensus building and did not want lengthy academic studies. A consensus was found in advising competitive tendering.
	<ul style="list-style-type: none"> ▶ t0: The legislator confirmed the choice for an authority initiative regime, abolishing almost all remnants of market initiative. A choice for tactical tendering was made. 	<ul style="list-style-type: none"> ▶ t0: The legislator was not aware of the possibilities to deregulate the old law 	<ul style="list-style-type: none"> ▶ t0: Some political parties were sceptical about the dogmatic obligation to tender out all services and asked for a two-stage process: 35%, then evaluation, then 100% if evaluation is positive.
2.2 Regulations <i>The general rules, that are decided within the scope of the law</i>	<ul style="list-style-type: none"> ▶ t0: The ministry chose for the stricter 92/50/EEC tendering rules to guarantee transparency, although these did not have to apply to public transport, and although these were not developed for public transport tendering. Consequently, the chosen tendering rules prevent in almost all cases the usage of negotiated procedures. This may, according to some authorities, hamper the appearance of the delegation of service design powers. ▶ The replacement of the National Ticketing System (NTS) by a Chipcard is planned, but delayed. Maximum public transport fares are still determined by the ministry (A'foort; see also Nijssink). ▶ Public transport subsidisation is determined centrally by the ministry. Local authorities have little or no possibility to determine their public transport budget (DAV). 	<ul style="list-style-type: none"> ▶ t0: The sector had doubts as to the extent to which European tendering rules applied/would apply to public transport and whether the EC would later on impose tendering rules. 	<ul style="list-style-type: none"> ▶ t0: The ministry was rather dogmatic and strived towards some kind of perfection in terms of competition (objectivity and transparency).

Source: Van de Velde and Pruijboom (2005)

Table 9 | Barriers to functional tendering, results Dutch experience 2002/2003 (Part 2)

← Objective barriers			Subjective barriers →	
FACTUAL Impossibility	INFORMATIONAL Lack of knowledge	BEHAVIOURAL Psychology of actors		
<p><i>Barriers due to objectively identifiable feature in laws, regulations, governance or contract, which makes delegation illegal, impossible or not workable</i></p>	<p><i>Barriers due to lack of information for actor(s) concerning the regime, its possibilities or lack of information on the market</i></p>	<p><i>Barriers due to subjectively determined features in the behaviour of involved actors.</i></p> <p><i>Remark: these barriers are reinforced by the presence of factual and informational barriers</i></p>		
LEVELS				
<p>3.1 Governance arrangements <i>The choice of governance arrangement by transport authorities within the scope of the existing laws and regulations</i></p>	<p>▶ 2.1: The late enactment of the new law meant that many authorities have already signed new contracts with the incumbents. Tendering is consequently delayed (Nijssink).</p> <p>▶ 2.1: The maximum concession length of 6 years makes a parallelism with rolling stock amortisation and integration with railways difficult (Nijssink)</p> <p>▶ (2.1): Court cases have been started due to lack of clarity with personnel transfer.</p> <p>▶ 2.2: Drifting national public transport policy (Nijssink).</p> <p>▶ 2.2: Lack of a possibility to negotiate after tendering (Nijssink)</p> <p>▶ 2.2: The fragmented area of some transport authorities (Nijssink)</p> <p>▶ 2.2: The subsidisation regime (budgets determined by central government) render delegation difficult to implement due to resulting uncertainties (DAV, A'foort; also Nijssink)</p>		<p>▶ 2.1: Some authorities do not know which and how much flexibilities are offered by the law and regulations in term of choice of tendering procedures (all cases; see also Nijssink)</p> <p>▶ 2.1/2.2: Some authorities do not know how to create clever organisational forms within the scope provided by the law and additional regulations.</p> <p>▶ 2.1: Operators and authorities do not have clear information on personnel issues.</p> <p>▶ 2.2: Lack of clarity on the status of the smaller urban transport authorities (Nijssink; although A'foort decide to tender because of this).</p>	<p>▶ 2.1: Some authorities consider central government wants to keep too much policy prerogatives, even after what they see as a half-hearted decentralisation (Nijssink).</p> <p>▶ 2.1: Some authorities regret personnel transfers at concession takeover, as this is perceived to reduce potential efficiency gains from tendering (DAV).</p> <p>▶ 2.1: Operators are reluctant to provide adequate information on personnel matters.</p> <p>▶ 2.2: Some authorities are afraid of potential lawsuits by (potential) operators if more complex, and less mechanical granting criteria are used (DAV, BRU).</p> <p>▶ 2.2: Some authorities do not want to engage in negotiations with central government to solve problems. Distrust in the relationship.</p>
<p>▶ The competitive tendering is organised within the local public administration, and not through professional tendering organisations or regional transport planning bodies.</p> <p>▶ The public transport infrastructure is often owned by the incumbent operator (Nijssink).</p> <p>▶ (Potential) operators complain that there is a large variation in tendering procedure from authority to authority. Consequently, the demand side lacks transparency and (potential) operators may be scared off by the tendering costs.</p>	<p>▶ Most authorities have no clear view on the performances of competitive tendering regimes elsewhere (in the world) and distrust the ministry's points of view on the advantages of public transport tendering.</p> <p>▶ Some authorities do not know how to attract potentially 'good' operators to their call-for-tenders.</p> <p>▶ Some authorities consider that there are not enough potential operators to organise a competitive tendering process (Nijssink).</p>		<p>▶ Many if not most authorities doubt that an obligation to competitively tender out will help to improve public transport quality (Nijssink).</p> <p>▶ Some authorities reject the idea of competitive tendering altogether (BRU).</p> <p>▶ Some authorities want to continue to have direct influence on their own transport company (Nijssink).</p> <p>▶ Some authorities have a conservative attitude ("why changing a good network?") (BRU, DAV)</p> <p>▶ Some authorities are afraid of potential political consequences when the public or the press would react negatively to some actions by the operators (BRU, DAV).</p> <p>▶ Some authorities have very low expectations as far as the operators' innovative power and drive is concerned, and want, consequently, to keep all service design powers for themselves (BRU).</p> <p>▶ The complexity of issues in local decision making (intertwined policy domains such as town planning and social policy) plead against tactical tendering (A'foort).</p> <p>▶ Bad experience with past direct award with negotiation (DAV).</p>	

Source: Van de Velde and Pruijboom (2005)

Table 10 | Barriers to functional tendering, results Dutch experience 2002/2003 (Part 3)

	← Objective barriers		Subjective barriers →
	FACTUAL Impossibility	INFORMATIONAL Lack of knowledge	BEHAVIOURAL Psychology of actors
	<i>Barriers due to objectively identifiable feature in laws, regulations, governance or contract, which makes delegation illegal, impossible or not workable</i>	<i>Barriers due to lack of information for actor(s) concerning the regime, its possibilities or lack of information on the market</i>	<i>Barriers due to subjectively determined features in the behaviour of involved actors. Remark: these barriers are reinforced by the presence of factual and informational barriers</i>
LEVELS			
3.2 Contract <i>The choice of incentives in (contractual) relations between authorities and operators, within the scope of the chosen organisational form</i>	<ul style="list-style-type: none"> ▶ 2.1: The compulsory personnel takeover makes efficiency gains difficult (Nijssink). ▶ 2.2: The tendering documents and concession contracts tend to be very restrictive in terms of freedoms given to the operators. This results partly from the prohibition of negotiations. ▶ 2.2: The fares regime renders delegation difficult to implement due to resulting uncertainties both for authorities and especially for potential (foreign) entrants (DAV, A'foort; also Nijssink). 	<ul style="list-style-type: none"> ▶ 2.1/2.2: Some authorities do not know which and how much flexibilities are offered by the law and regulations in term of choice of contract content (all cases) 	<ul style="list-style-type: none"> ▶ 2.2: Some authorities do not want to engage in negotiations with central government to solve problems.
	<ul style="list-style-type: none"> ▶ Some contracts seem to contain only very weak or no incentives. ▶ Lack of knowledge on public transport within the newly created transport authorities (Nijssink). ▶ Lack of (skilled) potential operators to carry out delegation. Some tender areas are too big for small operators 	<ul style="list-style-type: none"> ▶ Some authorities do not know how to write good incentivising contracts. ▶ Operators do not have good information on the passengers' market potentials (all cases). 	<ul style="list-style-type: none"> ▶ Some authorities are excessively risk averse (BRU). ▶ Untrustworthy partners in past contractual relationships or past experience with incentives (under the old non-competitive regime) did not lead to positive action by the operators. ▶ Misconceptions about the motives and behaviour of the other actor in the principal-agent relationship created by public transport contracts.

Source: Van de Velde and Pruijboom (2005)

We drew a number of conclusions out of this analysis (Van de Velde and Pruijboom, 2005):

- ▶ Firstly, there appeared to be a multitude of more or less important barriers. The interviews conducted and corroborated by the evaluation reports commissioned by the ministry suggested that the central subsidisation and fare setting regime were important factual barriers. Even more important were the behavioural barriers observed on the authorities' side. They appeared rather risk-averse, which—combined with the rather strict tendering procedure imposed by the ministry—led them to tightly specifying service provision, leaving little freedom to the operators, contrary to the aims of the legislator. Informational barriers were also observed but seemed easier to overcome.
- ▶ Secondly, the majority of authorities appeared to choose for caution, keeping the tactical level on their side, fully or largely. Observing that it was too early to conclude on the actual effects of the contracts, the paper predicted that a further spread of tactical tendering would depend upon the success of those first experiences. It concluded that: *“To realise the dream of the legislator one would also need a kind of transport authority whose psychology fits with the legislator’s mind. While the example of Amersfoort shows us that such mindset can exist, the observation of the average transport authority’s behaviour in the Netherlands until now makes us believe that the probability for such a daring psychology to exist at the local level is rather low”*.

- ▶ Thirdly, institutional evolution had started to appear. A few examples were given. Choices made at L2.1 and L2.2 impacted upon the functioning of L3.1 and L3.2 and revealed a number of problems that subsequently led to repair work at L2.1 and L2.2 (such as amendments to the legislation in 2004) related to a stronger obligation of coordination in case of routes crossing concession areas, to an improvement of the regulation on information on indirect personnel transfer after tendering, to a better definition of municipal transport operators to enforce the reciprocity clause, etc. Another change at L3.1 resulted from learning: the northern provinces of Groningen, Drenthe and Overijssel reported their intention to create a common professional public transport tendering organisation¹³¹.

In the following year, the official evaluations realised for the Ministry added further corroborating explanations. Appelman et al. (2004) perceived that a preoccupation with process objectivity led authorities to restrict the freedom given to bidders. They saw a tendency to restrict this freedom further due to the increased political focus on public transport quality, which led authorities to specify required services in greater detail. They mentioned a possible effect created by negative experiences with allocating more freedom to operators (locally or elsewhere). They reported that bid evaluation and award tend to be complex under such arrangement, even though some learning had started to develop in this respect. Also, they found an increased consciousness of authorities for the importance of using clear evaluation criteria in view of the increased 'strategic' bidding behaviour into which operators appeared to engage. MuConsult (2004a) formulated other interesting observations as to the way in which service design developed at the time in the context of the tendering regime. It observed that in order to win a contract, operators were more inclined to follow the tendering authorities requests, rather than to follow what the operators believed themselves to be in the actual interest of passengers (MuConsult, 2004a, p. 41). Also, they signalled that tendering led to less innovation than expected, but that operators retorted that the concession texts included few incentives to innovate, that innovation hardly played a role in the evaluation of bids and that innovation would require a longer contractual period than usually granted. As a result, authorities tended to develop innovation ideas themselves, while operators tended to follow these such as to win contracts even when disbelieving the ideas' potential, this all leading to disappointing results (MuConsult, 2004a, p. 48).

8.2.2 Shifting allocation of the tactical function

The analysis presented above indicated that diversity and changes over time started to appear in the institutional arrangements at L3 and L4. Authorities that had chosen for a particular institutional configuration during the tendering of their first concession area sometimes chose a different setup when tendering their second or third concession area. This could be observed in particular with regard to the allocation of the tactical level or the awarding procedure. In other words, shifts were starting to take place. In addition, the

[131] This is akin to Scandinavian public transport authorities although those are often organised as 'transport companies' (without own operations departments) separated from the pure administrative bodies of their political transport authorities.

choices made appeared to vary through time. This was revealed in professional meetings with transport authorities, further interviews conducted in the ensuing years, as well as reports in the trade press and press releases by transport authorities pertaining to their pending competitive tendering procedures.

This section looks further into this trial-and-error and learning that took place in the allocation of the tactical functions between contracting parties. It reports on an official evaluation held by the Ministry, and on some of its consequences. As to functional tendering, it observes a number of disappointments and distrust in the sector and shifts both towards and away from functional tendering. A summarising grid of analysis of those shifts is developed.

First shifts between authorities and operators

We investigated whether and which shifts were taking place in the allocation of the tactical level in tendering (Van de Velde et al., 2006b), thus complementing analyses conducted in the preceding years (see Appelman et al., 2004; MuConsult, 2004a; Van de Velde and Pruijmbom, 2005). This showed that shifts could indeed be observed and that these were—interestingly—in both directions. Some authorities had initially given substantial service design freedom to their operators but decided in a second tendering round to take this power away from the operators. Other authorities decided in their second tendering rounds to give operators more service design freedom than in their first contracting period. This illustrated developments that were at least partially at odds with the original aims of the new legislation. Four tendering cases illustrated these evolutions in the paper: the cases of North-Holland and South-Holland showed an increase of service design powers for the operators, although under very different implementations, while the cases of North-Brabant and Groningen-Drenthe showed a decrease, here too with divergent implementations.

A number of observations were drawn on that basis concerning emerging institutional arrangements and reasons that led authorities to opposite choices and evolutions:

- ▶ Conflicting rationalities between operator and authority appeared problematic. Some authorities (or operators) started to act according to the letter of the contract, very much to the surprise of the operator (or authority). This was at a sharp contrast with the more lenient behaviour from both parties as common before the tendering regime. This pointed at the importance of both learning to understand each other's rationality and ensuring to have a proper, well-calibrated, enforceable and enforced contractual steering mechanism.
- ▶ The shift of the tactical level to the authority's side led to the appearance of specific institutional features. Though similar disappointments could stand behind the shifts, the actual institutionalisation of the solution differed. Groningen-Drenthe created a specific public transport bureau. North-Brabant decided initially to contract out the tactical function separately from the operations, but subsequently took the function in-house after a failed tendering procedure. South-Holland left the function on the side of the operator but placed it under stricter monitoring and separate budgeting.

- ▶ Contrary to what seemed essential to practitioners in other countries¹³², Dutch practice showed that tendering and contracting arrangements giving operators at least some tactical freedom could be realised without negotiations during the awarding procedures¹³³.
- ▶ One particularity of the funding of Dutch public transport at the time was that most budgets came via transfers from central government that had to be spent on public transport or be foregone. This gave no incentives to minimize spending, contrary to countries with a strong local taxation regime. Consequently, competitive tendering was used as a mechanism to maximize production under specified public service obligations. This effect was later weakened as a result of a softening in 2005 and 2008 of the requirements put to the transport authorities as to the spending of national government transfers related to public transport.
- ▶ Transport authorities appeared to learn little from their earlier tendering rounds, while knowledge exchange between authorities seemed undervalued. Past ‘bad’ experiences appeared to dominate perceptions, while root-cause analyses of failures were mostly absent. Authorities did not show much ability and readiness to question their own behaviour, perhaps revealing the absence of the right ‘culture’ and expertise. Some authorities preferred to organise the tendering procedures themselves while other sub-contracted most activities to consultants; the first option bearing the risk of missing useful new insights and leading to a long learning curve, the second offering better chances for success but bearing the risk of an insufficient build-up of competences that could, in turn, lead to more conservative (i.e. risk averse) choices.

As to the probability of seeing practice develop in the direction originally drafted by the Brokx Committee, we perceived this to be low and linked this to the ‘psychology’ of actors at the level of the transport authorities (Van de Velde et al., 2006b). The experience thus far seemed to indicate that civil servants—perhaps more at the regional than at the national level—seemed more likely to exhibit a risk-averse rather than an entrepreneurial behaviour. Approaches giving more freedom to the operators were more exception than rule and appeared to require civil servants and project managers with an innovative approach as to the authority’s action in this field. This also required a broader field of competence and adequate process skills to engage parties located outside the civil service to cooperate. We analysed that, while such mind-set could not be assumed to be absent at the regional authority’s level, it appeared unlikely to be present everywhere. In short, the conclusion was that the probability to see the dream of the legislator come true was low, though certainly not zero. Another conclusion was that the architects of the reform seemed to have paid too little attention to behavioural aspects at the level of the regional authorities. This might have resulted from them looking at the transformation too much from their own motivational framework. Related to this, we formulated the concern that, as long as only a minority of 10-15% of authorities allocated service design functions to the operators, this would probably prove insufficient a market size to ensure that enough competitors would develop the skills necessary to carry out this function. This could mean that further

[132] This is the case both for similar contracts as in France and for simpler contracts as in Denmark.

[133] The Netherlands had at the time chosen to follow for public transport concession tendering the rather strict procedures of Directive 92/50, which prevented using negotiations (except in very exceptional cases); see also the analysis of barriers earlier on. This was included in Art. 37 of the *Besluit Personenvervoer 2000*.

disappointment would result for those attempting this transfer to operators, with the eventuality of a further concentration of the tactical level on the side of the authority looming at the horizon.

Second evaluations

The Ministry commissioned a follow-up study evaluating the Act's effects and effectiveness five years after its enactment, thereby respecting the corresponding commitment included in the Passenger Transport Act 2000. Two main reports were produced (Groenendijk et al., 2005; Gleijm, 2005) on the basis of which the government published its position paper (Tweede Kamer, 2006), stating that the competitive tendering regime was functioning well, with an improved supply and quality of service, while the production costs per bus-hour had decreased¹³⁴. As to service design, the government's position paper underscored the evaluation's conclusion that the usage of the tendering instrument needed to be improved as the transport authorities showed a tendency to include rather detailed requirements in their Terms of Reference for concession tendering. The position paper observed that this was restricting the creativity of operators, and that bidders were uncertain as to whether innovative ideas increased their chances of winning a concession. It also noted that this problem was worsened by the fact that awarding criteria were mainly quantitative, leading to choose 'more of the same' instead of innovation. Furthermore, it also found that the existing tendering rules led to a limited consultation between regional authorities and operators, which hampered checking how reasonable the wishes and requirements formulated by the authorities were.

In response to this analysis, the government's position paper included an action programme (Tweede Kamer, 2006, p. 17-18). One action was to develop a guidebook in cooperation with regional authorities. This should collate best practices related to concession sizes, formulation of Terms of References, and way to setup the development function such as to attribute the tactical level as much as possible to the operators. This paper clearly reaffirmed the original intentions of the reform. The regional authorities appeared favourable to the idea of creating a guidebook and a working group lead by the Province of North-Holland was constituted. A guidebook resulted but was not published (Lutje Schipholt et al., 2006 [unpublished]) due to insufficient support from the sector, who feared excessive standardisation. The Knowledge Platform for Traffic and Transport (CVOV/KpVV), as national platform regrouping regional transport authorities, then decided, in consultation with the Ministry and the working group, to take over the initiative and transform it into a trajectory of knowledge exchange meetings. This led in 2007 to the creation of the "*Beter Bestek*" ("Better Terms of Reference") programme of meetings and reports by KpVV in an attempt at improving the quality of the Terms of Reference used for public transport concessions (see also Tweede Kamer, 2007)¹³⁵. One of the concrete results of the programme was the

[134] Further details are given in MuConsult (2004b) who finds that competitive tendering led to a global cost reduction of 15-20% in the urban areas (kaderwgebieden) and 10-15% in the Provinces, while cost reductions through negotiations (no competitive tendering) were on average 10% less. The researchers stress that these are not averages, but global indicators of the effects.

[135] This project was run by inno-V consultancy until 2014. It gradually developed into a platform for consultants, operators and transport authorities to collectively define issues, evaluate problems and share lessons. It aimed at in-

development by inno-V of a tendering ‘Toolbox’ for transport authorities (van Kooij et al., 2009). This included a ‘Roadmap’ for successful tendering (see Figure 12), a description of experiences with tendering and suggestions for texts to be used in Terms of Reference. Later on, this was transformed into a knowledge module (*Kennismodule Opdrachtgeverschap stads- en streekvervoer*) made available online by CROW/KpVV¹³⁶.

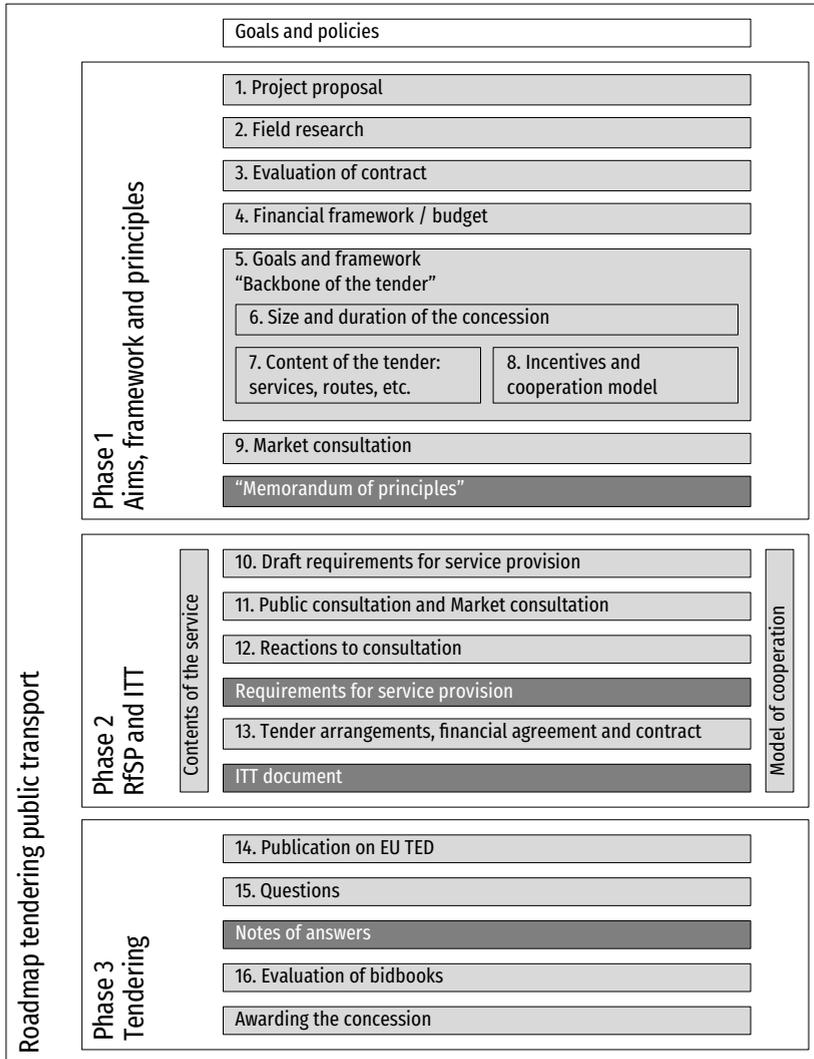


Figure 12 | Roadmap tendering in public transport (Source: inno-V)

creasing the knowledge and skills of regional public transport authorities. Every year a broad selection of transport authorities was interviewed to see which key issues they wanted to see addressed. Two main topics were chosen and several smaller and larger ‘in-depth workshop sessions’ with authorities, operators and consultants were organized to share problem perceptions and lessons.

[136] <http://www.crow.nl/online-kennis-tools/kennismodule-opdrachtgeverschap-stad-en-streekver>

Towards central planning or functional specifications

The observed tendency to utilise tightly specified contracts had generated much discussion in the sector and much attention in the policy debate, as shown above. This, together with our earlier findings (Van de Velde et al., 2006b), and in particular the observation that shifts were in both directions, led to a further investigation of this issue. The resulting paper (Van de Velde et al., 2008c) included hereafter, illustrated the continued divergence in the extent to which service design freedom was given to operators.

For this paper, the information collected on earlier tendering cases¹³⁷ was complemented by additional, more recent case studies. The suburban contracts in the Amsterdam city region were added¹³⁸, representing at the time the most extensive level of freedom given to operators, it had even implemented a super-incentive contract to induce the operator to focus on increasing ridership. The problematic tendering case of the Province of Noord-Brabant that had been presented in an earlier paper was also updated to reflect upon the findings of an official Provincial Committee that had in the meantime investigated the problems encountered.

Furthermore, the more refined case analysis conducted in the meantime confirmed that not only did the allocation of the tactical function diverge between authorities (and in time), in several cases it also diverged between the tendering 'moment' and the contract 'period'. A further nuance was that authorities also made different choices *within* the tactical function, not necessarily delegating all tactical items to the operator. In relation to this, an important contribution of this paper was the development of a graphical representation that enables illustrating in a more refined way these evolutions by distinguishing between the allocation of the tactical level during the bidding phase and its allocation during the contract period, while also representing observable evolutions through time¹³⁹.

On the basis of that analysis, we observed that a number of disappointments and distrust in the sector (resulting from the first tendering rounds), led to a more formal and distant relationship between operator and authority. In turn, this generated a tendency to use more tightly specified contracts in the next tendering procedure; thereby generating a movement away from the original functional tendering aim. This can be linked to the 'informational barriers' referred to earlier on, as a lack of knowledge and skills on the side of authorities was perceived to be major causes for this behaviour. This in turn underlined the problem of a lack of build-up and continuity of knowledge on the side of some authorities.

[137] These are described in earlier papers presented at the Thredbo conferences (Van de Velde and Leijenaar, 2001; Van de Velde and Pruijboom, 2003; Van de Velde et al., 2005; Van de Velde and Pruijboom, 2005), the Dutch Colloquium Vervoerplanologisch Spuurwerk (Van de Velde et al., 2006a; Veeneman et al., 2006a; Van de Velde et al., 2007; Veeneman et al., 2007b) and the European Transport Conference (Van de Velde et al., 2006b; Veeneman et al., 2006b; 2007a).

[138] More details on these super-incentive contracts can be found in (Bakker and Van de Velde, 2009). A brief definition is that the payment to the operator entirely variable and linked to its performances (i.e. no lump sum is paid). In this case, the payment is linked to the revenue generated by ticket sales.

[139] This graph is based on a distinction first introduced in a paper presented at the 5th Thredbo conference (Van de Velde, 1997a) and refined in a workshop report for the 7th Thredbo conference (Preston and Van de Velde, 2002), complemented here with arrows representing the observed evolutions.

Essentially, we identified five main issues: (i) authorities often had high expectations about how actively operators should develop services, but these expectations often proved wrong; (ii) trust between the parties appeared to be a major issue as the cooperative spirit formerly present in the sector was replaced by more aggressive forms of relation; (iii) the concession hand-over and timing of the tendering formed the basis for many problems, further hampered by court cases initiated by losing bidders; (iv) there often appeared to be a bad fit between awarding criteria and actual desires by the authority, including ill-designed and ill-calibrated incentives, leading to ‘strategic bidding’; and (v) authorities appeared to lack knowledge on the cost consequences of their choices, while contracts appeared insufficiently flexible to accommodate change during the contract period.

Using these findings, we formulated perspectives for improvement through fine-tuning the contractual relationship, including a better calibration of incentives. It underlined a call for more ‘relational contracting’ with more focus on cooperation between parties and a need for process agreements rather than attempting to write down complete contracts. It found that neither of all three types of contracting (gross-cost, net-cost and super-incentive) is a panacea and stressed instead the importance of a good balance between allocated service design powers and steering mechanisms. Finally, it also noted that the majority of tendering cases did not cause trouble, while a minority of cases was responsible for substantial negative media and political attention, thereby influencing negatively—and probably unduly—the general opinion on the implemented arrangements.

Competitive tendering in The Netherlands: Central planning vs. functional specifications

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Abstract - The competitive tendering regime introduced in The Netherlands in 2001 aims at stimulating innovation in service design. One can observe, in the meantime, a variety of arrangements as transport authorities vary considerably in the level of service design freedom they give to operators, both in tendering and within contracts. This paper presents facts and problems encountered and uses the results of a stakeholder evaluation of current practices to formulate perspectives for further improvements of the, by and large, current positive results of competitive tendering in public transport.

1. INTRODUCTION

Differently from many competitive tendering (CT) regimes introduced elsewhere in Europe, the current Dutch regime aims at stimulating innovation in service design. To this effect, the legislator aimed at giving operators the power to (re-)design transport services (routes, timetables, fares, vehicles, etc.) during CT procedures and/or during contract execution. The usage transport authorities currently make of this freedom, the problems encountered in doing so, and the observable evolutions in the usage made of this freedom, are the main topics studied in this paper. The rest of this section will provide a brief overview of the Dutch public transport reform and the results reached so far. The second section will focus on the evolving competitive tendering practices, presenting a number of diverging experiences on the basis of earlier publications on regulatory reforms in The Netherlands by the authors of this paper, and upon interviews conducted with the transport authorities involved. The third section of this paper provides an analysis of the functioning of the current situation based upon workshops that were organised with main stakeholders (presented in more detail in KPVV and inno-V, 2007). Using these facts and this analysis, the fourth section will formulate a number of perspectives that the transport authorities should take into account to further improve current practices. The last section provides a few general conclusions.

1.1. The Dutch public transport reform in short

The Dutch public transport regime was revolutionized by the introduction of a competitive tendering (further abbreviated to 'CT') regime in 2001. Since then, the Dutch public transport legislation requires passenger transport authorities to establish public transport policy

goals, to define concession areas and, gradually, to organize CT procedures to award exclusive concessions for up to 8 years in the bus sector and 15 years in the railway sector.

The previous legislation was based upon the principle of market initiative, whereby transport operators were supposed to behave as entrepreneurs and request authorizations from appropriate municipal or national government instances to operate services. This regime had, however, in practice evolved towards public monopoly. Public transport had ceased to be profitable in its own right in the 1960s and all operators except minor exceptions were publicly owned by municipalities or national government. Various forms of subsidization were used in the course of time. These evolved from simple deficit compensation towards more incentivising forms of subsidization at the end of the period.

The 2001 legislation institutionalized the power of the 12 Provinces and 7 urban area governments as public transport authorities, replacing the role played hitherto by central government as regulator of the public transport services outside specific urban areas. Note that provincial authorities had had no involvement in regional public transport until then (see Van de Velde and Leijenaar, 2001 for more details on this transition).

This new regime changed fundamentally the market organization principle as it gave authorities the monopoly right to provide public transport services. But this right came with the legal obligation to use CT to select operators, an obligation which was to be introduced gradually.

An essential particularity of the Dutch regime is its financing. Differently to many other parts of Europe,

Dutch municipalities and provinces hardly have any own taxation powers. As far as public transport is concerned, the financial means are composed of transfers from central government which, until recently, could be spent exclusively on public transport. A recent legal change allows them to re-allocate monies for passenger transport services and (smaller) infrastructure investments in transport sectors. This central financing of public transport subsidies led to CT practices focusing on maximizing supply and quality for the existing budget, contrary to the Scandinavian practice of minimizing costs for the level of services requested.

1.2. Results so far

Most Dutch public transport (excluding the core of the four largest agglomerations) has in the meantime been submitted to CT, or will be tendered in the next year or so. This has led to a substantial reshuffling on the suppliers' side. The main former player (VSN, as national bus company) sold off its northern area to the British group 'Arriva' and its southern area to the French group 'Veolia'. The remainder came to be known as 'Connexxion' and was partly sold in 2007 to the French group 'Transdev'. The originally clear geographical division between the operators soon disappeared with the generalization of CT. All three main operators are currently active throughout the whole country. The large cities remain the exceptions, though. Note that, differently from many other countries, small (family) operators are not present.

Generally speaking, the results of CT in The Netherlands are good. Efficiency certainly improved. Some of the cases presented further on in this paper even show a very substantial growth of bus-hours (30-60%) at lower budgets (5-10%). The consensus from interviews conducted with public transport authorities and operators for this paper is that the effective price per bus-hour declined by some 30% after CT. Interestingly, that price drop is not limited to tendered concessions. Two mechanisms seem to have led to lower prices in negotiated concessions. First, transport authorities conducted an informal benchmarking during their negotiations and used the tendered concession prices as leverage. Secondly, operators of non-tendered concessions prepared for CT with extensive reorganisations and rationalisations, became more efficient and were able to offer lower prices.

We also see that passengers' perception of service quality is improving. Yearly, the KpVV (a knowledge centre for regional transport authorities) surveys more than 80,000 passengers on quality in public transport services. Their research shows that quality perception rose from an average 6.8 in 2000 to an average 7.2 in 2006 (Veeneman et al., 2007a). Importantly, tendered concessions do

better than non-tendered concessions. Over the years, more than 60 concessions (the numbers vary over the years) were submitted to CT. Table 11 gives an overview of quality perception in these concessions, compared to 2001, both for tendered and non-tendered concessions. All concessions came from similar averages, 6.8 for the concessions tendered between 2002 and 2007 and 6.9 for those not tendered.

The figure shows that the rise in quality perception between 2001 and 2006 was largest for those concessions that were tendered most recently (in 2005): more than 8% rise. For the concessions that were tendered earlier, the table shows that the improvement was slightly larger (more than 5%) than for those concessions not tendered (4%).

National government had set growing ridership and better cost-recovery as its goals with the introduction of CT. The introduction of CT was officially reviewed in studies commissioned by the Ministry of Transport (Hermans and Stoelinga, 2003). Until then, efficiency had indeed improved, but ridership growth could not be observed. Note that subsidy cuts imposed by central government during the same period blurred the observation on the true effects of CT, putting in the public discussion the blame of possible service worsening on CT rather than on those budget cuts. A shortcoming of the studies conducted at that time is that they probably came too early to study the newer and more interesting cases of CT, giving service design freedom to the operators. In the meantime, ridership is indeed growing substantially in specific locations, but has remained broadly stable at a national level (KpVV, 2007b). Cost-recovery is not up substantially, although prices per bus-hour decreased. That can be explained by the growing supply of services and the stable ridership: authorities get more service for their subsidies, but ridership and therefore fare-box revenues are not going up at the same pace.

The major urban areas (Amsterdam, Rotterdam, The Hague and Utrecht) had received a preferential treatment since 2001 by being allowed to postpone the compulsory usage of CT for the concessions currently held by their municipal operators. However, government finally decided at the beginning of 2007 to require the usage of CT in the whole of public transport (i.e. including these urban areas but excluding national railway services). The plans of early 2007 were to impose CT upon the main urban areas in 2012 for all services, or in 2009 for bus and 2017 for trams. But even this is now much less likely to happen as Parliament surprisingly decided during the summer of 2007 to abolish the obligation to use CT in those areas, very much against the advice of the Ministry, and at odds with the decision taken only a few months

earlier to generalise the usage of CT to all public transport in the Netherlands. This surprising step was triggered by the recent adoption by the European Parliament of the long-awaited Regulation on Public Service Obligations in public transport, itself giving passenger transport authorities the right of self-production or of usage of an internal operator.

2. COMPETITIVE TENDERING AND SERVICE DESIGN: EVOLVING PRACTICES

One of the fundamental aims of the Dutch legislator with the enactment of the new Passenger Transport Act in 2001 was to improve public transport attractiveness through use of CT, as means to generate innovation and improvements in service design. The law gave authorities substantial governance freedom in concessioning practices, leaving the door open to strict 'Scandinavian style' CT (fully specified route gross-cost contracts), besides more innovative forms of network contracting, leaving service design freedom to the operators. The newly created transport authorities did indeed use this governance freedom related to the allocation of service design power between authority and operator (i.e. the 'tactical' level in the terminology introduced by Van de Velde, 1999) and a variety of institutional arrangements appeared.

With now about 6 years of experience with CT, interesting developments can be observed. Interestingly, opposite tendencies can also be encountered. This section will start by reviewing some of these diverging practices, presenting two radically opposed experiences to start with, before summarising graphically further experiences presented elsewhere.

2.1. City Region of Amsterdam: successful functional tendering

During the last three years, the City Region of Amsterdam organized three rather successful competitive tendering procedures for the three regional/suburban bus concessions around the city of Amsterdam. Public transport in the central urban area is still provided by the historic municipal operator.

The results of the CT procedures were as follows:

- The Zaanstreek concession (2004-2010) promised 30% more supply (in bus-hours) for a 10% lower budget, while the operator promised a revenue growth of 26.5%. The year 2005 delivered a revenue growth of 10%, compared to a promise of 0%. The year 2006 delivered a growth of 6% (cumulated: 16.6%), compared to a promise of 26.5%. The year 2007 (until August) delivered a growth of 4% (cumulated: 21.3%), compared to a contractual promise of 26.5%.

- The Waterland concession (2005-2011) promised 50% more supply (in bus-hours) for a 10% lower budget, while the operator promised a revenue growth of more than 35%. The year 2006 delivered a growth of 4.5%, compared to a contractual promise of 0%. The year 2007 (until August) delivered a growth of 6.4% (cumulated: 11.2%), compared to a contractual promise of 11%.
- The Amstelland-Meerlanden concession (2007-2015) promised 60% more supply (in bus-hours) for a 5% lower budget, while the operator promised a revenue growth of more than 50%. As the concession only started operations recently, no data is as of yet available.

These observations tell us that the operators seem to be on target (or almost) for the time being, even though we can observe some variation in the timing of the realization of the growth.

A particularity of the approach of the Amsterdam City Region is the usage of very incentivising contracts without lump-sums. The full amount of payment from the authority to the operator is variable and entirely dependent upon realized ridership. Ridership itself is approximated by the total amount of passenger revenue. The aim of the authority is to grow both patronage and cost-coverage. A compensation factor is determined through the bidding by dividing the pre-determined available budget for each year by the promised passenger revenue for each year. The compensation factor times the realised revenue is then the amount actually paid to the operator each year. The contracted service supply level has, at least, to be realized, but the operator may provide more. The national fare system remains valid in the area, effectively capping fares charged by the operator. One can, however, observe that operators also develop own and more flexible payment schemes that are sometimes even a bit more expensive than the universally available tickets from the national fare system. Apparently, passengers are prepared to pay for this flexibility (such as paying 1 euro on board for a single trip rather than buying a cheaper pre-paid multi-ride ticket).

The services were, to a considerable extent, defined functionally for the CT of the Zaanstreek and Waterland areas. Interestingly, the recently tendered Amstelland-Meerlanden concession was based upon largely pre-defined services. One reason the authority puts forward for this change in approach was the observed complexity of the interaction with local authorities (and their various wishes) during the first two CTs. This led the authority to the conclusion that under such circumstances, a functional definition of services boils down to such an extensive set of constraints that it becomes almost similar to a fully specified tender.

In the meantime, the Waterland concession won by Arriva is reported to have generated interesting operator behaviour, as the operator started to provide new routes upon its own initiative and within the general ridership incentives included in the contract.

2.2. North Brabant: problematic tendering

Contrary to the experience of the Amsterdam City Region, the Province of North Brabant encountered numerous problems (see Van de Velde and Pruijboom, 2005 for a more detailed description of this case).

In March 2004, the Province decided not to make use of the possible prolongation of the existing concessions but to start a new CT procedure for services starting in January 2006. The incumbent (BBA) protested against this decision. On 14 September 2004, the courts ruled the protest partially founded, as the Province did not first discuss this decision with the incumbent as contractually required. In addition, the Province had amended its concession demands unilaterally and unforeseen changes had taken place (budget cuts by central government, unachievable assumptions in the concession and intermediate changes in the policy aims of the Province). Nevertheless, the Province was allowed to move on with CT. It started a procedure in which price was an important element of the awarding model. Tightly specified terms stated that the Province would enforce upper boundaries for the total concession budget and lower boundaries for the price per bus-hour. Bids outside those boundaries would be set aside, but the terms did not give exact numbers for the boundaries. The bid from the incumbent was set aside as it was over budget, and the operator protested again. The courts ruled in favour of the plaintiff; as the boundaries in the terms were too vague, although the judge acknowledged that clear boundaries would have triggered strategic bidding. The Province restarted the tendering procedure, this time in five concessions covering nearly the complete province. So much in one go was unique for The Netherlands. The Province used similar terms of reference, but with even more focus on price as an awarding criterion. Part of the awarding model was also the price for additional work. Several operators handed in bids that proved to be infeasible, due to an awkward and unclear definition of how to formulate the price for additional work in the terms of reference. As a result, two operators had to withdraw their bids, after they had been awarded the concession and discussed the conditions with the Province. Negotiations on how to deal with the situation lasted until 3 weeks before the start of the new concession. Finally, the Province awarded the concessions to the runners-up, who had 3 weeks to set up their services. Unsurprisingly, service levels were appalling in the first weeks of operations in the new concession.

The problems encountered with CT led the Provincial Council to appoint a research committee to analyse the facts with the 2005 and the 2006 CT and to prevent similar mistakes from happening again. Here are a few observations collected from that report (Provincie Noord-Brabant, 2007):

- The ambitions of the Provincial Government and its civil servants were found to be too high in several respects. There was not enough time (half a year to prepare the procedure, 3 months to carry it out and 6 months before implementation). Too many services were put on the market at the same time (all provincial services at the same time). The authority provided too detailed a programme of requirements for the services to produce and attempted, in legal and procedural terms, to work too much exactly according to legal requirements. Sticking strictly to these aims, the Province eliminated any space it had for adaptation during the procedure.
- The enquiry concluded that the relationship between authority and operator seemed to be characterised by distrust, 'playing games' with each other, opportunistic behaviour by the operator, etc. In reaction, the Province adopted a rather formal stance and legal aspects started to dominate the contacts. Consultation documents for the first tendering and preparation documents for the second tendering were sent to many actors, but not to the operator. Signals given by the incumbent that the evaluation model included in the first tendering could be manipulated were set aside based on formal grounds. The operator's opinions were considered of no relevance for CT-preparation officially to prevent discrimination. Much of this illustrates the lack of attention paid to the 'relationship factor' (is the nature of the contact between the parties such that adequate business can be realised?)
- The report stresses that the Province all too often took the strictest possible interpretation of legal advice for fear of legal procedures. The committee stresses that distrust cannot be the basis of good business but it also finds the insufficiently clear legal framework (in procedural terms) largely contributed to the risk averse behaviour exhibited by the authority, leading to a formalisation of relationship and a greater distance between operator and authority. This, in combination with the authority's desire to reach clear results quickly, avoiding further legal procedures, led to even more procedural strictness and stiffness.
- A main problem, according to the committee, is caused by the choice made in the new transport act to use public law instruments (unilateral decisions and subsidy grants) formally, while actually intending to make use of private law mechanisms (CT and

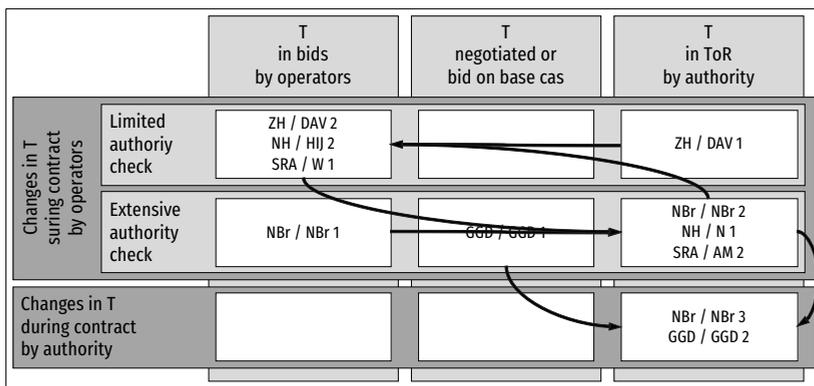


Figure 13 | Development of the tactical level for five authorities in the Netherlands

contracting) with market players. The committee concluded that if these public law instruments need to be maintained, they need to be considerably simplified, removing the current complex pile-up of all too many overlapping but not coinciding laws and regulations.

2.3. Summary of evolutions elsewhere in The Netherlands

The two cases presented above illustrate the most extreme – in terms of design, success and failure – of all practices that can be encountered in CT in The Netherlands. Many other practices exist and some of them have been presented elsewhere (Van de Velde et al., 2005; Van de Velde et al., 2006b). The graph below summarises some of these practices as well as their evolution in recent years, by categorizing the main allocations of the tactical level between operator and authority and distinguishing between two ‘periods’:

- The three columns indicate the localization of the tactical level (T) during the bidding phase: service determined in the bidding phase by the (potential) operators, in negotiations between the parties or services pre-determined by the authority.
- The three rows indicate the localization of the tactical level during the contractual period: are changes in services mainly controlled by the authority (fixed for the operator), or by the operator, and with or without prior approval by the authority (i.e. should operators submit their ideas for service re-design to the authority prior to implementation, or may operators act in autonomy).

Figure 13 illustrates the evolutions in the localization of the tactical level for five authorities in The Netherlands. Table 12 provides a key for the abbreviations used. The arrows and numbering show how these authorities

changed their minds about the localization of the tactical level in successive CT rounds.

Table 12 | Used abbreviations for authorities and concessions

GGD	Provinces of Groningen and Drenthe and City of Groningen ▶ GGD: Groningen (prov.) – Groningen (city) – Drenthe
NBr	Province of Northern Brabant ▶ NBr: Noord-Brabant
NH	Province of Northern Holland ▶ HIJ: Haarlem IJmond ▶ N: Noord
SRA	City Region Amsterdam ▶ W: Waterland ▶ AM: Amstel- en Meerlanden
ZH	Province of Southern Holland ▶ DAV: Drechtsteden-Alblasserwaard-Vijfherenland

A first observation of the figure indicates a tendency to move from the upper left to the lower right, indicating less powers for the operator, both at tendering and during the contract. However, some authorities also moved in the opposite direction, giving more freedom to the operator at both stages. In fact, several factors influence such movements. The own preferences of the actors involved indeed play a role, but these are contingent upon their past experiences with public transport contracting and tendering. The local institutional context also plays a role (such as the previous existence of co-operations of authority, etc.) The experience in North Brabant indicates, e.g., many similarities with what happens in concession areas where the authority had already decided to specify

rigidly the tactical level, such as in the GGD-area: the authority is not satisfied with the performance of the incumbent, this leads to a worsening of the relationship with the operator and consequently to a rigid definition of the tactical level by the authority at the next tendering round.

This being said, a closer look at the terms of reference of the sample of cases presented also reveals that the tendency of some authorities to increase the level of specification at the expense of more functional tenders must be somewhat nuanced. When looking at those details, one can observe that an increasing level of specification in terms of routing, frequency and vehicles (as seen in the case of the Amsterdam City Region) does not necessarily entail the same level of specification increase in term of commercial freedom (communication, information and fares). And indeed we see the operator keeping more freedom on that part of the tactical level.

3. PROBLEMS WITH THE CURRENT SET-UP

The previous section gives a first overview of general effects that CT has had in The Netherlands and it illustrates some of the development of the tactical level implementation in CT in The Netherlands. The practices described illustrate some of the interesting potentials of functional tendering. At the same time, they also illustrate some of the problems and pitfalls of complex forms of CT in public transport.

The tendency to utilise tightly specified CT in a growing number of regions and the problems that appeared in the Province of North Brabant generated a lot of discussion amongst those who, in The Netherlands, favoured CT as a means to generate service innovation through the operators. This resulted in the conduct of a further analysis initiated by the Ministry of Transport and Public Works and the Knowledge Centre for Transport (in which various authorities cooperate) in order to evaluate current practices and help authorities to develop best-practices. Operators, authorities and experts were asked to analyse the current situation in a process that involved multiple meetings from late 2006 to late 2007. Results from earlier meetings were fed back into later meetings to develop a common perspective on problems and best practices. This exercise was extremely helpful for all involved parties to understand what the sector itself sees as the main problems with CT in its current form in The Netherlands. Essentially, five main issues could be identified (see KPVV and inno-V, 2007; and Lutje Schipholt et al., 2006 [unpublished] for a further description of this process):

- First, the expert meetings showed that the authorities often have very high expectations about how actively operators will develop services, but that these

expectations often prove wrong. Several problems caused this: political influence (constraints) on services to supply often limit the operator's freedom during the concession to a greater extent than what authorities perceive, contractual incentives often prove to be too weak to actually necessitate innovative action by the operators, and budget cuts during the contract, combined (sometimes combined with unchanged minimum service levels) to severely limit the manoeuvring room for the operator.

- Second, the meetings showed that trust is a major issue. This is in line with the analysis of Longva and Osland (2007) that tendering has to rely on thin-trust relations. The cooperative spirit formerly present in the sector is now replaced by a more aggressive form of relation. As contracts are never complete, they leave room for interpretation (for example: contract norms in relation to bonuses or penalties) which is a basis for conflicts. Often it proved problematic to maintain an open and cooperative relation when several smaller conflicts had created a bad atmosphere. The expert meeting concluded that there is much need for clearer procedures describing how to deal with conflicts and changing circumstances.
- Third, the analysis showed that the concession hand-over is a basis for many problems. The North Brabant case is perhaps the most well-known, but problems also appeared earlier at the first implementation of the DAV-concessions in South Holland. The large size of some of the concessions makes smooth implementation difficult. Also, authorities seem to take their time in the tender procedure, reducing implementation time for the operator, given the fixed dates for concession hand-over. Moreover, when authorities ask for large innovations in CT, implementation can prove difficult. One could see that problems with timely rolling stock availability appeared and, more importantly, implementation is now all too often hampered by court cases initiated by losing bidders.
- Fourth, the experts saw that many Terms of Reference (ToR) lacked a good fit between awarding criteria and what the authority actually wanted the operator to provide. In other words, the incentives given by the bid valuation model were not always clear nor properly reflecting the ToR and transport policy aims. They saw a mixing up of obligations and wishes in the ToR and saw that authorities were sometimes too vague about the criteria in the awarding model for bid valuation. As these elements are main sources of incentives for the operators, these deficiencies become a potential source of strategic bidding.
- Finally, the expert meetings concluded that authorities seem to have too little knowledge on the cost

consequences of many of their choices, obligations and wishes in the context of CT. They advised that authorities should refrain from wanting all at once, advising them to keep some budget aside to amend or order additional things later during the contract. But this requires flexibility to be allowed during the contract period, which – again – requires a clear set of rules on how to deal with possible changes. That is also often lacking.

4. PERSPECTIVES FOR FURTHER IMPROVEMENTS

A number of perspectives for further improvements can be drawn based on the cases described above and in earlier papers, the results of the expert meetings presented in the previous section, and additional interviews conducted with several authorities. These are lessons that authorities could use to improve the setup of their CT procedures, contracts and relation with operators.

4.1. Aligning aims between authority and operator

Stanley et al. (2007) underline the importance of accepting the legitimacy of each other's goals as authority and operator. One should add that in the contractual design this can be supported by aligning those goals through incentives. Lower costs and higher income are important drivers for the operator and these are partly aligned with the interests of the authority. Firstly, efficient operation leads to lower costs for the operator which in successive tendering rounds would lead to lower subsidies by the authorities and consequently less taxation or more services. Secondly, higher income for the operator comes partly through higher ridership and more attractive services justifying higher fares. Most policy goals that authorities have set for public transport depend on high ridership, depending in turn on attractive services.

However, the current experience with contracting in The Netherlands has shown that an important challenge is to align interests not only in general terms, but also in detail. For example, the optimal cost-income ratio for the operator might incorporate less services or a higher price level; both may not be seen as desirable by the authority. The operator might also seek to achieve cost reductions, harming quality perception while not harming ridership nor willingness to pay; for authorities this weakening of public transport image might be unacceptable.

In those cases, the authority can choose two paths: tuning the incentive or taking control. We see examples of both in current practices in The Netherlands: authorities rewarding ridership growth with a premium, making sure that operators also seek more passengers; but also

authorities choosing to set fares themselves, restricting operator behaviour.

Where the interests of the operator and the authority are partly aligned, fine-tuning can provide the solution for further alignment. However, many incentives are not aligned at all. Here are a few examples. Authorities often want environmentally friendly buses, and a high basic service level in low-demand areas and periods, but these types of services offer little return to the operator, making them unattractive to supply. Additional services in peak hours are desired by the authorities and do provide extra income, but their marginal cost-level is also high. In these cases, it is much more likely that the authority will have to have a far stronger contractual say in service design.

4.2. Using control or cooperation to set-up the relationship

Aligned incentives can form a basis for cooperation: together operator and authority suggest, select and implement improvements to services. Yet, getting the incentives right is not easy for several reasons. First, it is not the general idea of the contract but the specific reaction of the operator to the contract that matters. Examples showed that the specific interpretation of the incentive by the operator could be at odds with the intentions of the authority. Second, the context for the operator might change, leading to unexpected reactions to unchanged incentives. For example, economic decline might lead to lower ridership and when incentives are based on ridership, this might have unexpected consequences on the outcome of a carefully chosen set of incentives. Thirdly, the context for the authority can also change, as changing political priorities might lead to a mismatch between new governmental goals and existing incentive systems.

The easy alternative seems to be more governmental control: taking care of detailed design, under extensive monitoring and enforcement rules. This has happened in the Groningen-Drenthe concession before happening in the North Brabant concessions. But this proves to be far from robust as problems occur in three respects. First, there are aspects of service provision that can simply be designed better by the operator. Efficient bus circulation is not the key expertise of (Dutch) transport authorities who have no background as operators. Second, monitoring proves to be problematic. Formulating performance indicators that can easily be monitored and have non-contested outcomes is not easy, especially for non-technical performance indicators (such as quality) that are often chosen by authorities. Third, enforcement can be problematic. Not only do operators calculate possible fines in their bids (making the desired effect on

service provision non-existent when such fines are too low), but indicators for monitoring and enforcement also have to be undisputed. And heavy fines prove to be an easier source for conflict than nice premiums.

Obviously, both incentive-based and control-based models have problems. In both cases, the operator's choices might be ill-aligned with the intentions of the authority. Indeed, it may not be possible to make a general choice for control or incentive. Some aspects of service provision are suited to strict control systems (such as punctuality), others are better candidates for incentive systems (such as passenger growth, as seen in many Dutch contracts).

A way out of this conflict may be to look at the incentive and control systems as just the general scenery for cooperation between authority and operator, leading to a more relational form of contracting. A main problem, though, in the establishment of such trusting relationships is that reasons for authority intervention (political aims) might change over time. More fundamentally, the question is whether the current legal and regulatory regime stands in the way of the development of such trusting relationships. Do the actors only have to learn to play their new roles or are more fundamental changes required?

While more cooperation seems unavoidable in this sector, it can be organised in various ways. Besides the contract, other aspects of governance also determine the functioning of the relation in the direction of more cooperation or control. Some authorities set up a specific organization to design and monitor services, like Groningen/Drenthe. North Brabant chose initially to have third parties developing services. In South Holland, the operator and authority have brought staff together to develop services jointly. In Overijssel, authority and operator negotiate changes on a case-by-case basis within a detailed framework on how to deal with disagreement. These models differ in term of flexibility: swift decision-making in authority-controlled models, but at the expense of perhaps larger effects in operator incentivised models. Models giving much power to authorities allow for simpler changes, but less well-balanced choices. The best ones seem to be those where authority and operator speed up their common decision-making, as in the latter two models mentioned above.

4.3. Incentives in awarding systems and in contracts

CT gives strong incentives intended to align interests of operator and authority. These incentives have two habitats: the awarding model and the contract.

In terms of procedure, a particularity of the Dutch regime is that the Ministry chose for a rather strict tendering procedure that prevents all forms of negotiation as part of regular procedures. Contrary to France which bases its tendering regime in public transport 'concessions' on the necessity to have open negotiation, the Dutch regime is thus based on rather 'mathematical' multi-criteria evaluation procedures. The awarding model is included in the ToR. It allocates points to the bids and the bid with the best score wins the contract. Although such awarding models should focus the operator on the goals of the authority, its incentive structure is binary and extreme: operators either win or lose the contract. Consequently, operators feel a pressure to place attractive bids and under-emphasise future uncertainties that could thwart future service provision. They often seem to overemphasise their ability to deliver. This holds two major lessons for the authority. First, each element of the awarding model needs a strong penalty for under-performance in order to balance the tendency to overbid in this awarding model. Such penalty should be larger than gains from under-delivering, but it should remain close to the order of magnitude of those gains. Second, qualitative judgements (for example by a team of experts, as often used in Dutch practice) provide an attractive element to diminish possibilities of strategic bidding. But this should include an appraisal of the feasibility of the services promised in the bid. Such qualitative judgement could focus on an implementation plan of the services defined.

Contrary to the bidding stage, the incentive structure during the concession period is far less binary. Here the incentives should focus the operator more on the authority's needs during the concession. Incentives come in two forms here. Penalties (several times the possible gains to the operator when not delivering) on not delivering on imperative demands (like those in the awarding model) and bonuses (based on the willingness to pay by the authority) on delivering optional demands. The second type has an economic advantage: it relates the authority's willingness to pay (e.g. for environmentally friendly buses) with the additional costs to the operator and the authority can make a balanced choice (what are clean buses worth). The second type also has a political disadvantage: politicians want to be able to ensure specific service aspects, often without regard to costs. CT allows them to hide the costs of various service aspects in an overall price per bus-hour or bus-kilometre. Obviously, the costs of their demands will eventually be reflected in the overall price and, given a limited budget, in other parts of the service level.

A main lesson from the Dutch practices reviewed here is that incentives in the awarding model should include qualitative judgements, including feasibility

considerations. The general opinion of involved parties has been that it has been possible, in the Dutch context, to guarantee fairness and neutrality of such judgements. In addition, service promised in the bid should be accompanied by a penalty system for not delivering. Furthermore, it is good to include bonuses on various aspects that the operator can optionally deliver and that could support government goal achievement; although they should not be a substantial part of the awarding model, as that would trigger overbidding on these aspects.

Obviously, the above holds mainly for concessions where a large part of the service aspects are developed by the operator in the bid. When the bid is purely a price for bus-hours of bus-kilometres with detailed service descriptions, it all becomes less problematic. However, tendering solely on price has been shown to give problems in quality assurance, as all incentives are focused on low price.

4.4. Choosing for net- or gross-cost contracts

We see a variety of contracts in The Netherlands. North Brabant and Groningen have used gross-cost contracts (similarly to Copenhagen or London, the authority decides on supply, the operator is paid for its expected production costs). Yet, most contracts in The Netherlands have to be regarded as net-cost contracts, with fare-box revenues going to the operator besides a lump-sum subsidy payment. Interestingly, Amsterdam City Region uses an even more incentivising form of contract for its regional concessions. Here the payment to the operator is fully based on ridership, multiplying the revenue collected by the operator by a factor determined through CT (note that this payment method is in effect similar to subsidization in The Netherlands prior to CT). Such a contract can be classified as a super-incentive contract (Norheim and Longva, 2005).

There are advantages in all three approaches. Gross-cost contracts, in combination with service development by the authority, allow for flexible planning of services. Disadvantages are that it hampers efficient bus circulation planning by the operator, and that this form of contract needs clear quality incentives, based on either passenger quality perception or ridership (often bringing them closer to net-cost contracts). Net-cost contracts already include more quality incentive by their nature, focussing the operator on the quality experience of the passenger, although this may be different from the quality experience of the authority; perhaps revealing a mismatch between the customers' needs and the political perception of customers' needs. Flexibility is also more complex under such a contract, as changes in services ordered by the authority have immediate consequences for the fare-box and contract balance. Such a contract requires a clear

agreement on how to deal with service amendment wishes, both from the authority and the operator, especially concerning financial consequences. Foremost, the authority needs to secure those services that are not cost-effective for the operator. Subsidising specific services can help, for example services in low-density areas or additional services at the peak. But the authority has to be aware of the limited incentive offered by the fare-box in those situations where a substantial part of the income is (lump-sum) subsidy; typically cost-recovery by the fare-box in The Netherlands revolves around 40%. The higher the lump-sum subsidy, the lower the fare-box incentive to actively attract passengers. Super-incentive contracts solve the latter problem, and this seems to be corroborated by facts in the Amsterdam suburban concessions, but they make it even harder for the authority to intervene in service definition.

None of the three contract types is a panacea. The optimal choice will have to depend upon the situation, such as the extent to which the transport authority has inherited service design and planning capability (this situation is the exception in The Netherlands due to local regulatory history), the complexity of the local situation or the specific policy wishes of the transport authority.

4.5. Service design by the operator or the authority

A main issue in The Netherlands has been on the organisational choice of the tactical level: will the operator or the authority design the services (see for an overview Van de Velde et al., 2006b)? As public transport is currently supported by extensive public funding (about 60% of total costs in The Netherlands) to realise a set of general goals (see Veeneman et al., 2006b for an analysis of these goals), one can expect a continued governmental influence on service definition. However, the balance between the need to secure public policy goals on the one hand and the desire to capitalise on operator expertise on the other remains a major institutional issue in Dutch public transport. This has led to a wide diversity of CT forms, with more or less control by the transport authority and more or less functional CT.

As revealed by the interviews conducted for this paper, some of the authorities see their institutional choices failing, and start seeking new possibilities on the other side of the institutional spectrum in later tendering rounds (Figure 1 illustrates those movements). Their dilemma is located in the fact that contracts giving a substantial level of freedom to operators often generate disappointing results in terms of innovation and ridership growth, while choosing for more central planning by the authority generates substantial monitoring and quality

control problems, even with quality incentives in place. A deconstruction of the issue is needed to draw more general lessons out of these experiences. The question whether the operator or the authority should control service definition is too general. The better question is: on what aspects of service definition is more governmental control needed to reach policy goals, and on what aspects can strong governmental control – design, monitoring and enforcement – actually be detrimental to reaching policy goals. Actually, for most aspects of service design, inputs by both operator and authority will be useful (for example, environmentally friendly trains are often requested in CT by the authority, but some are easier and cheaper to maintain than others and this can be

organizations directed at judging the plans of the operators and at evaluating the quality during the concession. Examples: Rijn en Bollenstreek-Midden-Holland, Drechtsteden-Alblasserwaard-Vijfherenland, Limburg Zuid en Midden, Haarlem-IJmond en Fryslân.

- Service design by the authority: detailed service and quality requirements, guarantee of minimum service, revenue risk shared between actors, award on quantities such as price and service hours, evaluation based on inputs, role of consumers’ organizations directed at the authority during the concession period. Examples are: Almere Stad, IJsselmond, Zeeland; and even more so in North Brabant and Groningen, Drenthe (GGD) and Haaglanden where service design is concentrated on

Table 11 | Growth of traveller perception of public transport service quality in Dutch concessions

	Bus concessions:					Non-tendered
	Tendered, split by year of first competitive tendering					
	All years	2002	2003	2004	2005	
Growth service quality perception by passengers between 2001 and 2006	+6,9%	+5.5%	+7.7%	+7.2%	+8.2%	+4.3%

Source: Adapted from KPVV (2007a)

best assessed by the operator) and the most efficient improvement will only be reached by making use of both inputs. Indeed this calls for a trusting partnership along the lines also concluded by Stanley (2007).

5. CONCLUSIONS

Confirming the conclusion of a former paper (Van de Velde et al., 2006b), one can still observe a variety of changing configurations within the institutional setting, both at the governance level and at the contractual level in the Netherlands. There is now also additional confirmation of the appearance of the tactical level as a (half-)separate institution. Some transport authorities chose strategies that gave substantial service redesign freedom to operators in a first contracting round (either at contracting and/or during contract realization), in conformity with the aims of the new legislation. Later some authorities moved to an opposite stance, keeping most service design powers in-house. As observed in the cases presented, there are broadly two extreme models now in the Dutch tendering practice:

- Substantial freedom for the operator: characterised by trust in the creativity of the operator, service design on the side of the operator, functional tendering, revenue risk for the operator, award based on the quality of the plans, steering through realised output usually with a rather high bonus/penalty system, role of consumers’

the side of the authority.

Figure 14 summarises the main lessons from the analysis conducted above in terms of a good balance between service design and steering within the concession.

Indeed, many other aspects have to be looked into when considering the relation between authority and operator, but an appropriate equilibrium between steering instruments and allocation of service design powers is of utmost importance. When few obligations are formulated, the contract will need to contain sufficient incentives to stimulate the operator to provide market-led services. Such incentives will indeed make little sense when the authority has pre-determined the services to supply. Many arrangements are feasible within the spectrum of coherent forms of CT, but a lack of equilibrium between the items mentioned will severely increase the chances for failures.

Despite the advice above, time pressure and the legal problems that appeared during earlier CT procedures have led some Dutch authorities to adopt a more formal and distant relation between operator and authority during recent years. This sometimes generated a climate of distrust, penalties and the tendency for those authorities to more rigidly specify the tactical level. To be fair, one also has to see that this was partly caused by authorities sometimes lacking knowledge and qualities needed to organise CT properly, this problem being partly caused

by a lack of build-up and continuity of knowledge on the side of some authorities.

While this problem exists in some cases, it is also

contracting'. The experts stressed the need to agree on the process rather than to attempt writing down complete contracts. This is indeed a very well known theoretical debate, and it is interesting to see it appear so clearly in

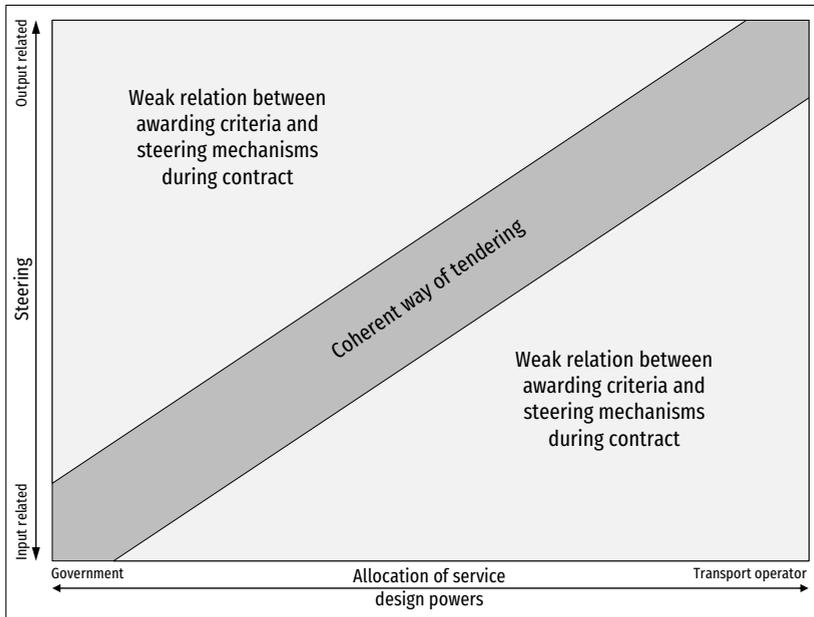


Figure 14 | Coherent way of tendering (Source: Lutje Schipholt et al., 2006 [unpublished])

important to note that the majority of cases function without problem. Yet, that small minority of problems is indeed responsible for quite some negative media and political attention, which, perhaps unduly, influences the general opinion on the current success of CT in the Netherlands.

One main point comes out of the opinions of the experts cited in this paper: a very clear call for more 'relational

this context. Relational contracting is about trust and partnership, it is more demanding for the contracting parties and one has to remember that trust is the result of repeated experience.

REFERENCES

[See reference list at the end of the thesis]



8.2.3 From disappointments to flexibility and hybridity

The disappointments observed in the sector after the first rounds of tendering, as identified (Van de Velde et al., 2008c) and reported upon in the previous sections, formed the starting point for further explorations. The reasons that may have caused these disappointments and in particular the perceived tendency to over-specify contracts were investigated in more detail, as well as the mitigating arrangements that had started to appear.

In a paper written with three consulting colleagues (Eerdmans et al., 2010) and titled “*Are we doing it wrong or do we expect too much? Forces that push authorities to become public transport designers*”, we attempted to look into reasons that may have caused these disappointments. The findings from the “*Beter Bestek*” meetings, together with our consulting experience, led us to formulate in the paper three categories of reasons for the authorities’ disappointment. Firstly, contracts sometimes pretend to give service design freedom to the operator, but effectively hamper this intention with piling contractual requirements, preference for certainty, or ill-calibrated incentives. Secondly, the authorities’ market growth expectations are sometimes exaggerated in relation to the actual potential demand in the area contracted. Furthermore, local authorities sometimes inadvertently reduce public transport’s market potential through counterproductive spatial planning and uncoordinated road management. Thirdly, behavioural reasons appear to be a further source for disappointments as the operators’ business culture (profit and cost-cutting) often collides with the authorities’ social focus, leading to misunderstandings and wrong expectations. This is even worsened by the fact that authorities often have no clear information on the actual costs linked to the realisation of specific contractual aims.

Interestingly, a ‘hybrid’ service development approach, further also called ‘relational contracting’¹⁴⁰, had also started to appear a few years earlier. Authorities, operators and sometimes even third parties became jointly involved in the development of services during the contract period, often in so-called ‘development teams’. This was reported upon in a paper presented at the 13th Thredbo conference (Van de Velde et al., 2013), covering four cases¹⁴¹ through interviews. All authorities consulted considered that the hybrid model constituted an improvement over their previous contracting approach, even though not all disappointments about the efforts deployed by operators vanished. Various benefits were mentioned: aligning goals and interests instead of ‘fighting’ over money, creating a platform for discussing developments, and forcing parties to think about improvements by the mere

[140] The term ‘hybrid’ is used by Williamson (1991) to describe intermediate arrangements between market and hierarchies. Debates in the public transport sector have come to use ‘relational contracting’ to describe contractual arrangements that are characterised by a degree of flexibility. Hrelja et al. (2018) provides a discussion of relational contracting and collaborative partnerships between operators and public transport authorities.

[141] In the provinces of Overijssel and Gelderland, the development teams, who consisted of representatives of the authority and the operator, initiated, discussed and decided on plans regarding the public transport project in the region. The operator mostly worked out details of these plans, although this was sometimes done by small joint project teams grouping authority and operator before the development team taking a final decision on the proposal. The province of Utrecht did not explicitly choose for a hybrid development model with development team. Its contract did, however, include concession meetings between the authority and the operator at regular intervals, bearing similarities to a development team. The joint public transport authority of the provinces of Groningen and Drenthe shifted towards a hybrid development model starting from a situation where this had been allocated to the authority in a previous contract.

fact of meetings being scheduled. It was also conjectured that co-operation is inevitable in the Dutch context (operators have the market and technical knowledge, authorities do not always). Interviewees found that ‘people matter’ (the character and drives of the persons involved on both sides of the table) or in other words that contractual cooperation clauses, while necessary to set a basic level of expectation, do not guarantee a successful cooperation between authority and operator. It was also found by some that revenue risk allocation to the operator might stand in the way of a successful cooperation. Finally, some interviewees stressed that it may be difficult to find the right balance between ‘working together’ and a more distant business-like approach as the former can easily lead to the authority paying too much for what it gets, and the latter can easily lead to a passive or conservative stance by the operator. The paper concluded that the hybrid arrangements presented were mere steps in the direction of a more successful relationship but that matters are more complex than simply adding a few contractual clauses. Relational contracting is about trust and partnership, which is demanding for both contracting parties, while trust is the result of repeated experience¹⁴².

This and further sectoral debates led KpVV to a request a deepening of the analysis and the formulation of suggestions to avoid further procedural and contractual over-specification¹⁴³. This resulted in a report (Van de Velde and Eerdman, 2013) titled “*Terms of Requirement of the Future, towards more flexibility and innovation in contract forms in public transport*” (translated), that was meant to give inspiration and guidance to transport authorities on ways to improve the specifications of service in tendering documentation such as to achieve more flexibility and innovation within the (competitively tendered) contractual setting¹⁴⁴.

The report we wrote started by observing a degree of discomfort in the sector as to the functioning of the regime in relation to its capacity to lead to innovation and flexibility (Van de Velde and Eerdman, 2013, p. 9-12). An increased procedural complexity, an increased focus on legalistic requirements, and a tendency to over-specify contracts were seen to lead to missed market opportunities, missed opportunities for efficiency improvements and suboptimal service (or even no service at all) to the customers. We observed that this led many authorities, in the light of their experiences, to reconsider their tendering and contracting approach through time. Figure 15 shows a slight tendency to move from top-left to down-right in the graph, corresponding to a reduction of the tactical freedom allocated to the operators. Note that this tendency was not absolute as opposite, though apparently more limited, movements could also be observed. This figure also updated an earlier version of a similar graph (Van de Velde et al., 2008c) by showing that various forms of cooperation had appeared. These were characterised as ‘development teams’ (see the middle of the Figure) and illustrated that the call for relational contracting formulated earlier (Van de Velde et al., 2008c) had seemingly started to lead to the actual development

[142] See Stanley and Van de Velde (2008) for a discussion on trusting partnerships in public transport contracting.

[143] This fitted within a sector-wide initiative that was developing at the time and which would lead a few months later in 2013 to the publication of a sector-wide manifesto including a number of actions aimed at realizing a better public transport system, and in particular a better cooperation between public transport providers. This sector-wide initiative (*‘Samen op Reis’*) was a cooperation between authorities, operators and consumers organisations.

[144] The rest of this section is based summarized and translated extracts from this report.

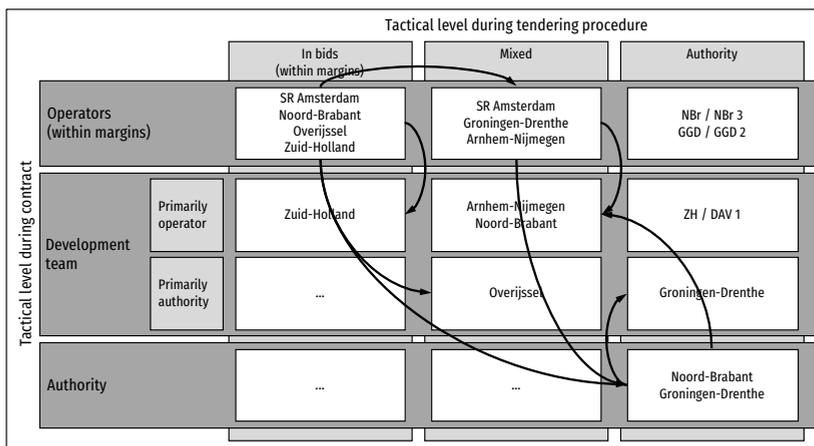


Figure 15 | Developments at the tactical level in the Netherlands

of such contractual arrangements. The problem analysis conducted in the report noted that the attribution of much tactical freedom to the operator both during the tendering phase and during the contract could not, from what was observable in the Dutch practice, be considered as a ‘natural’ tendency. Rather, the opposite development (away from giving much development freedom to the operator) appeared to be an easier development ‘path’. At the same time, doubts were rising in the sector as to the realizability of this ‘ideal’ attribution of power to the operator.

The report stressed that a process-analysis was needed to understand why more flexible functional contracts (that were meant to generate more innovation) did not appear. On such basis, we observed that two main phenomena seemed to be at play (Van de Velde and Eerdman, 2013, p. 12-14). Firstly, and referring to actual practice, the report observed that in a number of cases a discrepancy could be observed between the intentions of the tendering authority at the start of the preparation of the tendering documents, and the actual freedom as embedded in the resulting tendering documents. We analysed that this might result from the following: the authority refrains from determining clear strategic goals, the preservation of the existing services becomes dominant, which limits the tactical freedom that can be attributed to the operator, writing functional specification for the call for tender then becomes difficult despite all good intentions formulated at the start of the process, and the resulting concession texts end up being very detailed and leaving little freedom to the operator (this is represented in a simplified fashion in Figure 16).

Secondly, we described in the report a dynamic that often—though not always—led to contractual over-specification. The authority starts with a desire for more innovation through contracting. Freedom is given to the operator or is perceived to be given to the operator even though this freedom cannot always effectively be used for the reasons discussed above (Eerdman et al., 2010). This is summarised in the first main arrow on the top-left in Figure 17. Operators subsequently appear not to use the freedom given or to use it ‘wrongly’ in the eyes of the responsible politicians or civil servants (arrows in the middle of the Figure). The tendering authority becomes frustrated by this state of affairs and a perception develops that giving this freedom does not lead to the expected result. As a reaction, a tendency develops on the side of the authority to specify contracts more tightly

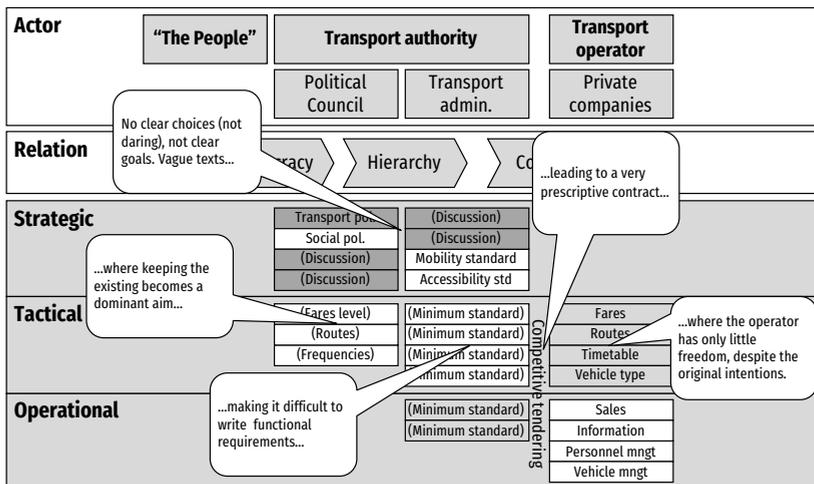


Figure 16 | Tendency to over-specify explained

at next tendering round. This tendency can even be reinforced when the authority exhibits a lack of self-reflection as to what can be the root-causes of this situation. A risk-avoiding stance, attempting to prevent further 'fuss' then develops (represented by the second arrow on the left of Figure 17).

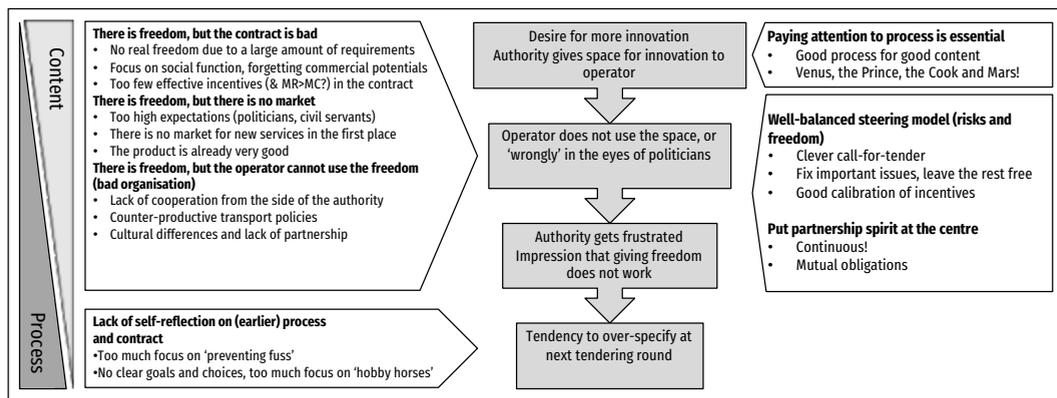


Figure 17 | Reasons for over-specification and ways to avoid it

This analysis led to the formulation of the following typology of problematic issues (Van de Velde and Eerdman, 2013, p. 15)¹⁴⁵:

- ▶ *Informal/cultural issues*: risk-aversity of local politicians, cultural focus on consensus, preserving the interests of all, absence of clear choices, risk-aversity of operators;
- ▶ *Formal/legal issues*: procedural limitations imposed by the public procurement legislation (e.g. the unavailability of the negotiated procedure), service exclusivity imposed by law;

[145] This typology is similar to the typology used by Maretope (MARETOPE Research Consortium, 2003, p. 43).

- ▶ *Organisational issues*: lack of distance between civil servants (as public transport planners and monitoring agents) and politicians, concession border issues, lack of enforceable cooperation clauses between authority and operator;
- ▶ *Process issues*: lack of attention for a proper process design for the preparation of the tendering procedures and its documents, blocking power of local authorities;
- ▶ *Contractual and financial issues*: inappropriate awarding criteria, excessive details in the terms of requirements, ill-calibrated incentives, lack of contractual commitment by thirds (such a road authorities and other transport operators), lack of financial means.

In response to this, we formulated a series of recommendations (Van de Velde and Eerdman, 2013, p. 17-52), that can be summarised as follows:

- ▶ *Improving incentive mechanisms*: having a more appropriate allocation of risks between contracting parties, introducing cost-, revenue- or profit-sharing mechanisms, improving incentive calibration, using so-called super-incentives, including process agreements for contractual amendments, replacing net-cost clauses by separate clauses for costs and revenues;
- ▶ *Stimulating cooperation between actors*: creating joint development teams, creating a joint development company, establishing public transport agreements with local (road) authorities, creating alliances with third parties;
- ▶ *More space for innovation and flexibility*: translating policy aims into functional contractual requirements, increased focus on service development during the contractual period;
- ▶ *Stimulating an increased customer focus through market separation*: separating concessions between bundles of weaker and bundles of stronger public transport services, while involving local authorities for weaker local services;
- ▶ *Introducing more flexibility through a reduced exclusivity of the concessions*¹⁴⁶: allowing for concession infringements by open access competitors, either locally, in general or by law;
- ▶ *Creating more negotiation space*: creating or enhancing the negotiation space within competitive tendering procedures;
- ▶ *Focussing on output and continuous improvement*: using awarding criteria aimed at output rather than input variables, focussing on continuous improvement, introducing the quality management tools implemented in the British rail franchising, in particular the 'Radar' (Results, Approach, Deployment, Assess and Refine) self-assessment method.

This is summarised in Figure 17. The central items are the steps leading to over-specification. The arrows on the left present influencing items forming a continuum from content to process aspects. The arrows on the right summarise the report's recommendations to help preventing the observed tendency to over-specification.

[146] The endeavour of Flixbus to penetrate the Dutch market in the provision of long-distance services made it clear that some market potential might exist. This even led to questions in Parliament as to how to facilitate such entry.

The objectives of the new regime were twofold: creating conditions to improve public transport services' attractiveness such as to increase public transport's modal share, especially in areas worst hit by congestion; and increasing cost recovery from roughly 35% to 50%. Can the reform be considered a success?

An increased supply of services can be observed. Data from KpVV (2011) shows that service level increased over the period when tendering was introduced with service kilometres increasing by 13% between 2000 and 2010 (Van de Velde and Savelberg, 2016). This increase was strongest after the first round of tendering (2001-2004) as a consequence of the regional authorities maximising supply under the budgets received from central government. Supply was reduced later with the joint effect of refined awarding criteria and national budget cuts (Groenendijk et al., 2005; KpVV, 2011). Concessions that had not been tendered showed between 2000 and 2009 a lower than average (8%) increase of supply (KpVV, 2011).

Customer satisfaction about public transport quality improved. Measured through yearly national surveys, the average score given by passengers (on a scale of 1 to 10) increased more or less linearly over the whole period, growing from 6.84 in 2001 to 7.64 in 2017 (KpVV, 2019). Earlier van Buiren et al. (2012) reported, using the same KpVV data, that customer satisfaction was increasing with the number of time a concession area had been tendered, while all concessions areas, even non-tendered exhibited an increasing trend. Mouwen and Rietveld (2013) saw this as a possible illustration of the effect of the threat of competitive tendering, causing both authorities and operators to adopt a more customer-oriented attitude even in areas not yet submitted to tendering.

One of the policy goals of the reform was to increase ridership and, thus, the share of public transport in overall mobility. This does not appear to have materialised, but a precise analysis of ridership data proves, unfortunately, very difficult to realise. Substantially conflicting conclusions can be drawn when comparing the data coming from national travel surveys¹⁴⁷ conducted by the Central Bureau for Statistics (CBS) with the data resulting from public transport usage as reported by the knowledge centre in which Dutch transport authorities cooperate (CROW-KpVV). The CBS data shows that public transport boardings (bus/tram/metro) remained almost unchanged over the 2005-2016 period, while passenger-kilometres decreased by almost 20% (Van der Loop et al., 2019). KpVV data (KpVV, 2011) shows that total ridership expressed in passenger-kilometres varied but remained almost stable between 2000 and 2009, with an increase of only 1.5% over the period (6.4 billion passenger-kilometres in 2000, 6.2 in 2003, 6.5 in 2009). Obviously, with growing supply and dropping or stable demand, occupancy rates went down from 13.3 in 2000 to 11.8 in 2009 (KpVV, 2011). KpVV later reported that trustworthy data on public transport usage could not be provided at the national level for the period 2010-2013 and that the quality of the data relating to the 2000-2009 period had to be questioned due to the decreasing trustworthiness of the ridership estimations over those years (van Kesteren,

[147] MON for the period 2004-2009 and OViN since 2010.

2016). Eventually, KpVV did not start giving national estimations that it estimated to be sufficiently trustworthy for publication until 2016. It came to an estimated ridership reduced by about 25% compared to earlier estimations (due to a change in counting method, mainly in relation to the introduction of the public transport chipcard), with 4.9 billion passenger-kilometres in 2014 increasing to 5.1 in 2015. In 2019 KpVV reported public transport ridership to be up at 5.4 billion passenger-kilometres by 2017 (KpVV, 2019), representing a growth of 11% since 2014, or about 3.5% per year. The Knowledge Centre for Mobility Policy of the Dutch Ministry of Infrastructure and Water Management (KiM) attempted to dig further into these confusing issues for the period 2005-2016, comparing the data published with estimations from its national transport model (LMS) such as to disentangle various effects (population, economy, etc.). They concluded that a ridership growth of 2.7% might have been expected over the 2005-2016 period due to actual service level improvement in public transport. They also concluded this to be more in line with the growth reported by KpVV estimations than with the decline observed in CBS data, even though substantial questions remained as to the reliability of the underlying data (Van der Loop et al., 2019).

As to modal share, KiM (2015) report a share of public transport of around 12% of passenger-kilometres in 2014 (9% for rail and 3% for bus/tram/metro) and 4% of trips (2% rail and 2% bus/tram/metro) representing almost no change at the national level compared to the previous decade¹⁴⁸.

Clear information on fares and revenues is also difficult to gather but Van der Loop et al. (2019) report an increase of 20.9% of public transport fares over the 2005-2016 period. This, as such, is not necessarily related to tendering, but is also linked to budget cuts and other political choices. Koopmans et al. (2013) report that revenues from ticket sales went up from EUR 689 million in 2005 to EUR 857 million in 2010, representing a 24% growth in current prices and a 15% growth in constant prices of 2005.

Operational efficiency improved, as shown by decreasing unit costs per vehicle service hour¹⁴⁹. Estimations run from 7 up to 20% of cost savings in the first four years and a further 20% from 2005 to 2010, with generally a smaller reduction after the second round of tendering (Engelsman et al., 2010). This also benefited non-tendered concessions as authorities were able to use the tendering threat to negotiate lower prices (Van de Velde et al., 2008c; Engelsman et al., 2010). Niaounakis et al. (2016) find that, when corrected for external factors, local and regional public transport is more cost effective under four circumstances: tendering rather than direct award; quite short or on the contrary fairly long contract length (concessions of 5-6 years appear 10 to 20% more expensive than concessions of 3 or 10 years); net cost contracts (these are now used in the majority of new concessions); and under quality bonus systems. Mouwen (2016, p. 149) concludes that

[148] They note that this masks that public transport accounts for 40% of all trips above 10 km during morning peak to the five large cities (Amsterdam, Rotterdam, Den Haag, Utrecht and Eindhoven) (KiM, 2012). They also note that the modest position of public transport in the Netherlands is also determined by the strong competition from the bicycle, especially for shorter distances and within urban areas (27% in 2014, and even up to 40% in smaller and medium-sized cities) and that the Student Travel Pass (with which a large proportion of students travel for free on all public transport services) accounts for about a quarter of all public transport ridership in the Netherlands.

[149] This is the standard operating cost unit used in the Netherlands.

contract renewal leads to a substantial reduction in operational costs (10% at first renewal, and an additional 6% when renewed at least twice), leading to even larger decreases in subsidies. He did not, however, find evidence of an effect of competitive tendering on operational costs and suggests that the threat of competitive tendering may be sufficient in a market in which the majority of concessions is competitively tendered.

Unfortunately, there is also no overview of the total regional public spending in public transport support as national transfers to the regions (the main source of funding) are not earmarked for public transport and regional authorities also use other resources¹⁵⁰. Public transport authorities actually spent more until 2010, according to Koopmans et al. (2013), and the traveller was also paying more¹⁵¹, which could have affected patronage. Here too, substantial variety exists in the data, with for example the in-house municipal operator in Amsterdam claiming a growth in cost recovery¹⁵² up from 40 to 69 per cent over the last ten years, despite patronage being down from 971 million to around 800 million trips in the same period. Consequently, national data on the average level of cost-coverage does not exist either. General sectoral expertise puts it at about 45% subsidies (estimating that 30% of costs are covered by direct ticket revenues and 25% through the national student pass contract with the ministry of education).

As to vehicles used, one can mention that new low-floor buses have been introduced and that buses now comply with much improved environmental standards (EEV and Euro VI buses are now the norm), with several concession areas moving towards zero-emission in the coming years.

The newly-created transport authorities have spent more effort than under the former regime in developing explicit public transport policies at a more strategic level, stating general goals and priorities. Also, the reform maintained—or perhaps even improved—the ability to plan and integrate services across modes, with bus services feeding upon regional trains, and more Demand Responsive Systems being introduced (Van de Velde and Savelberg, 2016). The national ticketing and passenger information system could be maintained, but fare integration was actually reduced. While this might be perceived by some as negative, one should recall that one of the reform aims was to allow for more decentralised fare regimes. This was facilitated by the introduction of the national chipcard system.

One of the aims of the reform was to make better use of the service design skills of operators and a variety of contracting approaches resulted from practice. Veeneman (2016) calculates that out of the 80 concessions that were tendered out between 2001 and 2015, 7 had a ‘suppletion’ or super-incentive contract, 8 had a gross contract, and the remaining 67 were under a net contract, with a distribution between remuneration schemes remaining fairly stable over the years. A more recent trend is the emergence of hybrid contracts in

[150] The price of the *Strippenkaart* (old national public transport ticket) grew 50 per cent more than inflation between 2002 and 2010, for the *OV-Chipkaart* (new national public transport ticket) the base rate grew double the inflation between 2011 and 2013, while the regional kilometre rate varied from 9 per cent to 40 per cent increase. Inflation was around 5 per cent over that period.

[151] The total budget of EUR 2 billion (2012) represents a real term increase of 26% compared to 2005. While no public data is available on which part of the fund is actually spent on public transport, Hilferink and Poppeliers (2010) estimate this to be about 62%.

[152] The rate of total operating costs covered with fare box revenues.

which authority and operator share responsibilities in service development (see also Section 8.1.3).

The average size and length of contracts has increased over the years and several contracts have also become multi-modal (regional bus and regional rail). This led to a sharp decrease in the number of contracts: from 72 in 2005 to 39 in 2015, while contract length increased and most recent contracts have a duration of 10 years, which is the maximum allowed under Dutch law (15 years for rail or multi-modal contracts). This reflects a desire to give operators more revenue risk and service specification freedom, while larger contract areas are also seen as more efficient and offering better opportunities to promote and develop a more effective integrated public transport supply (Van de Velde and Eerdmans, 2016). At the same time, this increased the barriers to entry for small operators while it attracted large but few multinational operators and increased the stakes for the operators.

The number of bidders per tendered concession has over the period 2001-2018 remained rather stable, fluctuating around 2.5 to 3 bidders per concession (KpVV, 2019). The regime appears to work well from the points of view of legality and fairness to competitors and there is strong competition between bidders, even if their number is limited. At the same time, one must observe that there are numerous court cases linked to tendering procedures. This is a source of concern but it is presumably more linked to the high stakes for the operators linked to the increasing size and length of the concessions than to real issues linked to the tendering regime itself (Van de Velde and Savelberg, 2016).

Unrealistically low bids have occurred, but this problem seems to have been solved by improvement to various aspects of the tendering procedures and learning on the side of operators (Van de Velde and Savelberg, 2016). A remaining issue, though, is the questionable ability of operators to make economic forecasts over the length of a contract period (now up to 10-15 years). This has, in more recent contracts, been mitigated by using *business case* approaches when major changes occur. This, however, requires knowledge of production costs on the authority's side (Van de Velde and Eerdmans, 2016).

Contract design and contract management were not always well aligned and good monitoring was not always properly organized in the first tendering rounds. This is related to operators and authorities tending to have different teams involved during the bidding phase and the operational phase, which can lead to less mutual understanding and successful cooperation during operations (Van de Velde and Savelberg, 2016). Furthermore, many authorities seem reluctant to use strong enforcement mechanisms such as fines, even when included in their contracts. This appears to be due to various reasons, such as a fear of harming a good relationship with the operator (especially in hybrid contracts), doubts about the quality of the data used, lack of manpower to analyse the data, or fear of bad press about public transport in their jurisdiction (Van de Velde and Eerdmans, 2016). On the other hand, one should also question an excessive focus on complex financial incentive regimes. Van de Velde and Eerdmans (2016) concludes from their experience that “clever monitoring and contract management based on an adequately formulated contractual flexibility and definition of amendment processes, and on an open-minded, constructive and highly-skilled approach to contractual breaches, combined with a credible determination to enforce a quick resolution of performance issues in the interest of passengers, are likely to deliver better results and induce a better partnership spirit than a precise and lit-

eral interpretation of overly detailed contractual clauses”. This is to be related to the recent hybridization of contracts, but the success of such an approach depends strongly on the skills of those charged with contract monitoring, and operators also have to learn how to act within the new hybrid contracts. While they have been sceptical about the increasing hybridization—and this led to a significant amount of clarification questions during tendering procedures about the exact roles and responsibilities of parties—they now understand that they too need to work on building a trusted partnership and developing public transport supply together with the authority (Van de Velde and Eerdmans, 2016).

As to recent developments in tendering practices in the Netherlands, these are covered by a series of paper based on interviews with transport authorities around the key question: “*what did you do differently in your last competitive tendering compared to the previous one?*” (Veeneman and Van de Velde, 2014; Veeneman, 2016; Veeneman, 2018). These discuss lessons drawn by the authorities in the course of time, changes they introduced and fine-tuning developments at L3.1 and in particular at L3.2 that have appeared.

Three main trends could be reported by 2014 (Veeneman and Van de Velde, 2014). The first was a reduction of fragmentation. While regional authorities started off carefully with small concessions, expecting small operators to step in, the original goal of competition with small entrants seemed to have lost value. The national government was looking for structural changes, reducing the number of authorities. The authorities were looking for larger concessions, integrated multi-modal concessions and cooperation with other authorities. This required larger and well-established multi-modal operators, which were provided by the opening up of the European market. A second trend was pointing away from pure contractual incentive regimes (pure gross-cost or pure net-cost and super-incentive) towards more hybrid forms of incentivisation and institutional designs for cooperation. This illustrated a maturing of base choices, adding counter-arrangements to deal with the downsides of earlier choices. A third trend was that the regime had managed to mature, even though several items resulting from the historical context of the sector were not optimal organised for competitive tendering of public transport services (a ticketing system managed by incumbent operators while the main stakeholders are the regional authorities, national taxation as funding source while public transport responsibility is decentralised, small regional authorities with small concessions while large European operators dominate the market, and different funding and governance schemes for various forms of public transport while further integration is a promising option).

Veeneman (2016) concluded that the austerity measures and expected market developments in vehicle technology and new forms of transport have led to two kinds of developments. A first one is scaling up (multi-modal, larger and longer concessions, and increasing cooperation and mergers between authorities) and a second one is introducing more flexibility to deal with these changes as the role of public transport in the future of mobility has become less certain with the advent of hybridization in transport modes, innovation in vehicles and data technology and citizen participation. Many transport authorities felt ill-equipped to deal with those challenges, though, which in term of governance reinforced the need for flexibility to meet changing needs. This led to a gradual change from defining demands precisely and controlling delivery, towards getting a good operator and setting the stage for a fruitful and flexible co-development of services during the contract period,

all the while continuing to use a variety of governance forms for the relation between authority and operator in term of degree of initiative given to the operator.

More recently, Veeneman (2018) showed that uncertainties around technological developments (electric propulsion, autonomous vehicles) asked for even more flexibility in tendering and contractual governance. Authorities are increasingly focusing on high-demand routes, improving the overall efficiency of the system, while compensating this by alternative solutions for the first and last mile (such as bike sharing). They also start being active to deliver MaaS (“Mobility-as-a-Service”), seeking ways to better integrate services towards broad mobility solutions within the context of a public transport concession and moving to tendering procedures that go beyond the simple delivery of scheduled services. Furthermore, a shift at the national level towards a more integrated policy between transport policies and environmental and spatial development policies seems to be trickling down to the provinces. Future will tell whether this will be the start of a further reconsideration of the way in which public transport concessions are being tendered and contracted.

These overview papers illustrate the muddling-through process in which the sector is involved. The introduction of the new regime in 2001 caused a shock at L2 which led to various adaptations at L3.1 and L3.2, as presented. But the world does not stand still. Further changes appear in the environment of the public transport system: policy changes at the national level, changes in funding regimes, technological innovation with yet uncertain ramifications (MaaS, AV, etc.), all of which challenging the choices made so far at L3.1 and L3.2. Furthermore, the choices made at L3.1 and L3.2 have themselves shaped the actors (such as the size and skills of the competitors) and their behaviour at L4.

9 Contrasting cases

The reform of the Dutch public transport sector that took place during the last two decades has been discussed at length in Chapter 8. The developments observed within that regime in the Netherlands illustrated in particular a struggle with the functional tendering issue; and not all Dutch authorities appear to have made the same choices or to be moving in exactly the same direction.

This reform constitutes only one of the institutional reform cases based on competitive tendering that could be observed in Europe over that period of time. As concluded in Part II, an array of institutional configurations and developments exists in other countries. Without having the intention to dig thoroughly into all issues, this chapter moves one step closer to exploring how institutional frameworks based on competitive tendering have fared over the last decades in a number of other countries. In particular, we attempt to discern whether similar patterns can be observed within the array of institutional frameworks and developments encountered in Europe. The purpose of this exercise is to reach a better understanding of the observed institutional developments and the resulting diversity.

To structure the presentation and ease comparison, we distinguish between a number of institutional themes (see Table 13). These represent main discriminating issues when considering alternative configurations of institutional frameworks. This list results from aggregation of the body of knowledge gathered over the years through observation and analysis¹⁵³. The first theme in the list is a preliminary issue related to the fundamental choice of institutional framework family at L2 (authority initiative or market initiative). This usually falls outside the decision space of the local (transport) authority. The following themes are relevant for both families, though perhaps differently. They usually fall within the decision space of the transport authorities (L3). The themes are also closely related to the STO framework as defined in Part II. Note that these themes can also serve as main guiding questions in the context of an institutional design exercise, for example within advisory work.¹⁵⁴

[153] This follows upon three first themes suggested by Van de Velde and van Reeve (1996) in the context of advisory for the Dutch ministry of transport when various options were being considered for the implementation of competitive tendering in Dutch public transport (themes 3 and 4). Wider case observations and practical expertise later led to extend this list to the current list of themes.

[154] We had the opportunity to apply such an approach on several occasions, for example in a seminar organised to discuss the setup of the new transport authority in Rotterdam/The Hague in 2011, and later in Bucharest during a World Bank assignment in 2013.

Table 13 | Themes

Theme 0: The right of initiative to create services	L2
▶ Do transport authorities have all property rights on the market to create passenger transport services or do autonomous market actors have the right to create public transport services? Is hybridity between both configurations foreseen?	
Theme 1: The setup of the (transport) authority(ies)	L2
▶ What type of authority is responsible for the public transport system? Are several authorities involved? Do they cooperate or divided responsibilities? How? On all relevant policy domains?	L3.1
Theme 2: The governance arrangement of the authority	L3.1
▶ How is the authority organised: as an internal administrative service, as a separate public sector company, otherwise? What is the nature of its relationship with the political level: e.g. direct political steering through a politically appointed board, an 'at arm's-length' organisation under contract, otherwise?	
Theme 3: The division of marketing responsibilities	L3.2
▶ How are marketing responsibilities divided between 'the authority' and operators? (marketing is defined in the broad sense as the development of product-market combinations, the sales and promotion of services) How is coordination between actors organised?	
Theme 4: The type of relationship with the operator(s)	L3.2
▶ What is the nature of the relationship with the operators: contractual, regulatory, otherwise? Is competition used to select operators: competitive tendering, negotiation? How are goals defined and performance monitored?	
Theme 5: The assets with a longer lifespan	L3.2
▶ How are long-term assets managed? (infrastructure, vehicles, stations, etc) Which actor is the owner? Which actor is responsible for the adequacy of investments? Which actor is responsible for short-term management (maintenance)?	

We will start in Section 9.1 by reviewing a number of national cases in which competitive tendering has been introduced or has come to play a growing role of the years. Section 9.2 will then summarise, in a similar fashion our observations on the Netherlands, while at the same time commenting on differences and similarities observed with the other cases.

A few remarks on the scope and method for this chapter have to be made at the outset. The cases are defined here as country cases and the findings are presented at that level in a summarised way. This is done using the theme table as suggested above. This unavoidably masks variations within the country considered. We do not strive for exhaustivity here; indeed, even Chapter 8 cannot provide full exhaustivity on developments in the Netherlands. Our aim is to represent in an aggregated way a number of main trends that we or others have been able to discern through observations. Our findings are based on the aggregation of general knowledge that we have gathered over the years through various pieces of research and advice, including the realization of several overview studies¹⁵⁵ and further punctual updates. Clearly, these findings are also exploratory and may lead to additional research at a later stage.

[155] For example: Van de Velde (1997d); Van de Velde et al. (2008b) or Van de Velde et al. (2011).

We present in this section a number of country cases that are selected to be representative of the main type of institutional frameworks based in competitive tendering. As will be seen, the cases differ mainly in relation to Theme 3: the extent to which operators are responsible for the tactical level and (related) size of the contracts:

- ▶ The route-based contracting approach can best be illustrated by the London or Copenhagen approaches: the former public operator gradually contracts out all vehicle operations on a route-by-route basis in rather short gross-cost contracts (less than 10 years) retaining revenue risk and marketing function (service design, fare-setting, sales and promotion) on the side of the former public operators, and adding various quality incentives. The former public operator ultimately, having shed all operational activities, eventually ‘becomes’ the transport authority or the planning body of the political authority. This London model eventually came to be known in Europe as the ‘Scandinavian model’ due to similar regimes being implemented later on at a large scale in Denmark, Sweden and Norway, but also in Finland and to a lesser extent in Germany, Budapest and Belgium. It eventually formed a major source of inspiration for further areas in the world and was copied (and adapted) in Singapore.
- ▶ The network-based contracting approach can best be illustrated by the French and Dutch approaches¹⁵⁶: the operator is usually given both cost and revenue risks (net-cost contracts), contracts typically cover whole networks, have a length of 10 years or more, the operator is usually involved in service development, whether during the tendering procedure and/or contract realization via various incentive regimes.

9.1.1 Great Britain (London case)

The route-based contracting approach introduced in London in 1984 grew to constitute the archetypical example of route-based tendering. Table 14 provides a summary of the London arrangements.

This route-based competitive tendering approach followed upon a regime that for more than 50 years had been based upon one public operator, the London Transport (LT) Board, responsible for both underground and bus services in the London area (Higginson, 1991). LT was controlled by central government until its decentralisation in 1970 as London Transport Executive to the newly created Greater London Council (GLC). Left-wing policies conducted by the GLC led to growing conflicts with central government, in particular under the leadership of the Conservatives and Margaret Thatcher, due to the perceived high level of public spending. This resulted in removing the power of the GLC on local public transport in 1984 and in the abolition of the GLC in 1986 (Higginson, 1991). The London Regional Transport (LRT) Act organized in 1984 its transfer to central government and foresaw in the reorganization of LT into a small holding company (LRT) and separate subsidiaries for service operations (London Underground Ltd (LUL)

[156] The franchising approach used in the British railway sector is similar too.

Table 14 | Great Britain (London): institutional themes summary

Theme 0: The right of initiative to create services

- ▶ “Transport for London” (TfL) organises public transport within the London area as one integrated system.

Theme 1: The setup of the (transport) authority(ies)

- ▶ The London Assembly (25 democratically elected members) holding the democratically elected Mayor of London to account. Responsible for several policy domains besides transport.

Theme 2: The governance arrangement of the authority

- ▶ TfL is placed under the direct responsibility of the Mayor of London.

Theme 3: The division of marketing responsibilities

- ▶ TfL is in charge of marketing. Operators run pre-determined services as defined by TfL.

Theme 4: The type of relationship with the operator(s)

- ▶ Competitively tendered contracts (5+2 years) in the bus sector, In-house operations of underground services. Competitive tendering of other rail services.

Theme 5: The assets with a longer lifespan

- ▶ Buses and depots managed by operators. Railway assets managed by TfL.
-

and London Buses Ltd (LBL), itself split into 12 garage units in preparation for a privatisation). This introduced a separation between transport planning and marketing (LRT) and transport operations (LUL and LBL). The Act also required LRT to organise competitive tendering procedures, in line with the ideas included in the White Paper “Public Transport in London” (DfT, 1983) and according to which LRT would have to: (i) improve services within the resources available and make them more attractive to the public; (ii) reduce costs and the need for taxpayers’ money while securing better value; (iii) involve the private sector in service provision and make better use of public assets; and (iv) promote better management through smaller and more efficient units, with clear goals and measurable objectives (cited in Higginson, 1991). The Act included an obligation to invite tenders “*in the case of such activities carried on by them as they may determine to be appropriate*” (Section 6 of the Act), but a letter from the State Secretary of Transport to LRT made it clear that bus services was one such activity (Higginson, 1991).

The initial approach was to use route-based gross-cost contracts, varying between individual routes and small area networks and on short contracts of initially 3 years. The 1984 legislation did not foresee any specific time line for the introduction of competitive tendering, but October 1984 saw the first competitively tendered bus contract organised by LRT. LBL’s units and private operators were supposed to compete for these contracts. As the pre-existing regime did not make use of private contractors, a market of suppliers still had to develop, and this was facilitated by starting from areas where competition was more likely (the outskirts of London) and moving gradually towards inner London. Consequently, with the 12 subsidiaries of LRT, only 17 operators were present in total on the network in 1985. One quarter of the services had been submitted to tender by 1989, resulting in savings of 17.5% and service increases of 6% (Higginson, 1991). The number of operators had grown to 31 by 1993 when 50% of the network had been submitted to competitive tendering. About 60% of the contracts were originally won by LBL subsidiaries. One of LBL’s subsidiary failed, the others were gradually privatised until 1995. Resulting operators varied substantially in size and some of them were part of the larger bus groups that had in the meantime developed in the rest of Great Britain as a consequence of the

deregulated bus markets outside London. Specific accounting rules prevented LBL from engaging into unfair competition with the private sector, using subsidies that continued to be paid directly for those routes that had not yet been subject to competitive tendering.

The results of the tendering regime were positive, with falling operating costs, less staff, less vehicles and more passenger miles, 3.75 bids per route and improved operational quality. A few remarks should be made, though: 10% of the services did not manage to reach the end of their contracting terms (Higginson, 1991), but this could perhaps be seen as part of a learning curve, and wages were lowered and more flexible working conditions were introduced. This could be done because nothing was laid down concerning the terms and conditions of employment of labour to be used by tenderers, although LRT did take these into consideration when assessing how realistic bids were (Glaister and Beesley, 1991). Such aspects were of course instrumental in reaching part of the cost savings and in reaching a need for financial support for LRT in 1989 that was only half that of 1983 with an increased service level and an improved operational reliability (Higginson, 1991).

The reform was largely seen as a success and it appeared that competitive tendering also had a positive indirect effect leading to efficiency improvements on non-tendered routes (Glaister and Beesley, 1991). Higginson (1991) concluded that the model of separate roles for planning and operating the services would stay, irrespective of which party is in government. Note in this respect that the British government had originally intended to introduce the free market in London in the early 1990s, as had happened in the rest of Great Britain in 1986. Although the expectations were that this would be done in a more coordinated way that in the rest of Britain (fare coordination and network planning was expected to play a more important role), this goal ultimately did not materialize, some say for the fear of the consequences that a failed deregulation would have in a major city such as London¹⁵⁷. It was officially 'differed' in 1993 and subsequently cancelled when the new Labour government created *Transport for London* in 2000 as a new strategic governing body for London.

Despite this success confirmed by academic studies (Kennedy, 1995b, estimated the cost savings at 20% and mentioned that the public sector had by then managed to reach the same contract price level of the private sector; see also Kennedy, 1996; White and Tough, 1995), the government did force LRT to move to route-based net-cost contracting in 1995, essentially for dogmatic reasons and very much against the advice of some experts. These new contracts did not result in discernible performance differences, while they entailed substantial revenue apportionment problems, as expected, and higher tender prices (Finn, 2003b). Consequently, the approach was reversed in 1999, coming back to gross-cost contracts but with more quality incentives towards regularity and punctuality added in 2001 in an attempt to induce the operators to more customer-oriented quality.

It also became apparent that operators started calling for another regime. Kennedy (1995a) found, on the basis of a series of interviews with London bus managers, that many managers perceived the tendering regime to be 'labour contracting' and that most tendering

[157] Nicholas Ridley, the Secretary of State for Transport in 1985, was at the time reportedly already concerned about the political reaction to altering substantially the organisation of bus transport in the capital and felt that it was too soon to unleash a further wave of reform in the capital (Parker, 2009).

gains had by then been reached. Many perceived this centrally planned regime focused more on keeping costs down rather than providing good service, that it did not encourage innovation and growth, resulting in much unexploited potential; which was probably inspired by experience with the deregulated markets around London. This was very much reminiscent of the academic dispute that developed at the time of the enactment of the new legislation (Gwilliam et al., 1985a; Beesley and Glaister, 1985b; 1985a), but actual developments would ultimately lead to the opposite evidence, with ridership growth in London and decline elsewhere¹⁵⁸, and with London being recognised as a major reference in term of service innovation in the UK, with innovations trickling down from London towards the rest of the country, to be merged with marketing innovations developed in those deregulated markets.

By 2000 all routes had been submitted to competitive tendering, indicating that the transition period from no to full tendering had lasted 16 years. Some market concentration could be observed during this period: from 10 large groups (with 91% of the market) and 13 smaller companies in 1995 to 6 groups (with 90% of the market) and 16 smaller companies in January 2001, and while there was an average of 6 bids per tender in 1995, this had reduced to 2.5 bids per tender in 2000, with access to garages being a major barrier to entry in the (inner) London market (Finn, 2003b).

Routes are currently usually tendered individually (with a peak vehicle requirement varying from 1 to 50), although several routes in one area can be tendered at the same time, for contracts that are normally for 5 years with a potential 2-year performance related extension. 15 to 20% of the routes are tendered each year, with contracts coming up for tender every few weeks. Routes, frequencies and operating times, vehicle type and minimum performance standard are pre-determined by TfL. Potential bidders having fulfilled a pre-qualification phase are notified of all upcoming tendering opportunities and asked to confirm whether they want to be issued with the tender documentation on a route by route basis. The bidders then produce a schedule to deliver the service specified and a price for delivering that service. Contract evaluation is based on best value for money, taking quality and safety into account. Various criteria are taken into account besides the price, such as the ability of the candidate to deliver the services requested, etc. Clarification meetings and negotiations may be conducted during the tender evaluation process. Contract payments are related to the distance operated and the reliability of the service. Extensive quality measurements are carried out. An additional incentive linked to driving quality and vehicle presentation (internal and external) is added, based upon inspections and mystery travellers survey. The revenue risk remains with TfL (TfL, 2015).

As to the possibility for the operators to exhibit entrepreneurial orientation¹⁵⁹ (EO), we can observe that essentially none of its dimensions apply to this type of contracting. An extremely limited level of EO was made possible when net-cost contracts had been introduced (for dogmatic reasons), but this was quickly reversed, as it only resulted in unbalanced contracts (see also the discussion on balanced contracts in Section 8.2.2).

[158] Although more factors have influenced this state of affairs.

[159] This concept is introduced in Part II.

All-in-all, the London case shows that, despite some variations in time due to political dogma (from gross-cost to net-cost, to gross-cost), this model remained stable throughout the whole period and even became recognized as one of the main international references of good public transport governance, and copied internationally.

9.1.2 Scandinavia

With the risk of some oversimplification, one can state that similar institutional frameworks are in place in Denmark, Sweden and Norway. This is summarised in Table 15. The main transformations that lead to the current practices in Copenhagen are summarised by Van de Velde (1997e; 2016c). The Swedish reforms are presented for examples by Alexandersson (2010) and information on the Norwegian cases can be found in Aarhaug et al. (2018) or in Solli et al. (2015) who also presents explanations for the differences between Norway, Sweden and Denmark.

Table 15 | Scandinavia: institutional themes summary

Theme 0: The right of initiative to create services

- ▶ Public transport services are organised by the transport authority, effectively in monopoly. This principle has been breached by the ‘deregulation’ introduced in Sweden in 2012, however with little effect so far. Furthermore, the deregulated status of the long-distance coaching business causes combinational issues between market-initiative long-distance services and authority-initiated short-distance services, especially in remote, thinly populated areas (Aarhaug and Fearnley, 2016).

Theme 1: The setup of the (transport) authority(ies)

- ▶ Transport authorities usually take the shape of a cooperation between local authorities (region, county and/or municipalities). Various developments can be observed, in line with national reforms of local governments. A broad move towards larger ‘regions’ can be observed in Sweden.

Theme 2: The governance arrangement of the authority

- ▶ The transport authority, in the political sense, has an administrative organ charged with managing the public transport system. This can be constituted by the planning core of the former public operators (as in Copenhagen, Stockholm and Oslo), or by regionally organised public transport bureaus. Some of them are organised as separate organisations, according to private company law, others are simply part of the administration. Slow changes can be observed with the creation or abolition of public transport bureaus in Norway, or with the reinforcement of the public authority part in Sweden above existing public transport planning bureaus. Contracting arrangements hardly exist between authority and bureau.

Theme 3: The division of marketing responsibilities

- ▶ The transport authority is, via its transport planning organ, in charge of public transport service definition and marketing. Operators originally have no service design responsibility. This, however, is challenged by a number of experiments and developments towards contracts that expect from operators that they contribute to service development, in particular during the contract period. This move is most clearly visible in Sweden, but with mixed effects so far.

Theme 4: The type of relationship with the operator(s)

- ▶ Bus operators are usually contracted through competitive tendering, using route-based contracts (individual routes or bundles of routes). Metro and tram services are provided through an in-house operators of the transport authority (Oslo), or competitively tendered (Stockholm, Copenhagen). Few cases maintain direct award for bus services and a few cases of move back to in-house production have been observed in Sweden and Denmark. Regular (smaller) contract renewal leads to relatively quick learning

Theme 5: The assets with a longer lifespan

- ▶ Bus investments fall under the responsibility of contracted operators. Various other arrangements exist for rail-based vehicles.

Theme 2 has led both in Sweden and Norway to quite some debate. The perception of uncontrolled power enjoyed the planners and public transport bureaus, in relation to the actual political representatives at the same level, has even been one of the elements that led to the 2012 reform, which shifted power away from the planning bureaus of the authorities, increasing the power of the political component of the authority (Rye and Wretstrand, 2014; Van de Velde and Wallis, 2013). Further issues lead to academic discussions, such as steering in complex governance settings (Camén et al., 2011; Hansson, 2013; Hrelja et al., 2018) or of the influence of formal versus informal institutions (Hrelja et al., 2017). Similar issues played in Norway. Longva and Osland (2010) analyse the relation between two Norwegian counties and the administrative company responsible for planning and procuring public transport services. They indicate, firstly, challenges for the county administration due to lack of regional administrative competencies in relation to the administrative company, which hampers the county's role as coordinator of policy areas of importance for public transport. Secondly, they conclude that, due to increased transaction costs, the establishment of administrative companies does not seem compatible with contracts relying on net cost solutions with huge scope for operator initiatives (Theme 3). The creation of public transport bureaus in some counties is discussed by further authors, including a later tendency to reintegrate them in the county administration (Leiren, 2014a; 2014b; Haugsbø et al., 2014; Krogstad and Leiren, 2016).

Theme 3 has been a topic for continuing debates, especially in Norway (Norheim et al., 2009) and Sweden, less so in Denmark. The Swedish experience is particularly interesting in this respect. While general practice was to use gross-cost contracts with no commercial responsibility for the operator, the Helsingborg case (as reported in Van de Velde and van Reeve, 1996)¹⁶⁰ constituted a first sign of a search for another type of contract and awarding in Sweden. While its functioning was not entirely without issues (Maasing, 2002; Reiter, 2002), the idea to give parts of the tactical level to the operator, including some part or surrogate of commercial risk remained and spread further in Sweden. Importantly, contracts giving some design freedom to operators and payments based partially or totally on the number of passengers transported (the so-called VBP contracts) started being used in Stockholm (Danielson et al., 2016). Measured against our EO-yardstick, one could say that operators were granted 'some' freedom with respect to the possibility to exhibit innovativeness in service design, and pro-activity and autonomy in service supply. This illustrated a move towards a newer generation of contracts. Coming from shorter gross-cost 3-year contracts in the 1990s, the transport authority of the Stockholm region moved towards longer 5+5 year-contracts including quality incentives in the 2000s and further towards 8+2 years type of VBP contracts after 2011 (Arntzen, 2016). Whether these contracts are successful in reaching an increased customer focus and ridership increases remains, so far, a disputed issue Pyddoke and Lindgren (2018), analysing of the Stockholm contracts, report that compared with gross-cost operators in comparison areas, operators performed better in terms of costs, customer satisfaction, punctuality and cancelled departures, but worse in number of departures and no better in number of passengers. And Vigren and Pyddoke

[160] This case was included in the implementation report provided by the Dutch Ministry to Parliament (Tweede Kamer, 1996, p. 27).

(2019) conclude that they cannot prove that passenger incentive contracts have increased ridership more than traditional gross-cost contracts.

Theme 4 is also the source of some debate. Alexandersson (2010) concluded from his analysis that the introduction of tendering initiated a long period of major restructuring in the industry (leading to private company dominance and concentration even though room remains for smaller firms). He also found a significant effect of first-time tendering on costs, but a smaller effect when looking at the whole period. The question, of course, is whether things are comparable over such a period of time (in particular in relation to the quality improvement reached). While the principle of competitive tendering is not currently fundamentally challenged, the observed cost increases over the past years nevertheless constitute a growing source of concern. (Holmgren, 2013; Vigren, 2016; 2017; Lidestam et al., 2016; Lidestam et al., 2018; Camén and Lidestam, 2016). A few authorities have even moved towards in-house production¹⁶¹.

In short, these Scandinavian cases show questionings and developments at most levels. What looked like a revolution at L2 in Sweden (deregulation) proved, so far, to be an empty shell. But more has happened at L3.1 as authority reforms took place, and also L3.2 as new contracts with an increased incentivisation of the operators are being tried (allowing them to exhibit some of the dimensions of EO). Yet, one clear conclusion as to the future of these institutional arrangements cannot be drawn.

9.1.3 France

The institutional framework in place in French local public transport (as introduced in Part II), bears many similarities with that currently in place in the Netherlands. Essentially, network contracts are submitted to competitive tendering and operators are supposed to play a substantial role in service design, and in bearing the commercial risk of operations (see Table 16). Practice differs in a number of respects with the Netherlands, though.

Few fundamental discussions about the institutional framework could be observed in France over the past decades. Some developments took place, as mentioned in the table, but these remained in the line of existing arrangements (such as the extension of the possibilities for inter-municipal cooperation). Further discussions exist (for example in relation to inter-modality, co-operation between transport authorities), but this too does not fundamentally challenge the framework.

Some researchers, however, point to growing financial issues in public transport, and the need to start considering other approaches. Faivre d'Arcier (2010) warned for the unsustainability of the current trends in term of financial means needed to provide the public transport services. He draws the attention on the stagnating revenues, linking it to the conservatism and limited attractiveness of the networks, and the lack of ambition in term of fare policy, itself made possible by the facility with which public money is made available through the public transport tax (Versement Transport). Despite the fact that negotiations

[161] We are currently involved in a piece of research for the national Swedish knowledge centre for public transport (K2) in which this issue is being investigated.

Table 16 | France: institutional themes summary

Theme 0: The right of initiative to create services

- ▶ Public transport services result from authority initiative.

Theme 1: The setup of the (transport) authority(ies)

- ▶ Numerous forms of cooperation between local authorities exist, facilitated by the very flexible French legal framework for intermunicipal cooperation. Several of these arrangements give access to levying a local tax for subsidising public transport. The gradual extension of this possibility over time has led to an increased level of intermunicipal cooperation.

Theme 2: The governance arrangement of the authority

- ▶ The transport authority is organised within the civil service.

Theme 3: The division of marketing responsibilities

- ▶ Contracts, in particular in the urban areas, are meant to give the commercial risk to the operators. Practice is less clear, as the contracts with the transport operators often tend to be very prescriptive. It is unclear whether much development can be witnessed in this practice.

Theme 4: The type of relationship with the operator(s)

- ▶ The relationship is contractual and results from competitive tendering. Negotiations are always used, giving some degree of freedom to the authority. Several authorities have chosen, in line with the starting principle of the law, for in-house production. An number of authorities have made this choice in recent years (*NB: We are currently involved in a piece of research for the national Swedish knowledge centre for public transport (K2) in which this issue is being investigated*).

Theme 5: The assets with a longer lifespan

- ▶ Assets are usually owned by the transport authority in the urban areas. The situation is more varied in the more rural areas.
-

allow operators, within the tendering procedure, to suggest adaptations of the services, he criticises current practices and suggests relaxing the contractual arrangements (which is Theme 3 in the table) which currently typically include very strict technical specifications in terms of frequency or quality, as he perceives these impose mobilising too high levels of production capacity, which does not encourage operators to optimise costs (using our EO-yardstick, one could say that all dimensions are closed). In his views, this campaigns for transferring a larger share of the tactical level to the operators, as well as introducing new performance-based contracts (Faivre d'Arcier, 2014). In a later paper, Bouf and Faivre d'Arcier (2015) further comment on the typical network tendering used in France, pointing at the complex and costly process this represents for the transport authorities. They observe that the risk-aversity of both the tendering authority and the operators leads to an inflation of details in the contractual arrangements, striving towards 'complete' contracts. In addition, they criticise the opacity of the tendering process resulting from the French principle of *intuitu personae* used when awarding contracts. They find that combining tendering with negotiation leads in the French context to achieving neither efficiency nor performance improvement. Yvrande-Billon (2006); Yvrande-Billon (2009) had already made similar observations, showing that the compulsory usage of competitive tendering in the sector had not led to better performance due to a lack of transparency in the attribution process and limited monitoring capabilities of local authorities. Bouf and Faivre d'Arcier (2015), observing the limited number of competitors present on the market, furthermore the recommend dividing the typically large French urban public transport contracts into smaller units, hoping that this will help to improve cost efficiency.

Let us close this section by mentioning briefly a few more cases of institutional frameworks in which competitive tendering is playing a role or a growing role.

The interesting but extremely complex case of Germany can be named as urban public transport remains dominated by municipal operators, but competitive tendering has come to play a growing role over the past decade. Several experiences of route bundle-based competitive tendering can be observed in the regions of Frankfurt, Mannheim, Munich and Hamburg (Beck, 2011). More or less akin to the contractual arrangements used in London, these also led to performance improvements (reduced average costs and increased quality). Further details, also in relation to the hybrid legal environment in Germany (Karl, 2018), are provided by Beck (2012a).

In a similar vein, the growing usage of competitive tendering by the Belgian public operators “De Lijn” (Flanders) and “TEC” (Wallonia) can also be named. The public operators have in this case themselves a public service contract with their respective governments and are charged with subcontracting a substantial share—though not all—of their services. Here we see the usage of small gross-costs contracts replacing former negotiated (historical) contracts, with little change compared to the former contracts, except for the addition of improved quality management and monitoring clauses, while the rest of the institutional framework is maintained without much change. Here too, operators have no freedom to innovate in service.

Switzerland provides a different note. Its institutional framework for public transport is based on a large degree of stability, production by public monopolies and coordination between all suppliers. While the main tenets of this model remain unchanged over the past years, we see that competitive tendering is playing an increasing role. It has been accommodated into the legal framework at L2.1, but it appears that regulations at L2.2 gives it more the role of a ‘threat’ than a systematic role in the provision of services. We can see this, for example, in the Zurich area. Filippini et al. (2015) report that relatively high levels of cost efficiency and no significant differences between competitive tendering and the more traditional performance-based negotiations. They suggest that the (credible) threat of competitive tendering may have a disciplining effect on negotiation¹⁶². Wegelin (2018) comes to a similar conclusion, and Schaaffkamp (2018) observes that the lack of competitive pressure does not lead to a reduced focus on passengers and innovations and lower levels of efficiency. He explains this by pointing to the fact the Swiss institutional framework creates conditions that favour stable, intrinsic motivation on the part of management and employees in public transport. He adds that this is contingent upon the existence of several elements: direct democracy, decision-making and budgeting at local level, together with non-commercial, local companies directly involved in the design of the public transport system, as well as a confidence-based management culture both with respect to and within the company (Schaaffkamp, 2018). A further analysis would be needed, but this seems

[162] They report that this is also supported by the evidence of cost convergence between competitive tendering and negotiated contracting in Australia (Hensher and Stanley, 2010).

to indicate that operators have been allocated at least some of the freedoms linked to our definition of EO.

Australia, to conclude this section, also introduced competitive tendering over the last decades. While it is out of scope for this thesis to analyse the (interesting) Australian case in detail, we would like to summarise some points from a general review of the Australian experience with competitive tendering provided by Wallis (2016). Interestingly, he attempts with his paper to focus also on demand and service impacts of competition, besides only cost impacts. His case study review leads him to conclude that competitive tendering, when replacing authority-owned monopolies will typically have three impacts. It will affect service levels, quality and customer orientation by increasing the quantity of service (cost savings of about 30% being partially reinvested in providing additional services). It will lead to network redesign (contract permitting and if appropriate incentives are given) so as to better meet market needs and will generate additional patronage without increasing service. It will also enhance quality, following various standards, targets, incentives/penalties and other contractual arrangements. He also recommends to carefully design incentive schemes, appropriately balancing potentially conflicting objectives.

These findings are very much in line with what can be observed in the Netherlands, although a further analysis would be needed to judge in more detail. Interestingly, the large experience with competitive tendering in Australia has also led to a fair amount of criticism in relation to its compulsory usage. In particular, Hensher c.s. made numerous comments on the relevance of negotiated performance-based contracts (PBC), as alternative to an obligation to use competitive tendering (Hensher and Stanley, 2003; Hensher and Houghton, 2004; Hensher and Wallis, 2005; Stanley and Hensher, 2008; Hensher and Stanley, 2010; Hensher et al., 2013). One important insight provided, is the finding that PBCs are 'as good as' competitive tendering upon the condition that the incumbent is not public (Hensher, 2015a). In other words, competitive tendering is useful when transitioning from a traditional public model to private provision, but less so afterwards. Hensher (2015a) concludes by warning against the presumption that competitive tendering is the natural way forward, he notes that while competitive tendering suggests transparency, "details of tender review and assessment are rarely published and claims of cost savings have been known to be fabricated". He then suggests that "if an incumbent has built up a strong trusting partnership with the regulator (with arm's-length commercial and legal obligations), and is subject to stringent benchmarked obligation, then the outcome is likely to deliver (in the long run) better value for money to society". Importantly, Hensher (2015a) states that, for this to hold, specific underlying conditions need to be realised: a mature market of competent private operators and a regulator that "has the skills to ensure that all alternative procurement processes can be undertaken efficiently, and that suitable monitoring of performance is in place as a credible threat to non-compliance under the terms of a contract". Wallis and Bray (2014) stress, for both competitive tendering and negotiations, the importance of government having sufficient skills and information to enable good negotiation and the importance of contracts specifying service and quality requirements while providing incentives and flexibility for operators to optimise services to ensure best value for money for governments.

The Netherlands compared to other countries

This section summarises the main points from our observations on the Netherlands based on Chapter 8. This is done in a similar fashion as for the cases presented above (see Table 17). Our findings are then presented and commented following the list of themes introduced in Table 13. This is then for each theme complemented where relevant with comments on differences and similarities with other cases or countries observed.

Table 17 | The Netherlands: institutional themes summary

Theme 0: The right of initiative to create services

- ▶ Public transport services result from authority initiative since 2001. The institutional framework based upon market initiative that was present until 2000 has been abolished with the reform.

Theme 1: The setup of the (transport) authority(ies)

- ▶ The reform put in place in 2001 transferred the responsibility for public transport to regional and local authorities. Their number was, in the course of the years that followed, strongly reduced to only the Provinces and two urban transport regions. Regional urban authorities (Stadsregio's) were abolished and local authorities lost their responsibilities for public transport, except where the Provinces agreed to delegate responsibilities (as, for example, in Almere).

Theme 2: The governance arrangement of the authority

- ▶ The transport authority is organised within the civil service, even where transport authorities have decided to cooperate with the creation of a public transport bureau (as in Groningen-Drenthe).

Theme 3: The division of marketing responsibilities

- ▶ The reform was fundamentally meant to introduce contractual arrangements where the operators would be responsible for service design. The path to such type of contractual arrangements proved difficult. A variety of arrangements currently result. Some of which are close to the original ideal.

Theme 4: The type of relationship with the operator(s)

- ▶ The relationship is contractual and results from competitive tendering. Negotiations were not originally not allowed and are not yet used although currently allowed. Contrary to the original legal arrangements, direct award to in-house operators has become legal in the three main urban areas, this as an unexpected result of it being accepted at the European level.

Theme 5: The assets with a longer lifespan

- ▶ Buses are owned by the operators in tendered areas. Various arrangements exist in the urban areas (which includes trams and metros) where tendering is not used.
-

Theme 0: The right of initiative to create services

The institutional choice made with the enactment of the Passenger Transport Act 2000 constituted a radical departure from the pre-existing institutional framework. This is explained and commented upon in a paper sporting the provocative title “Privatised central planning in public transport”. That paper, which was published a few years after the implementation of the reform (Van de Velde, 2006)¹⁶³, attempted to reconstitute the main steps of the decision. Let us summarise some of the main points. The new institutional

[163] This paper was written five years after the enactment of the new law for a special issue of the Dutch professional economist magazine ‘ESB’ edited by professor John Groenewegen and reviewing the introduction of competition in various sectors of the Dutch economy.

framework replaced the old market initiative framework that had become moribund from the point of view of private entrepreneurship. A new and radically opposed authority initiative framework resulted. While abolishing the principle of free market competition, it did introduce a competitive tendering obligation, giving the new framework its 'competition' character. Alternatives to competitive tendering (as explained in Section 8.1.2) have hardly been researched in the policy-making process. Reforming the existing market initiative framework would have constituted a much simpler reform, necessitating 'only' the abolition of revision of the numerous rules (a L2.2 reform) that had been developed in the course of time (and that some would have seen as the result of regulatory capture) and that had effectively rendered market initiative impossible under the old framework. We indicated in the paper that such a reform would probably have been more fitting with the psychology of actors. The operators, in particular, wished at the time to be freed from the stiffening oversight of local politicians and civil servants who dictated what could and could not be produced. It would also have fitted with the location of knowledge, which was at the time more on the side of the operators than on the side of the authorities. Yet, a much more fundamental reform was put on the track, abolishing the market initiative principle from the legislation and introducing authority initiative instead (a L2.1 reform). One of the major elements that probably contributed to this choice was the fact that the Committee charged with the formulation of the proposals, had observed the recently and dogmatically deregulated bus market in Great Britain. That competition framework was considered too radical, which contributed to its dismissal in the consensus-minded Netherlands. However, as the spirit of times was in favour of competition, another competition-based instrument became favourite: competitive tendering. This was seen as a more 'orderly' form of competition, more in tune with the mindset of the sector.

As a result, the institutional options that laid on the table were thus to a large extent simplified to two scenarios in the political and public debates that preceded the adoption of the new legislation: 'status quo' versus 'competitive tendering'. The second option was chosen, the deregulation option was not considered. Note also that vision exposed above fits with theoretical economic perspectives that see competitive tendering and free markets as different 'gradations' in market competition. It does not perceive both arrangements as fundamentally differently, as we do in our approach.

Overall the influence of academic thinking on the reform was limited. The suggestion to combine both frameworks (small-batch tendering in urban areas, deregulation elsewhere) as suggested by Gwilliam (1992) in a paper published in Dutch at the beginning of the discussions conducted by the Brokx Committee, was not endorsed. The academic review commissioned by the Brokx Committee in 1994 had expressed doubts about the competitive tendering proposal (Commissie Brokx Openbaar Vervoer, 1994). One argument was related to the uncertain availability of the required knowledge on the side of the authority. Suggestions for competition on the road and some level of deregulation were made, as well as a form of benchmarked regional monopolies. Note that, later on, the second evaluation of the Passenger Transport Act 2000 (Tweede Kamer, 2006) would also state that more space ought to be made for market initiative in the law, via a clearer and wider possibility for the exemption to the prohibition of providing services without concession. Related to this topic, we drew a tentative conclusion in 2006 on the basis of the observations availa-

ble¹⁶⁴ and found that while competitive tendering seemed adequate to increase productive and cost efficiency, it was probably less adequate to develop entrepreneurship in the passenger transport market (Van de Velde, 2006). Linking this with the incongruence of the institutional framework chosen for public transport in the Netherlands with the institutional framework of 'neighbouring' transport modes and markets, we formulated a warning and a plea for considering a regime that would be based on more autonomous market entry such as to increase congruence and allow a longer-term approach and perspective for transport operators (see also Part IV and V).

Other countries had at the time successfully introduced competitive tendering, in particular Scandinavia and London, and substantial cost savings and performance improvements had resulted. This appears aligned with the proposal of the Brokx Committee. However, the purpose (cost efficiency) and modality (tendering via the authority-owned operators) of those frameworks were radically different from the purpose (innovation) and modality (by the authorities) of what was proposed for the Netherlands. Importantly, the London/Scandinavian model would have meant that the Dutch municipal operators would have become main actors in the competition regime, having to organise the gradual sub-contracting of their services. Such an option appeared unacceptable in view of their reputation at the time. The French approach to tendering (concession contract awarded by the authority) proved better fitting, even if its specific results were less spectacular and even if local observers had warned for market concentration issues and the need for expertise on the side of the authority for such a framework to function (Van de Velde and Westeneng, 1994; van de Velde et al., 1996). Note the similarity with some of the remarks of the academic review commissioned by the Brokx Committee.

A remark should be made in relation to the choice for 'tendering' (in Dutch *aanbesteding*) that resulted from the proposal of the Brokx Committee (see Section 8.1.2). This advice followed upon the work carried out by the Houben Committee. That Committee also considered using *aanbestedingen*, but not in the sense of full-blown universal 'competitive tendering' as ultimately suggested by the Brokx Committee. The Houben Committee even stated that competitive tendering had too many disadvantages, even though they reflected on the idea of using it only on lines that were deemed too inefficient and for which competitive tendering could deliver more good than harm. Note the similarity of this proposal with the regime currently implemented in New Zealand. Note also the similarity with the negotiated performance-based contracts with actionable benchmarking as advocated by Hensher (2015a) for Australia. Finally, note also that European foresaw no competitive tendering obligations for public transport at the time of the Brokx Committee, this was a mere expectation (as explained in Section 8.1.2).

[164] The publication year was situated in a period that witnessed growing criticisms in the Netherlands on the potential benefits of introducing competition in sectors that used to be fully controlled by the public sector (Groenewegen, 2006). Janssen (2006), in the same issue of the journal, linked this waning support for competition amongst politicians and the general public to the inadequate design and implementation of some of the reforms, the cause of which would be located in the lack of proper knowledge of economic theories on the side of policy makers and civil servants and in hastily formulated and ill-founded expert reports that had led them to exaggerated expectations as to the effects of the introduction of competition.

The choice for the competitive tendering was ultimately very much linked to the spirit of times—neo-liberalism and NPM—without much explicit reference to such economic or public management theories in the rhetoric that led to its adoption, nor was it based on a thorough analysis of the existing regulatory framework and its potential. Rather, it was the result of a pragmatic consensus between stakeholders¹⁶⁵, combining a desire for stability and integration (in line with the Houben Committee's advice) with the spirit of times that called for competition. Yet, none of the other countries reviewed implemented such a fundamental change in institutional framework as the Netherlands, switching from one family to the other.

Theme 1: The setup of the (transport) authority(ies)

The reform put in place in 2001 transferred the responsibility for public transport from the state and larger municipalities to regional and local authorities. Initially, all authorities responsible for public transport organised their duties themselves, without cooperation with other authorities, nor delegation to other local authorities. This changed later on, both on a voluntary basis and as a result of changes at L2.1 in the Passenger Transport Act 2000. Opposite movements could be observed. Few authorities chose to move to a cooperative setting. The cooperation between the provinces of Groningen and Drenthe, together with the city of Groningen is the only example of institutionalised authority cooperation in the Netherlands. They created a common public transport bureau in 2009 charged with public transport governance in their areas, which includes preparing the public transport policy, carrying out the tasks foreseen by the Passenger Transport Act 2000. While the law had reduced the number of urban transport authorities after 2006, some decided re-delegate their new responsibilities to the authority that was originally responsible. The Province of Flevoland delegated its responsibilities for the cities of Almere and Lelystad to the corresponding municipalities. Later a more informal type of inter-authority cooperation also appeared, focussing on the tactical level. This was realised between the provinces of Gelderland and Overijssel via the creation of the *OV Cluster Oost*. While first developing as a soft tactical level cooperation on marketing in 2009, it was joined by the Province of Flevoland in 2011 with as main aim to realise more unity between the various concession areas of the participating authorities (one fare, one branding and better connections across concession boundaries). This has now led to a coordinated organisation of concession tendering. In sum, three main forms of transport authorities resulted in the Netherlands. The first is the province, responsible for various policy issues besides public transport. The second is the city region, as municipal cooperation covering several policy issues besides public transport. The third is the transport region, which replaced the city region and was limited to public transport only (Veeneman and Van de Velde, 2014).

Compared to the international experience reviewed, we can observe that Dutch transport authorities tend to be less than in other countries based on institutionalised cooperation between authorities (L3.1), this can be related to their size. Furthermore, one peculiarity of Dutch local government is the near absence of local taxation. The budgets of local authorities (Provinces and municipalities) originate from transfers from central govern-

[165] The chairman of the Brokx Committee was apparently known for its ability to generate compromises.

ment, which is a major difference with the situation in France or Scandinavia. As discussed earlier, this limits the public transport policy autonomy at the local level and potentially introduces perverse incentives (of the type ‘spend the budget or lose it’). Although this is now reduced due to the current apportionment rules for national transfers, this resulted in Dutch authorities choosing for competitive tendering awarding models that would maximise public transport supply for the available budget. Authorities in other countries that had to ‘earn’ their budget from local taxation, were more inclined to choose a more cost-optimising or cost-minimising approach (see Theme 3 and 4).

Theme 2: The governance arrangement of the authority

The three models presented above lead to differences in the actual governance of public transport policy. Direct political influence is larger in the provinces. The other two examples have a more staged governance model, putting the elected officials at a larger distance from the decision-making process (Veeneman and Van de Velde, 2014). The creation and then abolition of the city regions by central government (L2.1 changes) this also had a direct impact upon the governance of the public transport. As indicated by Veeneman and Van de Velde (2014) all three models presented above have shown advantages and disadvantages: “direct political control in the first model allowed speedy and direct implementation of the democratic priorities set by the representative legislative bodies. This could also be seen as a disadvantage, as these priorities sometime seem to ignore the reality and complexity of public transport provision. Civil branches of government have shown to be more able to include the context of the operators and as such operational reality in their considerations. In the latter two models, political influence is less direct, though not necessarily less present. It has to stay on a higher level of abstraction, with more room for the civil branch and operator to choose fitting operationalization for the services.” With hindsight, one could add that the city region or transport region configuration can also have, when compared to the unitary provincial configuration, the disadvantage of requiring lengthier internal negotiations between stakeholders before being able to reach consensus.

Another important aspect of governance are the organisational choices made by the transport authority at this level (L3.1). Typically, the authorities responsible for public transport in the Netherlands organise their public transport responsibility using their own administration and civil servants. These are located ‘inside’ the provincial administration buildings. Cooperation-based authorities, with their staff located in separate buildings from those of their constituent administrations, are setup according to the law on inter-authority cooperation. This choice is similar to the organisation of French transport authorities, but different from the many public transport bureaux present in Scandinavia or Germany, or the organisational form chosen by TfL in London. There separate organisations are created to carry professional tasks requiring specific public transport expertise (demand forecasting, supply planning, marketing, financing, etc.) Such organisations are, in particular in Germany but also in Sweden, often organised as separate daughter organisations set-up as private law companies owned by the cooperating authorities. The public transport bureau in Groningen-Drenthe is the only authority public transport organisation in the Netherlands that resembles that model, although it is not organised as a company. Obviously, the choice that is often made in Scandinavia and Germany is intimately linked to the tasks attributed

to such organisation in those countries. The fact that it is charged with marketing tasks and has to carry the revenue risk of the contracted operations is indeed the prime reason for such choice.

Theme 3: The division of marketing responsibilities

The chosen reform was meant to introduce contractual arrangements where operators would be responsible for the tactical level (service design, marketing), such as to generate innovation and customer focus. As discussed at length in Section 8.2, the path to such contractual arrangements proved difficult and a variety of arrangements resulted. From the point of view of our EO-yardstick, the intended model, at least in its pure form, meant to generate the possibility for operators to exhibit a number of the EO dimensions (innovativeness, risk-taking, a level of autonomy limited to the contractual clauses).

It is in this context interesting to note that the relative neutrality of competitive tendering with respect of the width of policy space it gives to transport authorities at the strategic (and tactical level if they so wish) was often not clearly seen. Tendering is easily seen in political debates as leading to the closing of weak lines at the expense of the social function of public transport. We have been able to observe such clear misconceptions about the tendering instrument over and over again, in discussions with politicians, professionals, in the Netherlands but also in other countries.

As to the choice made in the Netherlands, ultimately few authorities chose for gross-cost contracts with pre-determined services. As a matter of fact, most contracts are currently net-cost contracts with at least some level of service design freedom given to the operator, at some point in the awarding procedure or during operations, or both. We also observed a searching behaviour of authorities, with changing choices in the course of time and depending upon their past experience with more or less successful contracting and tendering approaches (Van de Velde et al., 2008c; Van de Velde and Eerdman, 2013). The resulting picture is in several respects close, but not equal or even moving away from the original ideal; we see for example more recently a tendency towards a hybrid governance of the relationship between operator and authority.

One important remark should be made. The choice for allocating the tactical function to the operator, while akin to the principle (less to the practice) adopted in French urban areas, was very much at odds with the dominant allocation of marketing responsibilities elsewhere in Europe at the time (small-batch gross-cost contract tendering with the tendering body bearing all tactical functions). The Passenger Transport Act 2000 did however allow for this alternative. Tendering only the operational level was even mentioned in policy documents as a possible first step for authorities to get acquainted with the new framework. The implementation note produced by the ministry did, however, also recommend moving towards including tactical development incentives in the tendering as quickly as possible (Tweede Kamer, 1996, p. 26). Clearly, small-batch route tendering did not fit within the vision delineated by the ministry.

Obvious candidates for an easy introduction of a route tendering model akin to the London/Scandinavian did however exist. The Province of North-Brabant, differently from the other provinces, owned a public transport company jointly with municipalities in the

province and the national VSN group. This company (BBA) could easily have become a central planning body owned by the Province, charged with a gradual sub-contracting of its services. This would have resulted in an institutional configuration that would have been almost similar to what can be observed in Scandinavian countries, some German areas or in neighbouring Flanders. However, that option was not understood to be a feasible, or was not perceived to be a promising option¹⁶⁶. Other obvious candidates for such a regime would have been the municipal operators in the main cities (Amsterdam, Rotterdam, The Hague). Out of these, only the Rotterdam operator took steps in this direction (this came to be known as the “*Rotterdam’s Model*”). Yet, strong internal dissensions between operator (RET) and authority (*Stadsregio Rotterdam*), and the later merger of the authority of Rotterdam with that in The Hague, led to abandoning that idea, while personal preferences of the civil servants and politicians involved have also contributed to this development. See Veeneman (2010) for a further discussion on governance options in those three main cities.

In relation to this, one should also take into account that the reform discussions had started with the observation, or conviction, that existing publicly owned transport operators were inefficient and did not deliver according to expectations. Consequently, ‘teaching them a lesson’ or even ‘getting rid of them’ may have become an implicit motivation for some policymakers. Following this view, it is not surprising that a move towards a ‘Scandinavian’ model, which would have maintained these operators as central planners and key players, was not perceived as the way to go; this despite wide positive experience with such arrangements elsewhere in Europe and ample reporting about it (Van de Velde, 1992b; 1995d; Van de Velde and van Reeve, 1996). Yet, all public transport knowledge was, at the time, located within such operators, not on the side of the authorities. This was not perceived or was not considered important enough to choose for a transitional path that would build upon that deficient knowledge, where located, rather than choosing for a completely different path that would give local authorities with no intrinsic knowledge of the sector a central role.

Another attitude has also played a role in this respect. This can be seen when considering the point of view of the directors and management of authority-owned operators. For some, the perspective of gradually becoming the directors of the authority’s public transport planning bureau—as would have resulted from implementing the Scandinavian model—might, with the spirit of times in mind, have looked personally less appealing than the perspective of becoming ‘entrepreneurs’ in a competitive public transport market. What they probably did not perceive at the time, was that tendering would lead to maintaining and even increasing regulatory control by authorities. Rather than having authorities stand at the side-line, subsidising services designed by operators, the new framework would give authorities a more active role in defining and ordering services.

As to the other countries, the Scandinavian experience shows that some movement towards transferring some marketing responsibilities from the authority to the operator (thus allowing some contractually framed EO-behaviour) can be observed as various discussions

[166] We had the opportunity to present this option both to the company and to the responsible politician at the provincial level.

and initiatives have existed for several years. Yet, radical moves are rare and the loss of power for the planners that such a move would entail can be suggested as one explanation. The Swedish move towards VBP contracts is one main exception, but it has so far led to rather mixed results. A further study would be required to analyse the coherence between the intended effect and the contracting arrangements implemented (L3.2) and resulting interactions (L4)¹⁶⁷. The French case would warrant a deeper analysis as well. Case information has so far revealed that the low level of cost-coverage (itself partly dependent upon politically determined fare policies) in combination with the risk-averse stance adopted by the contracting parties (Bouf and Faivre d'Arcier, 2015), but also the contracting traditions and the institutional environment (L2), may make a move towards a more 'Dutch' approach (in the sense of being more functional and/or more relational) difficult to realise. As a result, while French operators are meant to generate innovation within the contractual context, they effectively appear to have hardly any space for autonomous action, and thus score low on our EO-yardstick.

Theme 4: The type of relationship with the operator(s)

Competitive tendering was implemented in 2001 and, while many detail issues linked to its implementation had been discussed at length, the fundamental issue of designing corresponding contracting and awarding procedures had not yet been solved. This despite earlier warnings linked to the necessary knowledge and questionable adequacy of attributing the duty of contracting and awarding to authorities with no intrinsic knowledge of the sector (Commissie Brokx Openbaar Vervoer, 1994; Van de Velde and Veeneman, 1995). The 'implementation note' led to the creation of a Centre for Innovation in Public Transport ("*Centrum Vernieuwing Openbaar Vervoer*"), but the concrete way to tender public transport services at the tactical level such as to generate more entrepreneurship and innovation as wished for, remained fuzzy. This led to a long learning process, as discussed at length in Section 8.2. One could interpret this difficulty as a consequence of a fundamental paradox following from the chosen framework in relation to the intention of the reform: the authority was not satisfied with the result of its prior regulatory interventions; it wanted operators to be more innovative and more customer focussed; it then chose to use competitive tendering as a means to select the best operators; but how then could it be equipped to make such choice if it had been that bad at regulating the sector?

The choice of awarding mechanism is an issue that is located at the borderline between L2 and L3. It is partly rooted in the choice space given to authorities by legislation (European and national at L2.1) and by further implementation regulations linked to that legislation (for example the *Besluit Personenvervoer 2000*). The ministry, based on an interpretation included in the implementation note (Ministerie van Verkeer en Waterstaat, 1996, p. 60-61) made a choice essentially against the possibility of using negotiations within competitive tendering of public transport services (this was a decision codified at L2.2). This was also seen to be in the interest of preventing corruption, but European texts did not force this choice. Note also that this choice was very much against all practices elsewhere in Europe, both for network tendering—as in France where negotiations are considered es-

[167] Preliminary interviews indicate that inconsistencies appear to be present.

sential in such contract awarding—and for route tendering as almost all cases showed. This decision contributed to the development of multi-criteria awarding models without negotiation, as reviewed in Section 8.2. It is difficult to estimate the true impact of this choice, but our observations lead us to believe that the absence of negotiation after bid submission has been one of the factors that has led to the over-specification phenomenon discussed earlier. In the meantime, changes at L2.1 resulting from EU Regulation 1370/2007 and changes in EU procurement directives, make that negotiations are now in principle also allowed in the Netherlands; practice has not yet followed. Note that this issue has been much less present in other countries. Either because competitive tendering was not meant to solve such complex issues. Tendering in the Scandinavian or London model is much simpler, and negotiations are allowed anyway. Tendering in France is, however, complex as in the Netherlands, but the principles used in French law allow for much more negotiations and flexibility on the side of the tendering authorities (see above on France).

The level of expertise of authorities in contract formulation and management (monitoring, enforcement, partnership) represent main challenges in the approach chosen in the Netherlands, much more so than in ‘simpler’ contracting approaches such as that used in incentivised gross-cost route tendering (such as in London or large parts of Scandinavia) (Van de Velde and Savelberg, 2016; see also in this context Nash and Wolański, 2010; and earlier Domenach, 1987). The knowledge issue was evoked on several occasions earlier in this discussion. As far as the contracting and awarding discussion is concerned, we have been able to observe a major distinction between the route-based and the network-based contracting practice. Route-based contracting, as extensively exemplified by the Scandinavian and London practices, allows for quick learning by the tendering authority as overlapping short contracting cycles allow for continuous improvement in contracting. Demands placed on operators in the context of such bidding are limited. This is usually limited to the cost side, which they ought to be able to estimate for themselves without problem. With experience, tendering authorities tend to refine the quality management regime included in such contracting (the case of Copenhagen is probable the best example). This should, for success, be conducted with an eye on a parallel development of skills on the side of both the authority and the pool of potential operators. Network-based contracting, as exemplified by the French and Dutch case, are not in general conducive to the build-up of contracting competence on the side of the transport authority, unless the authority in question has numerous networks to put out to tender. Knowledge is easily lost after a tendering round as the next one may not come up before ten years. As a result, knowledge has to come from outside the authority, which in practice means hiring consultants and managing another competitive tendering issue and contractual interface between the authority and the consultant. The knowledge build-up has then to be realised on the side of the consultancy bureaus, themselves competing for missions for transport authorities. The outcome of this process will obviously depend on many factors, such as the size of those markets, the pool of consultants and the professionalism with which their services is tendered. Note that the knowledge issue is also present on the side of the operators with a prominent chicken-and-egg issue: knowledge will only be acquired and kept if it is requested by the authority or needed to win contracts. This has implications for the transition from one type of contracting approach (gross-cost) to another (net-cost). The current lack of success of the recent Swedish move towards VBP contracts might be explained by this. There is also an issue of understanding, linked to the different ‘worlds’ of the authority’s civil servants

(political and social focus) and operators (commercial and profit focus) that needs to be bridged. Finally, the knowledge issue is also present within organisations, both authorities and operators. We have been able to observe that the departments and persons involved in writing the tendering documents on the side of the tendering authority are not necessarily the same as those involved in later contract monitoring. Similarly, the bidding team¹⁶⁸ on the side of the operator is usually not the concession manager. This situation can (and does often) lead to misconceptions in practice about the purpose and content of contracts.

Numerous other issues could be named in relation to contracts and analyses related to this can be found in some countries more than others, depending on the availability of sources. It is out of our scope to engage into deep analyses of these issues. Contracting standardisation has been suggested in several countries (for example in Sweden and the Netherlands, earlier on also in France). The *Beter Bestek* project developed in the Netherlands constituted one example of such an endeavour (van Kooij et al., 2009; Van de Velde and Eerdman, 2013). Yet, experience shows that whole contracts are usually difficult to recycle between authorities as many circumstances differ. The proper calibration of contractual incentives is another issue leading to debate between professionals (see also Veeneman et al., 2014; Niaounakis et al., 2016; Mouwen and van Ommeren, 2016; Pyddoke and Lindgren, 2018; Gómez-Lobo and Briones, 2013; Hensher et al., 2016), as well as the proper fit between awarding criteria and the outcomes desired by the authorities. Relational contracting and the establishment of trusting partnership is yet another main avenue of thought (Hensher and Houghton, 2005; Stanley and Van de Velde, 2008; Hensher, 2015a). From our observations, professional contract management is another at least as important an issue as that of contract content, pointing to the difference that often exists between text (L3.2) and practice (L4).

Theme 5: The assets with a longer lifespan

The Dutch tendering practice for bus contracts requires bus operators to provide the necessary vehicles, this has proved to be unproblematic. Contract length, now often ten years, is currently close to the amortisation period of such vehicles. It is different from the French practice in urban areas where the authority is usually the owner of all assets, which allows for using shorter contract periods. The issue is also often more important here as fixed infrastructures (trams, metros) are usually involved. Route contracts, as used in London or Copenhagen, have contract lengths that are shorter than the amortisation period. This is made possible by organising regular tendering opportunities, thus avoiding stranding assets. Note also that the transition to electric traction may require different arrangements in the future and practices in various countries show a similar questioning.

[168] Note that this is sometimes contracted out, potentially amplifying the problem mentioned here.

10 Conclusions

The main purpose of this Part of the thesis was to find out how public transport institutional frameworks that are based on the usage of competitive tendering have fared since their introduction over the course of the last decades. The experience of the Netherlands, with the introduction of functional tendering in public transport, constituted the main focal point of this Part of the thesis.

We observed in the Netherlands a major shift from an institutional framework based on market-initiative that was essentially ‘dead’ toward an institutional framework based on authority-initiative with competitive tendering obligations. One main policy intention with this reform was to stimulate innovation and customer orientation, entrepreneurial characteristics that were deemed lacking in the practice of the old framework. Reaching this goal, surprisingly perhaps in view of the institutional components of the former framework, went essentially through *abolishing* the possibility of autonomous market entry (which can be seen as the abolition of competition in the sense of Part IV) in order to *introduce* competition through competitive tendering. Note that in the political discourse, this was clearly presented as the *introduction* of competition, not as its abolition. The operators, though, were effectively stripped of the possibility they in principle had in the former framework to exhibit autonomous, pro-active, innovative, risk-taking, competitive aggressiveness; all behavioural characteristics constituting an entrepreneurial orientation. Indeed, the former framework, through all regulations (L2.2) that had developed, created barriers that made it difficult or futile for operators to exhibit such behaviour, leading us to characterise it as ‘dead’ from the point of view of private entrepreneurship. Yet, removing such barriers through a deregulation would have constituted a simpler institutional step compared to a full legal overhaul and change of institutional framework family at L2.1. Furthermore, all public transport marketing knowledge was at the time located on the side of the operators (differently from the situation in Scandinavia, for example) and some entrepreneurial spirit was visible too¹⁶⁹. This, arguably, constituted a reasonable basis for reviving the market initiative framework. A different reform path was chosen though. Centrally-led arrangements were introduced at the level of regional transport authorities: competitively tendered exclusive rights under concession contracts meant to incentivise operators to be innovative and customer-oriented.

[169] The autonomous initiative and entry of *Lovers Rail* on the Amsterdam-IJmuiden railway line was a prime example. It constituted the last concrete case of autonomous market entry under the former framework. The start of a few private express coaches that had found some market gaps left open by the market regulation constituted further examples (Rotterdam Kralingse Zoom – Dordrecht, Enschede – Groningen, for example). One could also mention the development of the Interliner express coach services by the national bus company (VSN) or the FRED-initiative (that could ultimately not be realized) for a network of motorway coaches.

We have described in detail the path that led to the adoption of a new institutional framework at L2.1 in the Netherlands, commenting on how the competition idea entered the debate, and commenting on the functional approach to tendering that was being advocated. We have shown that the path to realising functional tendering was difficult, with trial-and-error, with contracting approaches evolving back and forth, sometimes in opposite directions in relation to the stated functional tendering ideal. We have shown that factual, informational and behavioural barriers have contributed to this. Feedback from L4 to L3, or from L3 to L2 were mentioned. We have observed a move towards hybrid arrangements, away from the pure ideal, with relational contracting gaining ground. This suggests that the Dutch tendering model has now ‘matured’ (Veeneman, 2018). We suggested further ideas that could help alleviating the perceived lack of flexibility and innovation in contracts. Finally, we also summarised the limited available quantitative evidence about the consequences of the reform and commented upon recent developments.

To widen our understanding of the Dutch case and the diversity of arrangements observed in Part II, we explored briefly how institutional frameworks based on competitive tendering have fared during the last few decades in a few other countries. The case of London and Scandinavia (Denmark, Norway and Sweden) illustrated route-based contracting approaches while the case of France illustrated the network-based contracting approach in complement to the Dutch case discussed in Chapter 8. A few other cases were also mentioned.

We distinguished six main themes to compare those experiences in a structured way, attempting to discern whether pattern similarities could be observed. A number of concluding observations can be drawn from this exercise:

- ▶ Theme 0: The right of initiative to create services: The Dutch case, in its shift of institutional framework family, appears exceptional in relation to the other cases observed. Those have remained within their starting family during the period studied.
- ▶ Theme 1: The setup of the (transport) authority(ies): The formal institutions (legal environment, L2) at the national level are obviously major determinants for the institutional arrangements chosen at the local level (L3.1). We observe a variety of arrangements, both in the Netherlands and in other countries. Local authority cooperation plays an important role here but differently from country to country, depending on the L2 environment and depending on their size.
- ▶ Theme 2: The governance arrangement of the authority: The main difference observed is whether parts of the authority are organised in the shape of a commercial company. This is logically more often the case when the authority retains the commercial risk and carries the full marketing function. While some Dutch authorities choose for bearing these, the company model has not been chosen. We see also that the company model is subject to change and abolition in the Swedish and Norwegian cases, as it is located in the midst of a power struggle between the political part of the authority and the professional part of the authority (the planners).
- ▶ Theme 3: The division of marketing responsibilities: The clear choice for functional tendering taken in the Netherlands is radically different from what we observe in the other countries reviewed. France does bear some resemblance, but this appears to be more in principle than in widespread practice. Interestingly, Sweden is slowly moving

from—to put it simply—the London/Scandinavian approach towards the Dutch/French approach, but so far with unconvincing results. All-in-all, the examples that attempt to give operators more incentives and space for exhibiting a contractually-framed entrepreneurial orientation all struggle with the positioning of the tactical level. Much variation results in the shaping and calibration of related incentive mechanisms, both in tendering and contracting, including a move towards a more relational type of contracting (see also Theme 4).

- ▶ Theme 4: The type of relationship with the operator(s): Competitively tendered contracts are the general rule in the reviewed countries. The Netherlands appears so far rather alone in choosing a non-negotiated awarding procedure for the complex contracts put in place. Such complex contracts are always negotiated in France and even much simpler gross-costs route contracts are being negotiated in other countries. Yet, the approach adopted in the Netherlands does work, even though this is probably surprising if looked at from a French tradition, legal environment or experience. A major issue is present here, though, that of the contracting knowledge and expertise, in particular in relation to large, complex contracts. While knowledge build-up proves to work well under gross-cost route contracting, the experience in the Netherlands and in France¹⁷⁰ with net-cost network contracting can be more worrisome. Here case information, publications and experience all point to the danger of an inadequate knowledge build-up on the side of the authority (and its advisors). Furthermore, the trend that has resulted in the Netherlands in larger and longer concessions is only adding weight to this issue. It is in this respect interesting to observe that some authorities have chosen to move away from competitive tendering towards in-house production. This is observable so far mainly in France, and to a much lesser extent apparently also in Sweden. Further analysis is needed to investigate whether these are connected. The call for the replacement of competitive tendering by negotiated performance-based contract, as can be heard in Australia, should also be analysed further even if currently incompatible with European law. A deeper understanding through process-analyses of the causes for this call in relation to the experience of other countries would be useful, in particular the development of a more relational type of contracting in the Netherlands
- ▶ Theme 5: The assets with a longer lifespan: This issue is more important in areas with fixed infrastructures (trams, metros) than where only buses run. In the bus case, the length of network-contracts is usually synchronised with fleet renewal (the Netherlands). If the contract is shorter, the authority takes responsibility for fleet investments and transfer (France). For route contracts, the organisation of regular tendering opportunities allows disconnecting contract length from the amortisation period.

Summarising, themes 3 and 4 are core to distinguish between main competitive tendering options in public transport. Two main families result, and the choice is between “doing the thing right” and “doing the right thing”¹⁷¹ (and possibly realising the first through the second):

[170] While not covered in this thesis, one could also add the experience in the (similar) tendering of the British rail franchises to this list.

[171] This phrase was first brought into the standard jargon of the Thredbo conferences by Gargett and Wallis (1995).

- ▶ “Doing the thing right” typically small gross-cost contracts (London/Scandinavia) and competitive tendering focussing on productive efficiency (the transport services are produced according to the requested service quality at the lowest possible cost).
- ▶ “Doing the right thing” typically larger net-cost contracts (Netherlands/France) and to competitive tendering focussing on allocative efficiency (the transport services, and their fares, represent consumer preferences, the services provide an optimal contribution to society).

This can be represented graphically using the STO approach introduced in Part II (Van de Velde, 1999). Summarising the main points from the reasoning above, we can say that the main challenge in “Doing the thing right” (Figure 18) is that the transport authority, being responsible for the tactical level (i.e. the marketing in the widest sense) needs to be equipped with the necessary skills for carrying out this function. For long-term success, this in turn implies that the authority needs to be sufficiently motivated, incentivised to build-up and keep these skills. Competitive tendering appears to be powerful in realising productive efficiency in this governance arrangement (as shown by international experience). This same competitive tendering instrument, however, plays no role in improving the adequacy between the services produced and either demand or socio-political aims. As a matter of fact, the tactical governance issue in this arrangement does not differ substantially from in-house operations by an authority-owned operator.

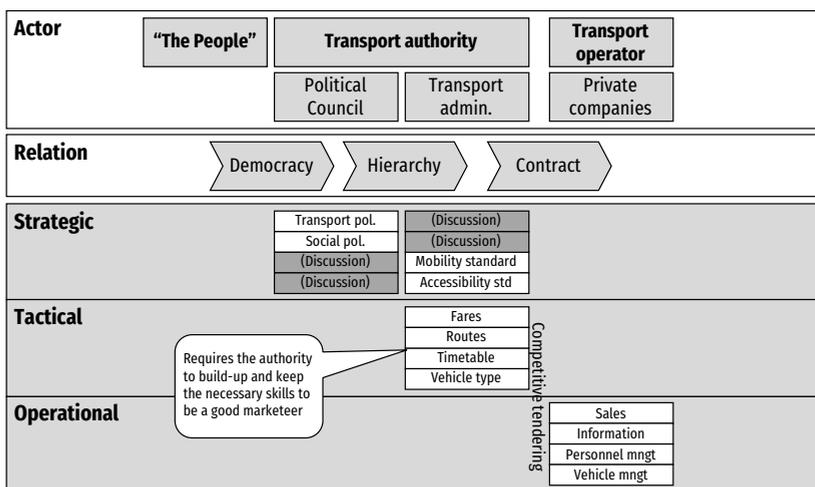


Figure 18 | “Doing the thing right”

The main challenges in “Doing the right thing” (Figure 19) are that the transport authority should be capable of writing tendering documents and contracts. This also requires that the authority be properly equipped for carrying out this function (or hires corresponding services). For long-term success, this in turn implies that the authority be sufficiently motivated, incentivised to build-up and keep the necessary skills. Yet, in this case it does not need to be a full-blown marketer. In this governance arrangement, as appears from international experience, results are more mixed. As we have discussed, this is very much linked to the quality of the tendering procedure, the contractual relationship and the monitoring.

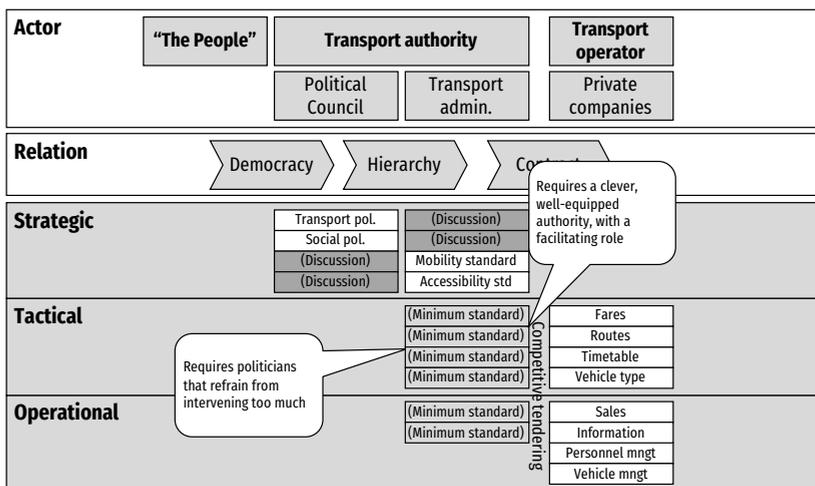


Figure 19 | “Doing the right thing”

It appears from our experience that success requires politicians to refrain from intervening too much at the tactical level, while being clear enough at the strategic level. It also requires the authority to be well-equipped to carry out its role as leader of the tendering procedure and contract writer, and in its role of contract facilitator after awarding, which includes proper monitoring. As experience shows, this may also require cleverly conceived relational contracting clauses.

An unbalanced relationship, with an unbalanced focus on tactical issues leads to what we could call “doing something”, without knowing exactly why. The result is then an approach that is in name ‘functional’, but not when considering all constraints included. This often boils down to maintaining historical services or following the private preferences of involved politicians or civil servants (Figure 20).

This brings us back to the difficult path to functional tendering, as discussed in Section 8.2. Interviews and practice in several countries (in particular the Netherlands, France, Sweden and Belgium) has revealed a number of things. Many parties are involved in the preparation of a competitive tendering procedure and important differences in behavioural motivation exist between these actors.

Civil servants of the authority prepare the policy and tendering documentation with—not unimportantly—the help of consultants; the managers of transport operators may attempt or be asked to influence the process in consultation rounds; elected officials, obviously, play a major role, though to a different extent all according to the political culture of the country or region concerned; the constituent authorities of the transport authorities (when existing) too; advisory organs such as customer representatives and individual customers also play a role, sometimes compulsory by law. As to behavioural motivation, operators are in the current tendering context likely to be motivated by profit and survival. Civil servants are more likely to be interested by pursuing public values (which may not have been clearly articulated), but also by reaching the end of the process without problems. Involved

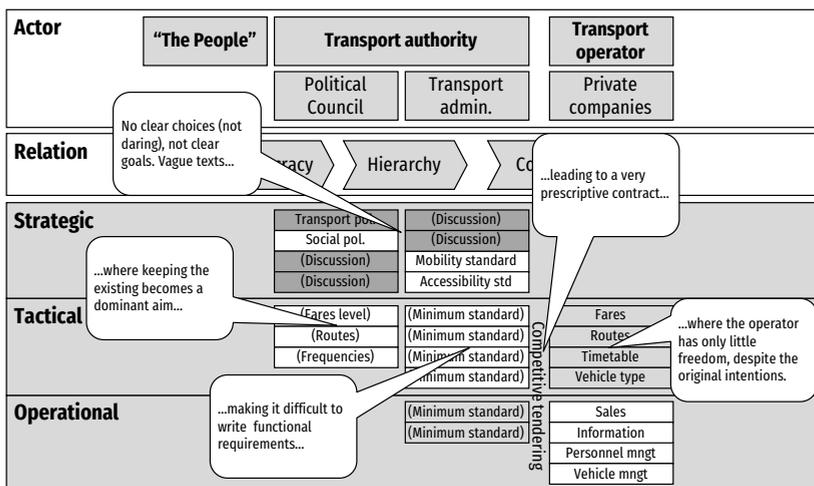


Figure 20 | "Doing something"

lawyers will stress the importance of a large number of rules, some of which may not at first sight be easily reconciled with economic rationale.

Different expectations by the actors involved about the behavioural motivation of the other actors involved, a lack of information and a lack of awareness and understanding for the motivational differences in presence between involved actors make that misunderstandings easily loom at the horizon. Furthermore, factors of chance and personality (in particular the 'chemistry' between the civil servant, the politician and the consultant) will also determine whether the tendering document preparation process will be able to overcome these differences. A bad management of this process may, despite an enthusiastic start, lead to an exaggeratedly risk-averse approach, attempting to write complete contracts, which will ultimately be counterproductive in view of the original objective which may have been to realise functional tendering under relational contracting. The likely result from the side of the operator will be a cost-cutting focus, rather than the innovative approach that was hoped for. Experience and repetition may ease this process, but this requires that knowledge has not been lost in the meantime with civil servant replacements, which is all the more likely that contracts get larger and longer.

While this all referred to contract preparation, similar points should also be made about contract realisation and monitoring with the compounding effect located the replacement of the involved actors by others on both sides of the table. The implementation manager and concession manager on the side of the authority is not necessarily the 'innovative' person who was leading the writing of the contract. He may thus be insufficiently aware of its philosophy and purpose, or simply more procedural. Similarly, the (optimistic) persons constituting the bidding team on the side of the operator are not necessarily the (realistic) local managers.

In sum, we observe a multi-faceted reality, the dynamics of which are characterised by feedback, learning, muddling-through, fine-tuning and sometimes strange or unexpected developments. We also see that areas introducing a specific type of arrangement go through

similar though not necessarily identical stages, which point to some extent to elements of path dependency and which illustrates the influence of experience on future choices. For example, the introduction of small-size gross-cost contracts in London started simply and quality management features were added with growing experience. The same can be observed in the Copenhagen region, or in various areas in Sweden. Note, however, that the details of the steps, their timing or results differ. We see additional developments at a later stage such as the addition of passenger related contractual incentives, thus moving one step towards the other main tendering model: larger net-cost contracts. For example, small trials have been put in place in Copenhagen, large scale implementation has been realised in some Swedish authorities, though not all, and London decided not to pursue the idea after an aborted dogmatic step in this direction. We see areas that started with functional tendering experiment back-and-forth with various types of tendering and contracting approaches. A tendency towards relational contracting seems to develop, but the future will tell whether this stabilises. In view of the development of new technologies, including shared mobility systems, autonomous vehicles and all possibilities offered by the internet, our guess will be that more change in institutional frameworks and practices is to be expected in the not too distant future.

Part IV

Deregulated Markets

11 Introduction

This Part of the thesis focuses on public transport institutional frameworks based on the principle of market initiative. Operators, as entrepreneurs, autonomously identify gaps in the market and take the commercial risk to provide corresponding services, possibly in competition with other entrepreneurs. The authority does not own any property rights on service provision, but it can play a role, for example by guiding the market process towards socially preferred outcomes using regulations and subsidies. In other words, services are meant to appear as a result of a more or less deregulated market process.

The following research sub-questions are addressed in two chapters that have developed in parallel:

- ▶ How has this institutional framework fared since its introduction?
- ▶ What developments can be observed and what can be said about them?
- ▶ Can recommendations be formulated?

Chapter 12 “Market initiative in a hybrid world” covers the two first sub-questions. It explores the functioning of a set of deregulated regimes, covering Great Britain, New Zealand, Sweden and Germany, first in general and then with a more detailed process analysis. Two papers reviewing these cases and related developments are included in this chapter:

van de Velde, D. and I. Wallis (2013), “‘Regulated deregulation’ of local bus services—An appraisal of international developments”, *Research in Transportation Economics*, 39, 21-33.

van de Velde, D. (2014), “Market initiative regimes in public transport in Europe: Recent developments”, *Research in Transportation Economics*, 48, 33-40.

Chapter 13 “Workshops on market regulation” discusses regulatory improvements based on the findings of workshop series from the Thredbo conference, answering the third sub-question. Three workshop reports are included:

Van de Velde, D. and K. Augustin (2014), “Workshop 4 Report: Governance, ownership and competition in deregulated public transport markets”, *Research in Transportation Economics*, 48, 237-244.

Preston, J. and D. van de Velde (2016), “Workshop 7 report: Market initiative: Regulatory design, implementation and performance”, *Research in Transportation Economics*, 59, 343-348.

van de Velde, D. and A. Karl (2018), “Workshop 3 report: Market initiative regimes in bus, coach and rail: Recent developments, threats, developing paradigms and regulatory needs”, *Research in Transportation Economics*, 69, 254-259.

Chapter 14 concludes.

12 Market initiative in a hybrid World

The cases studies conducted in the context of Part II showed that organising the provision of local public transport genuinely on the basis of market initiative is rather exceptional in European countries. The deregulated regime introduced in the British local bus sector in 1986 outside London constitutes such exceptional and interesting example—both in Europe and in the rest of the developed world—of a market initiative regime where commercial entry and exit by private companies does take place, while being submitted to a well-developed and administered regulatory regime¹⁷². While the British example dominated the academic debate of market initiative regimes ever since its introduction, it is also important to realise that public transport legislation was and still is based upon this same principle of market initiative in several other countries. New Zealand engaged in a similar reform in 1991 for example. The principle of market initiative was and still is present in the institutional framework of Germany as German legislation permits autonomous market entry even though its details and the current funding regime of municipal operators may often prevent actual private entry.

This chapter starts in Section 12.1 with a broad case exploration using two published papers (Van de Velde and Wallis, 2013; Van de Velde, 2014). This is followed in Section 12.2 by a more detailed process analysis of the developments in the market initiative based institutional frameworks encountered in the main cases studied in the first two papers (Great-Britain, New Zealand, Sweden and Germany, with some updates and additional comments on further cases).

12.1 An appraisal of international developments

We start with a broad case exploration, taking of the deregulated British institutional framework and its dynamic, spanning a period of 30 years since the introduction of the original market-initiative based reforms in 1986. The two papers included below (Van de Velde and Wallis, 2013; Van de Velde, 2014) widen the British-centric perspective of much of the academic literature by reviewing institutional developments in New Zealand, the limited deregulation introduced in local public transport in Sweden in 2012, and the reform of the existing market-initiative based legislation in Germany. Additionally, remarks

[172] Autonomous commercial entry also happens in many developing countries within perhaps less perfect administrative and legal regimes. These areas, their institutional frameworks and their functioning are not covered by this thesis.

are made in relation to the growing space given to market initiative in long-distance coaches and passenger railways markets.

The first paper included in this section (Van de Velde and Wallis, 2013) covers the experiences of Great Britain and New Zealand since the last decades of the 20th century, presenting the components of the institutional frameworks, their stepwise reforms and fine-tuning. The New Zealand case shows how the institutional framework, originally inspired by the British reform, evolved to exhibit a growing difference with the British case. Sweden, as third case presented in the paper, differs substantially from Britain and New Zealand as it started from comprehensive competitive tendering. Yet, a surprising market-initiative possibility was added in January 2012.

These cases illustrate underlying conflicts between competition and coordination. The British and New Zealand cases shows the slow reform paths that unfolded over the past decades away from the competition dogmatism towards various institutionalised options for coordination (with ultimately little remaining from a deregulated regime in the New Zealand case). The Swedish case shows a start from an opposite starting point (central planning and tendering), moving towards a peculiarly hybrid institutional framework, combining deregulation with tendering authorities, the functioning of which remained difficult to predict.

'Regulated deregulation' of local bus services: An appraisal of international developments

Van de Velde, D. and I. Wallis

Research in Transportation Economics, 2013, vol. 39, p. 21-33.

Abstract - The deregulation of the British bus sector (outside London) in 1986 was the start of a debate on the merits of 'deregulation' and 'competitive tendering'. The period that followed was rich in lessons. New Zealand was at the time the only other country engaging in a reform based upon market initiative (implemented in 1991). Other countries chose for a less extreme and more consensual way to introduce competitive incentives, choosing the fundamentally different competitive tendering (CT) path. As a result, the so-called 'Scandinavian model' developed, based upon the London example of route tendering. Later the Netherlands adopted a network tendering approach, resembling the French practice of network tendering though with more operator freedom. This paper focuses on recent experiences (outside developing countries) with market-initiated competition, as opposed to authority-initiated competition through competitive tendering. The paper covers the experiences of Great Britain and New Zealand, and the opposite example of Sweden where a partial deregulation will soon be implemented as a result of disappointment with earlier results of CT. It describes the expectations that came with their introduction, and some of their perceived shortcomings, and analyses the legal changes enacted to cope with revealed shortcomings. By doing so, the paper describes, compares and draws a few conclusions on the institutional evolutions that can be observed.

1. INTRODUCTION

The announcement of the deregulation of the British bus sector (outside London) to be implemented in 1986 was the occasion of an intense debate on the merits of 'deregulation' and 'competitive tendering' (Banister, 1985; Gwilliam et al., 1985a; Beesley and Glaister, 1985a; 1985b; Gwilliam et al., 1985b).

The period that followed was rich in lessons. Apart from Britain, New Zealand was the only country that adopted reforms based largely upon market initiative. Other countries chose less extreme and more consensual ways to introduce competitive incentives, choosing the fundamentally different competitive tendering (CT) path. As a result, the so-called 'Scandinavian model' developed, based upon the London example of route tendering. Later the Netherlands adopted a network tendering approach, resembling the French practice of network tendering though with more operator freedom.

This paper focuses and gives an update on market-initiated competition outside developing countries. The main example of such a regime is assuredly Great Britain (outside London). We describe this regime and the fine-tuning to which it was subjected in recent years. New Zealand constitutes our second main example. This regime was originally inspired by the British case, but the various amendments since put in place have involved greater departure from the British approach.

Sweden constitutes our third and last case. It differs substantially from the other cases, as its starting point is a comprehensive competitive tendering regime that will be complemented by a market-initiative regime starting in January 2012. We present each of these three cases before analysing their main evolutions and presenting a few general conclusions.

2. GREAT BRITAIN OUTSIDE LONDON: DEREGULATION WITH SOME COMPETITIVE TENDERING

Local and regional passenger transport services by bus in Great Britain outside London are provided on the basis of a deregulated market-initiated regime since 1986.

2.1. The 1985 Transport Act

Before the 1985 Transport Act, publicly owned companies provided public bus transport in urban and regional areas. Essentially, municipal operators provided services in the main cities while subsidiaries of the National Bus Company (owned by the national government) provided services in the regional areas. The urban operators had been amalgamated into Passenger Transport Executives (PTEs) in the larger urban agglomerations where Passenger Transport Authorities (PTAs) had been created. The first step of reform occurred when in 1980 a new conservative government introduced a new Transport Act. By removing the need for route licences

or authorisation of fares, this act led to the deregulation of long-distance express coach and tourist services. This movement was to be extended to the urban and regional services outside London in 1986 following the adoption of the 1985 Transport Act.

This reform introduced by the British government in 1985 was a radical reform completely deregulating all local and regional public bus transport in the UK, with the exception of Northern Ireland and the area of greater London. This deregulation of bus services introduced the possibility for on-the-road competition and since October 1986 operators may register routes and timetables when they believe it is commercially feasible to provide the service without financial support (subsidy) from the authority (but see below). There are no regulatory restraints on ticket pricing or on the timetable and route itself. All that is needed is a simple registration, consisting of a six weeks' notice (later changed to eight weeks) to which other operators are not allowed to object. Since there are no exclusive rights in the provision of services, operators are allowed to register any services they choose even if competing operators already serve part or all of that market.

In line with this deregulation, all main bus companies owned by the state were privatised. The sell-off of National Bus Company subsidiaries was completed by April 1988, followed by the Scottish Bus Group. The municipal operators had to be simultaneously privatised or at least put at arm's length (i.e. 'corporatised' and made independent from local political influences).

Subsidies remained available. Two subsidisation methods lead to the appearance of more commercial services than would otherwise have been the case. Firstly, compensations for fare rebates (known as 'Concessionary Fares Schemes') give local authorities the possibility to request operators to give discounted fares to specific groups of passengers (typically to elderly people, children or handicapped). Such rebates are then compensated to the operators on the 'no better and no worse off' principle, with payments based on the number of passengers carried, taking into account the ridership generated by this measure (calculation based upon the fare elasticity). Secondly, operators are entitled to a 'Fuel Duty Rebate' according to which operators could originally ask for the reimbursement of the fuel excise taxes they paid. This subsidy has later been reduced from a 100% rebate to an 80% rebate and it is currently known as 'Bus Service Operator Grant'.

When the results of this market process are deemed unsatisfactory by the local transport authorities, e.g. when some areas and/or some periods of the day are not

sufficiently served in their views, they have the possibility to organise additional bus services. To realise this, they may contract operators to provide additional services that the authority considers desirable on social grounds but that are not provided by the commercial market. Such contracts are usually submitted to a competitive tendering procedure. However, when only a minimal amount of funding is involved the *de minimis* rule applies and a contract can be negotiated with the commercial operator of the route.

2.2. Amendments to the deregulated regime in 2000

A few changes were introduced to this regime with the Transport Act 2000, attempting to codify cooperation forms that had appeared in practice, and responding to the desire of some authorities (especially in the metropolitan areas) to increase their control power on the network of services offered.

This introduced *Statutory Quality Partnership Schemes*, where a local transport authority may agree to invest in improved facilities at specific locations along bus routes (such as bus stops or bus lanes) and operators who wish to use these facilities promise to provide services of a particular standard (such as new buses or driver training standards). Under such scheme, only those operators who actually respect the standards specified are permitted to use the facilities. Such Statutory Quality Bus Partnerships are formalisations of voluntary agreements that had previously appeared as Gentlemen's agreements between operators and local transport authorities. The difference with such voluntary agreements is that a local authority first establishes a statutory partnership, where after operators are free to join, provided they guarantee that they will provide the quality specified. Note that such schemes maintain the principle that operators may not receive any direct subsidy for their operations. Its statutory nature does, however, prevent the 'free rider' problem existing with other schemes and where operators who would not invest in the required standards could not be prevented from using the facility put in place by the authority. *Joint ticketing schemes* have also been made easier to implement by this legislation. Yet, few *statutory* partnerships seemed to appear in practice and the strict interpretation of competition law by the Office of Fair Trading appeared to lead to a very cautious stance from both authorities and operators as to the development of more voluntary partnerships.

Quality Contracts were also made possible by this legislation. These were meant to allow local transport authorities to request permission from the Ministry to abolish the free market and replace it by a general

competitive tendering system, e.g. akin to that used in London. Yet, the requirements put upon the authorities before being authorized to use this model where such (proof that this was the only way to achieve their policy, etc.) that in effect no quality contract was introduced under this legislation.

2.3. The Local Transport Act 2008

An official review of the legislation was carried out in 2006 (DfT, 2006) as it was perceived that the quality of bus services varied markedly from place to place and that more needed to be done to improve the performance of the sector. This report concluded that bus patronage has been on a downward trend since the 1950s but that recently the first year-on-year increases in decades took place. The report noted that this was supported by increased government investment and the introduction of free travel on local buses for older and disabled people. The review identified a number of areas where improvements have been achieved, often through partnership between bus operators and local authorities, but it concluded that in many cases bus services are not meeting the expected high standards and that in major cities patronage continues to fall. The review concluded that there is no single approach that works everywhere and that solutions needed to be tailored to local circumstances. Legislative proposals were formulated as a response to this, trying to provide the local authorities with a 'tool-kit' to meet local needs. The Local Transport Act enacted in November 2008 (LTA 2008) was meant to address these issues, introducing a number of features to solve complaints expressed by actors, experts and observers within the official review on some of the dysfunctions of the deregulated regime.

To a large extent, the LTA 2008 essentially expands and facilitates the previously existing possibilities for introducing Quality Partnerships, giving more influence to the local transport authorities on the services provided by the operators. Since 9 February 2009 the risk that operators would be found to be in breach of competition law (for which the Office of Fair Trading has powers to levy substantial fines) when specific agreements were entered into was removed. The Act now simplifies the application of competition law to such agreements when these are entered into in 'good faith'. Examples are *voluntary partnership agreements* (VPA) between bus operators and local authorities, such as an investment in bus lanes or shelters, or real time information displays, by an authority in return for an operator investing in new vehicles or a higher frequency. Note that authorities are still not able to prevent operators who are not part of a VPA to make use of the facilities provided by the authority under such a scheme (such as investment in bus lanes, stops, etc.) unless a Statutory Quality Partnership applies.

Other examples are *qualifying agreements* between bus operators only, and which are now made possible when certified by the local authority as being in the interests of bus passengers and only imposing restrictions on bus operators as are necessary for the bus improvement objectives to be satisfied. These could, e.g., be agreements between operators to coordinate timetables to provide an even frequency.

The Act also broadens the scope of the existing *statutory* bus quality partnership schemes, so that these agreements can now also cover service frequencies and timings or maximum fares, in addition to what was already possible since 2000 in terms of quality standards. These provisions are in force since 6 April 2009. The Act also foresees a number of safeguards to prevent the imposition of unrealistic conditions by authorities on operators, which could undermine their right to a fair rate of return.

The *Quality contracts* (i.e. the replacement of deregulation by a competitive tendering scheme) are now made easier to implement than under the 2000 legislation. The Act also gives greater flexibility for metropolitan areas and other local transport authorities to design governance arrangements for planning, taking decisions on and delivering transport services suited for their area, rather than having to follow a standard national model. It allows the setting up and reconstitution of *Integrated Transport Authorities* (ITAs) to run transport through better co-ordination of the road network and public transport services. Consequently, the existing six English Passenger Transport Authorities became "Integrated Transport Authorities" (ITAs) on 9 February 2009 with full responsibility for local transport plans, including the road network and not just public transport. The Act empowers them to decide whether road user charging is right for their area, without needing the Secretary of State's approval.

Traffic commissioners (these are civil servants who have some regulatory power in local public transport) have received enhanced powers in relation to bus punctuality performance, which means that both local authorities and bus operators can now be held accountable for their contribution to punctuality performance.

2.4. The 1985-2000 regime and the LTA 2008 in practice

The British Competition Commission (2011) recently investigated the local bus services market and observed that service supply is characterised by a large degree of concentration at the local level. 1245 operators are active in the deregulated area (i.e. the United Kingdom excluding London and Northern Ireland), out of which Arriva, FirstGroup, Go-Ahead, National Express and

Stagecoach are the five largest representing 69% of all local bus services provided. Only five other operators have a share of services representing more than 1% of services in the deregulated area and 219 operators provide 95% of all services. On the authority's side, 11 municipally owned operators still exist and 132 local transport authorities play a role in service regulation.

At the local level, most areas have only one or two operators with a significant share of supply. The Competition Commission calculates that the largest operator has an average share of 69% of service provision in the urban areas. The report also typifies competition on the road at the local level as such: *"It is uncommon for one route to be completely overlapped by another, and in particular by another route with a similar timetable. While almost every route [...] is overlapped by the route of another operator at some point, few routes are overlapped for a large proportion of their length. We conclude that a large proportion of passengers [...] are unlikely to have a choice of the operator with which they make their journey. It is relatively rare for the operations of the Large Operators to overlap substantially."* (Competition Commission, 2011, p. 3) From the production's side point of view, the industry seems to be characterised by mildly increasing returns to scale, increasing as firms get bigger (Toner et al., 2010). This study concludes that, since increasing returns to scale prevail even for the largest operators, and there being no sign of dis-economies setting in, there are no reasons to break up large operators into smaller units. On the contrary, the data suggest bigger operators have lower average costs.

The British bus market outside London is based upon the principle of commercial operations, yet a substantial amount of subsidisation is also flowing into the sector. A recent report for the Passenger Transport Executive Group (Birch and Whelan, 2011) calculated on the basis of various statistical sources that bus industry revenue in England (i.e. including London) come in almost equal parts from fares and from the public purse. The public purse paying for the running of non-commercial services (47% of the expenses), the reimbursement of concessionary travel (37%) and rebates on fuel duty in the Bus Service Operators Grant (BSOG) (16%).

That report underlines that the revenue structure varies considerably across the country. In London general network subsidy represents about 35% of total industry revenue and concessionary fares 11%. In the six metropolitan areas, general network subsidy represents only about 10% but concessionary fares 23%. With 7% for fuel duty compensation, this leaves 60% paid by the farebox in the metropolitan areas (or 83% if one considers

the concessionary reimbursements to be a subsidy to the user).

The deregulation led to an increase in the amount of bus kilometres supplied. This was in many cases through frequency increases provided by the commercial operators. There was a general tendency to focus on better routes and to make them even more attractive to passengers by increasing their speed, reducing circuitous routes and increasing their frequency. Commercial slogans such as "at least one bus every 10 minutes" have now become very common in many deregulated urban operations.

On average, the local transport authorities currently tender contracts for 23% of the local bus mileage supplied in Great Britain outside London (Competition Commission, 2011, p. 13-3), this represents an increase compared to the more usual 15% since deregulation and 21% in 2007. But the share of the public purse varies greatly. It is lower in urban areas (even very low in York or Oxford) and increases in the more rural areas where more or even all services are submitted to competitive tendering by local transport authorities.

Successes should also be mentioned at the local level where some regional cities have, e.g., achieved substantial growth (sometimes 50% and more) since deregulation (see, e.g., York, Oxford, Brighton, Nottingham). It seems, though, that such successes are to a large extent dependent upon the co-existence of a pro-active pro public transport policy limiting car usage in the city centres by measures such as pedestrianisation, higher parking charges and the development of adequate Park-and-Ride facilities.

The LTA 2008 should now have addressed the reluctance that bus operators had to engage in forms of co-operation that would benefit passengers (such as timetable coordination) as this should not anymore lead to substantial fines by the OFT. Apparently little or no thorough academic analysis of the usage made of the provisions given to the transport authorities in the LTA 2008 has been made yet. A few concrete examples of the use made of these provisions can be given, though. The most well-known is the Statutory Quality Partnership Scheme introduced in Oxford in July 2011 which coordinates services on the four main corridors to Oxford between the two main operators Stagecoach and Go-Ahead, resulting in common headways and a turn-up-and-go frequency. This is done together with the introduction of a common interoperable smart card (increasing boarding speed), fewer buses in total though with a higher proportion of double-deckers to replace single-deckers and some hybrid vehicles to improve energy efficiency. As a result, a reduction of one quarter in buses along High Street is achieved, and this was one

of the aims of the local transport authority. A few other examples exist, such as in Chester between Arriva and First, where excessively high service frequencies were reduced via voluntary agreement.

As far as Quality Contracts are concerned, none have been implemented yet, despite the easier implementation procedure, although the West Yorkshire PTE is still contemplating this possibility. Note also that the Competition Commission in its final report is not recommending the usage of quality contracts as a means of stimulating more competition (Competition Commission, 2011, p. 15-104 - 15-110).

As such, a main usage of the LTA 2008 provisions seems to be the rationalisation of unsustainable high frequency services where at least two operators competed head-to-head, together with the provision of inter-available ticketing, reaching more sustainable regular headways. The LTA 2008 does allow for even more innovative controls on the free market. Nottingham, where a Statutory Quality Partnership for the city centre introduced a slot-booking system for the bus stops, is one interesting example of a local transport authority attempting to regulate the use of its busy city centre streets and stops via an innovative market mechanism. There seems, however, to be few of such innovative examples around.

A possible reason for this apparent lack of innovation could be current short-term focus of the transport authorities resulting from the severe budget cuts imposed upon them by the current government. These make that transport authorities will face important challenges for the years to come. This could aggravate the passenger decline and fare increase trends. Birch and Whelan (2011) calculate for the metropolitan areas that the expected decline in patronage for the period 2009-2014 would increase from 16% to 20%, the expected fare increase from 18% to 24% and the service km decrease would go from 13% to 19%. They also conjecture that this could be significantly reduced (7% patronage fall, equal fares and 4% service km reduction) if the Competition Commission's investigation into the local bus market (Competition Commission, 2011) manages to have a serious impact on competition in the sector.

2.5. Evaluation and outlook

Deregulation (1986/87) did not lead to the expected increase in passengers. Neither did it lead to a noticeable change in the secular decline that was already taking place in the decades preceding the deregulation. It is only recently, and especially with the generalisation of free travel for the elderly, that some stabilisation could be observed. However, the recent cuts on transport budgets may very well lead to a further decline. All in

all, deregulation received over the years a rather bad press. This negative image is essentially linked to the continued reduced passenger transport ridership, the fare increases and the loss of integration that followed its implementation. While these are facts, they should however be put into context. It is important to distinguish between (i) the effects of deregulation *per se*, (ii) the effect of the specific and rather dogmatic way in which its regulatory provisions were implemented in Great Britain and (iii) the budget limitations simultaneously imposed upon the transport authorities by central government.

The competitive pressure created by deregulation led to a very substantial improvement in the productivity in the sector (halving the production costs per unit). This was indeed similar to what happened in the competitively tendered sector (such as in London). It also led to a strong focus on services that should be more attractive to the customers (straightening routes, increasing frequencies, clear and simple communication to the customers). The regime created a clear split between what operators are supposed to be better at and what authorities are supposed to be better at: operators focus on where there are sufficiently high number of passengers to justify running bus services, whereas the authorities focus on the social services, i.e. everything that the market does not provide on a commercial basis.

Secondly, the specific way in which deregulation was introduced in Great Britain was a rather dogmatic one: almost all forms of co-ordination ('integration') between providers were deemed to be anti-competitive, collusive practices. This effectively made most forms of fare integration, timetable coordination, information integration, etc. very difficult if not impossible to implement until the LTA 2008. As a result, it can be argued that services were less attractive than they could have been otherwise, and some studies put the blame on the service instability generated by the way deregulation had been implemented, showing that the decline was larger than what could have been expected on the basis of the changes in supply, fares, economic development, car ownership, etc.

Finally, the implementation of deregulation in the British bus sector came together with a strong opposition between the (conservative) central government of Margaret Thatcher and the (labour) authorities in the large metropolitan areas of the UK. These authorities previously spent substantial amounts in public transport, in some cases to provide low fares. The government of the time prevented them continuing such spending. This limited the 'policy space' and budget available to the local authorities within the deregulated regime. If this had not been the case, one can imagine that these authorities

could have done more to improve public transport in their areas, and this is indeed what one can observe in London since the last decade where the possibilities and propensity to subsidise additional bus services are higher than elsewhere.

The recent interim report from the Competition Commission investigates the functioning of the local bus markets, but in fact it also refers to an underlying conflict between competition and coordination. As indicated by White (2010), there was a somewhat perverse effect of regulation until the LTA 2008 in that it may have been easier for two operators to merge (subject to approval by the competition authority) and hence offer a co-ordinated network and ticketing system, than working in co-ordination while continuing as separate organisations and potential competitors, e.g. for tendered services. The too dogmatic parts of the deregulation that prevented coordination have now been removed and the local transport authorities have been given some means to regulate the market in a clever way.

The challenge now is for the local transport authorities to devise clever coordinative provisions where needed, while not inadvertently killing competition. The Competition Commission, from its side, suggests a number of possible remedies to the problems identified (Competition Commission, 2011, ch. 15). These include measures to increase the number of multi-operator ticket schemes and to ensure that these are effective and attractive to customers; restrictions on aggressive behaviour, such as 'over-bussing' on particular routes and other obstructive behaviour aimed at reducing a rival's ability to compete and ensuring fair access to privately owned and managed bus stations for all operators. Other ideas from the Competition Commission are the issuing of recommendations to local transport authorities on the circumstances in which to pursue Quality Contracts, or other franchising models, in areas most affected by a lack of competition; and on how to use other powers (for example, Quality Partnerships) to promote competition or improve outcomes to local consumers. Also, there might be recommendations to the Department for Transport (DfT) to update its best practice guidance (to local authorities) on supported services in order to increase the number of operators bidding to win such contracts; and measures to make more information available to local transport authorities and potential bidders about the performance of supported services. The Competition Commission has for the moment ruled out price controls and selective divestment of local bus operations and is now consulting stakeholders on all these issues. A final report is expected by November 2011.

3. NEW ZEALAND: DEREGULATION BUT WITH MAINLY COMPETITIVE TENDERING

3.1. The 1991 'Deregulated' regime (TSLA)

3.1.1. Overview

The NZ 1991 'deregulated' regime was implemented through the Transport Services Licensing Act, 1989 (TSLA). This is based broadly on the GB deregulation model but with public transport planning/funding authorities having greater ability to implement the services and fares they consider appropriate for their region, even where these may have adverse impacts on commercial services.

The regime provided for two 'tiers' of public transport services:

- 'Commercial' services – unsubsidised, at operator initiative;
- 'Contracted' services – subsidised, at authority initiative (secured through competitive tendering).

Procedures for the Provision of Commercial Services:

- Operators are free to 'register' any services they propose to operate on a commercial basis. They are free to choose routes, timetables, fares, vehicle standards, etc. for these services.
- Unless the public transport authority refuses their registration, services could start (or be modified or terminated) after a 21-day notice period.
- Where the public transport authority provides a concession fare scheme, operators of commercial services could be compensated for the revenue forgone as a result of the scheme.

Constraints on the Provision of Commercial Services:

- The public transport authority (the regional council, RC) is able to decline to register proposed commercial services only on specific grounds: i.e. where the service is likely to adversely affect the net costs of any contracted services or is contrary to sound traffic management or environmental factors. These grounds are discretionary – where they are relevant, the RC may choose whether to accept or reject the registration.
- The RC is also able to 'contract over' any commercial service – this may undermine the service's viability and hence lead to its withdrawal.

Note that these two constraints on commercial services are not present under the GB deregulation model.

3.1.2. Operation of the Regime in Practice

Initially (1991) a minority of the bus services in the three largest centres (Auckland/Wellington/Christchurch)

were registered as commercial. In some cases these covered all services on a route, in other cases only some/all services at certain time periods (e.g. weekday daytime, excluding evening and weekend services).

Over time, a number of new commercial services and withdrawal of existing services have been implemented. In general, where commercial services have been withdrawn, they have largely been replaced by similar services contracted by the RC¹⁷³. In some cases, operators have used the registration of commercial services as a tactical device to gain advantage in the tendering/contracting process (and have usually withdrawn these registrations after a few months).

There have been few instances of two (or more) operators providing commercial services in on-road competition with each other. Where these did occur they were mostly in the early post-deregulation years, were generally short-lived and resulted in reduced rather than increased patronage.

The proportions of all bus services provided on a commercial basis in the 3 major regions since 1999/00 are shown in Figure 21. (The majority of ferry services in Auckland are operated commercially; while the urban rail services in both Auckland and Wellington are contracted.)

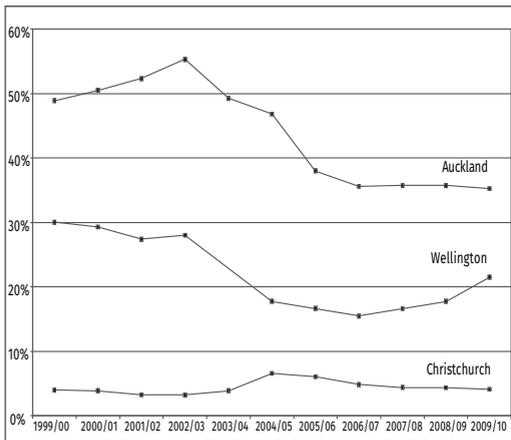


Figure 21 | Proportions of all bus services provided on a commercial basis in the 3 major regions since 1999/00

There have been some significant cases of operator innovation in the provision of new routes on a commercial basis. Some of these have been apparently successful (e.g. a new route running between Wellington airport, the CBD

and a major suburban corridor, charging premium fares); some others have operated for only a few months and were then withdrawn due to low patronage.

While detailed data are not publicly available, indications are that a significant proportion of the services provided 'commercially' do not cover their full costs (i.e. they are cross-subsidised by contracted services).

RCs have refused to register a number of proposed commercial services on the grounds available under the legislation, i.e. because of their adverse effects on the net costs of contracted services or their adverse traffic management or environmental effects: for example, these grounds have been used in Wellington to limit provision of commercial bus services in competition with subsidised urban rail services.

There have been only a few instances of RCs using their 'contracting over' powers. In one case in Wellington the regional council used these in order to ensure an efficient integrated network of (all-contracted) services in one of the suburban areas.

For practical reasons, the fares charged on commercial services are generally (except in the case of premium services) the same as those specified by the RC for contracted services (i.e. the RC is the price-maker, the commercial operator the price-taker). This in effect limits the number of commercial services provided. Similarly, in most cases (with the exception of school services) the same vehicles are used on both commercial services and contracted services, and hence the vehicle standards are effectively set by the RC.

3.1.3. Problems and Issues Arising

An extensive review of the public transport legislation and the associated procedures for procuring contracted services was undertaken over the period 2005-2008. This review identified and appraised numerous problems and issues relating to the regime in the opinion of particular parties involved, but little consensus emerged between regional councils and operators as to the preferred way forward.

The main perceived problems with the regime were:

- The difficulties faced by RCs in achieving integration between commercial and contracted services (particularly in cases where some services on a route are provide commercially, the remainder are contracted).

[173] A major instance of this happened in Auckland in 2005, where the largest operator withdrew around 25% of their commercial services, and the RC was faced with a major budgetary blow-out in replacing most of these services.

- The very low level of competition for contracted services in both Auckland and Wellington: this reflects the presence of a dominant operator in both centres, together with new entrants to the market being deterred by the complexities, risks and incumbent tactics associated with the 'two tier' (contracted/commercial) system. This low level of competition in the two largest centres has resulted in high contract costs relative to those in some of the smaller centres with greater levels of competition for contracts.
- The practice of operators in registering (and then subsequently withdrawing) commercial services as a means of frustrating the tendering process.
- The logistical and budgetary difficulties for RCs where operators withdraw commercial services at short notice.
- The tactics of operators in registering on a commercial basis only selected trips on a route, in such a way that they are in an advantageous position to win the contract for the remaining trips on the route. The low standards of vehicles used on some commercial services.
- The poor reliability and low customer satisfaction with some commercial services.
- The incompatibilities between the short-term financial focus of the commercial system and the longer-term wider public transport policy goals of the RCs.

3.2. The 2009 Reforms (PTMA)

3.2.1. Overview

New legislation (the Public Transport Management Act 2008) took effect from January 2009. The Act was designed to increase the powers of RCs to plan and manage public transport services, to enable them to require that some or all public transport services in the region be contracted, and to impose controls on commercial services. The act is classed as 'enabling legislation', and so is non-mandatory: each RC can decide whether or not to adopt any controls or contracting requirements. The earlier (TSLA) provisions relating to the grounds on which a RC may reject or contract over any commercial service remained unchanged.

Key provisions of the new legislation relevant to commercial services are as follows:

- Includes a requirement for RCs to adopt a strengthened regional public transport plan (RPTP). This must include a description of services to be provided in the region, and must specify any controls and contracting requirements the RC wishes to impose.
- Provides for a longer notice period (increased from 21 days to 90 days) for the registration and modification or withdrawal of commercial services.
- Allows for restrictions on registration of commercial services during the tendering/ contracting period.
- Allows a RC to impose controls on any/all commercial services in the region, provided these controls are specified in the RPTP (see below).
- Allows a RC to impose contracting requirements in some/all of the region (see below).
- Enables a RC to obtain information from commercial bus service operators relating to patronage, service standards and service performance.

Controls on Commercial Services:

- The 'controls' may cover the aspects set out in the Table below.
- They may be imposed on any new/potential commercial services.
- In the case of existing commercial services, controls may not be applied until at least 12 months after the RPTP is adopted, and may involve a transition period.

Type of Control and Permitted Controls on Commercial Services:

- Operating period: To set a minimum period (up to 12 months) for the operation of a commercial service.
- Service bundling: To require the operation of commercial services as part of a group (i.e. to disallow any commercial service that covers only some rather than all trips on a route).
- Service level and quality: To require services to operate according to frequency, capacity and times specified in an RPTP. To require services to meet specified quality and performance standards.
- Service integration: To require a service to be an integrated service. To require common emblems, signs or designs. To require operators to use integrated technology.
- Fares and ticketing integration: Various provisions relating to: setting of integrated fares, use of integrated tickets, collection and allocation of revenue from integrated tickets.

Contracting Requirement:

- A RC may specify (in its RPTP) that some or all of the public transport services in its region must be contracted.
- Where this is the case, any existing commercial services must be discontinued within 12 months of notification of the contracting requirement, and no new commercial services may be registered in the area.
- Imposition of a contracting requirement can only be done if a number of tests are fulfilled, including

transitional arrangements to give some protection to the commercial operators.

3.2.2. Implementation of the 2009 Reforms

A change occurred in the NZ Government (from Labour to National) in late 2008, just before the PTMA took effect. At an early stage, the new Government announced its intention to review the new Act, as it had concerns regarding the potential increased restrictions on 'operator initiative', through the ability to provide commercial services. At the extreme, it was concerned that one or more RCs might adopt the contracting requirement for all services in their region, which would eliminate all commercial services after a transition period. In effect, this could result in complete 're-regulation' of the bus and ferry market, with reversion to a fully contracted model.

Given the Government's statement that it would review the PTMA, RCs have not yet made any moves towards adopting either controls or any contracting requirements. Thus the most controversial provisions of the new Act have not yet been applied by any RCs, so current regulatory practice remains largely as under the previous (TSLA) legislation.

Meanwhile, the Government's review of the PTMA and its public transport regulatory policies is in progress, as described in the following section.

3.3. Potential Reforms (2012?): The Public Transport Operating Model (PTOM)

3.3.1. Overview

A review of the system of public transport regulation, together with any associated legislative changes required, was initiated by the new Government in early 2009. The Review focuses on the development of a new Public Transport Operating Model (PTOM), to apply to the future delivery of all urban bus and ferry services. The new Model is being developed through a core working group involving the Ministry of Transport, the NZ Transport Agency, major regional councils, the NZ Bus & Coach Association and some of the larger bus and ferry operators. Members of this group are also consulting with other operators as to the details of the Model and how it is likely to affect their business.

The Review and the resulting new Model is still very much a work-in-progress. To date a draft Model has been developed, but not yet finalised. Thus the following comments should be regarded in this light and not taken as representing firm Government policy proposals.

The Government has set the following **dual objectives for the PTOM**:

- To **grow the commerciality** of public transport services and create incentives for services to become fully commercial; and
- To grow confidence that services are **priced efficiently** and there is **access to public transport markets for competitors**.

It has stated that these objectives are to be addressed through:

- Enhancing clarity about the respective roles and responsibilities of RCs and operators that reflect their ability to add value and manage particular risks;
- Adopting more of a partnership basis to contractual relationships;
- Increasing confidence that services supported with public funds are priced efficiently; and
- Incentivising commercial behaviour to attract and grow patronage.

A key feature of the PTOM is that all services in the region will be allocated to '**operating units**':

- A unit is defined as a route or collection of routes catering for a readily identifiable customer market. All units will be contracted, with a single operator providing all services within each unit. Unit contracts may be awarded through negotiation or competitive tendering (see below). As a result, there will be two procurement and contracting approaches, with those units that are 100% commercial having longer tenure lengths and some differences in contract provisions.
- A '**commerciality ratio**' (or farebox recovery ratio) will be calculated for each unit and for the region as a whole. It will be defined as the ratio of farebox revenue (including concession reimbursement payments) to gross operating costs. A **league table**, which will be published, will set out on an annual basis the commerciality ratios for each unit and the region overall.
- The commerciality ratio (CR) will be used as a guide to the proportion of the region's public transport services that will be directly negotiated with incumbent operators, e.g. if the overall regional CR is 60% this indicates that contracts for about 60% of the total bus km in the region should be negotiated with incumbent operators, the remaining 40% put out to competitive tender. Within this guideline, those units with the higher CR would be negotiated, those with lower CR would be tendered. However, regions will be required to tender enough units to ensure that there is adequate competition for the market and to establish good prices that can be used as 'benchmarks' to guide price-setting for the negotiated units.

Existing commercial services will be treated differently according to whether they relate to fully commercial routes or only part of commercial routes:

- Where complete routes are currently operated on a commercial basis, these are likely to be defined as stand-alone units, and a contract awarded to the existing operator. These will be defined as **(fully) commercial units**.
- Where only part of a route (individual trips or all trips over a specific time period, etc.) are currently operated commercially, the commercial service operator will have the opportunity to negotiate contracts on a 'like-for-like' basis, i.e. the operator would surrender their existing registration of commercial services and in return, the RC would offer the operator a unit, on a negotiated contract basis, that contains at least the equivalent of the operator's current commercial bus kilometres (but may not involve the same services).

Operators are likely to be able to register **new commercial services** only in situations where these have no material adverse effects on the financial viability of existing units. However, in an urban network, such situations seem somewhat unlikely.

Units that can be operated fully commercially (**fully commercial units**) will be contracted for an indefinite term:

- This will be subject to the operator continuing to comply with the contract conditions. Service provision may be terminated by the operator, subject to a 12-month notice/disengagement period.
- Fully commercial units may receive reimbursement payments relating to the provision of concession fares (including free fares for 'seniors').
- Fully commercial units will be subject to a performance-based contract (similar in most respects to the contracts for other units) which will specify: minimum service levels (the operator will be free to provide additional services); minimum quality standards (vehicles, etc.); fare levels, fare structure and any fare/ticketing integration requirements; requirements regarding customer information (including real time information); and business planning and performance monitoring requirements.
- It is yet to be clarified whether or not the operator of a commercial unit will have exclusive operating rights within that unit's area. One possibility is that other operators may apply to provide services in the area on a commercial basis, but will be also subject to the same service and fare requirements and other contracting conditions.

3.3.2. The Case for PTOM – Some Difficult Trade-offs

It is intended that PTOM would "create an attractive, integrated and connected network that would attract more people to use urban bus and ferry services" (Cabinet Paper, Nov 2010), but it is also recognised by the Government and the PTOM Working Group that the case for the adoption of PTOM (in preference to both the previous TSLA and the current PTMA and their associated regulations) involves some critical but difficult trade-offs:

- PTOM will tend to result in reduced supplier competition, both in and for the market: once contracts have been secured operators will no longer be able to register individual services on a commercial basis (less competition in the market); and only around half the services are expected to be offered through competitive tendering with the others being awarded through negotiated contracts (less competition for the market). However, it is noted that the extent of competition, both in and for the market, has to date been extremely limited in both Auckland and Wellington.
- PTOM should limit the risk associated with reduced 'direct' competition by encouraging 'indirect' (peer) competition between units (both negotiated and tendered). This is to be encouraged through the annual publication of a league table of unit-by-unit performance, and by an approach that will reward good performance by negotiated extension of unit contracts on their expiry, rather than re-tendering.
- Importantly, the prices for negotiated contracts will be based on benchmark rates established from those units that are subject to open tender. Assuming appropriate efficient cost benchmarks can be established in this way (and this remains to be seen), it should help to ensure that the negotiated contract prices approximate to efficient costs.

At this stage the jury is still out on whether the benefits of PTOM will outweigh its costs. As stated by the Minister of Transport "*I am looking to the further development and on-the-ground testing of PTOM to help clarify what the costs and benefits of PTOM are*" (Cabinet paper Nov 2010, para 60).

In terms of the scope for the provision of commercial services through operator initiative, it appears that the PTOM approach is going to reduce this scope relative to the original (TSLA) legislation. PTOM will not allow only a sub-set of trips on a route to be provided commercially. Further, once the PTOM unit system is established, it would appear likely that there will be few opportunities for additional commercial routes to be

provided through operator initiative, as almost any such service would be likely to have adverse effects on the financial viability of existing unit(s), and would therefore not be approved.

Furthermore, the operators of fully commercial units are going to be faced with considerably greater restraints than apply to many of the existing commercial services they operate, e.g. relating to minimum service levels, performance standards, maximum fares, integrated ticketing, etc. While they will have upward flexibility (to provide more than the minimum standards), it seems unlikely that they will have incentives to do so in most cases, given the underlying market dynamics and the absence of any strong competitive threat.

One of the Minister's grounds for the current Review was concerns that the present (PTMA) legislation could result in 'complete re-regulation' of the market, involving a fully contracted model and discouraging operator investment. However, the PTOM approach could involve somewhat similar dangers, with all services also being contracted and with very limited scope for new commercial initiatives. Government decisions on PTOM are expected in the near future, and it is evident that the devil is going to be in the detail!

4. SWEDEN: FROM COMPETITIVE TENDERING TOWARDS MORE DEREGULATION

The Swedish local and regional public transport is since the 1990's organised on the basis of a comprehensive competitive tendering regime. The Swedish Counties, mostly in association with their municipalities, cooperate in planning and tendering their public transport services. This is often done through a common planning company, co-created, owned and financed by the County and its municipalities. The rest of the collective passenger transport system in Sweden has been deregulated over the past decades. This was first the case for long-distance coach services and for the airlines, and since this year also for national passenger railway services, effectively introducing the possibility of competition on the tracks. In this respect, local and regional public transport services was rather an exception in the general regulatory picture.

4.1. Moving from competitive tendering towards (some) deregulation

A number of factors have induced Sweden to review its public transport legislation. A main factor seems to be a disappointment with the achievements of the current competitive tendering regimes in terms of passenger focus. In particular, main wishes behind the reform are that public transport should become a better alternative to the use of private cars and that the focus should shift

from cost effectiveness and the supply side of public transport to customer orientation and demand side of the industry:

"The model with PTAs providing services by means of competitive tendering has brought about cost efficient and integrated services, but many believe that the main benefits with this model have now been harvested and that public transport needs a vitalising injection to be able to grow." (Westin, 2009)

The Swedish government chose to nominate a commissioner (Mr. Lundin) charged with the elaboration of a reform proposal. The government requested from Lundin to write a proposal that would foster a more dynamic market based upon a passenger perspective (SOU, 2009, p. 411). This followed the criticisms given in an earlier report produced by the Swedish Rail and the Road Administrations in cooperation with all other organisations representing the public transport sector (KOLLframåt, 2007), that stated that many official bodies responsible for public transport did not sufficiently put the passenger needs in their focus of action. Interestingly, the government especially requested Lundin to analyse how a more open market could enhance the usage of the driving forces existing within commercial transport services. On the basis of this, Lundin considered that new public transport products and services are needed to attract more passengers and that there must be more scope for individual choice, allowing an increased influence of passengers on the public transport system through their own active choices, choosing to a greater extent their journey on the basis of quality, service and price levels. Consequently, public transport companies had to be given more opportunities to develop services in line with passenger needs, while stability and ease of use for passengers had simultaneously to remain assured (SOU, 2009).

4.2. First reform proposal

The first reform proposal by Lundin was built around the idea that operators have a better ability than the public sector to be attentive and adapt to passenger needs. Authorities should then have a more strategic role in comparison to their current actions taken by the county public transport planning bodies (*Trafikhuvudman*) owned by the local and regional authorities. According to his proposal (SOU, 2009), the market had therefore to be opened to free competition and the public sector should limit its action to provide more or better services than what the free market could provide.

According to this proposal – and in a nutshell – regional public transport authorities would be created in each county and would first establish in a 'transport statement'

the aims in terms of accessibility that they wish to see realised in their area for the coming years. In a second step, operators would then have the opportunity to register with the authority those services (route and timetable) that they plan to provide on a commercial basis. Such registration would be binding. The authorities would then evaluate the results of this 'market search' process to see whether the resulting proposals are 'sufficient' in view of the policy aims of the authority. The authorities would then have the opportunity to create a Public Service Obligation (PSOs covering frequencies and/or fares) only on those lines that are not sufficiently well served by the market. This would then result in a general Transport Plan, including both the registered commercial lines and the PSO lines. Commercial services are then allowed to start operations, and all operators would have to observe a registration/de-registration period of one month. Non-commercial services (PSO) would then be tendered competitively in concession contracts. All services would have to fulfil a number of conditions on integrated ticketing, sales and information systems, on using specific stop and stations, on a limited number of timetable changes per year, on environmental requirements and accessibility requirements to the vehicles.

Lundin's proposal was partially welcomed by the public transport actors, but it was also substantially challenged on various grounds. Though logical, the proposal was seen as very – and perhaps too – radical and many local authorities were concerned that much of what had been built during the past decades, especially the increase in ridership, would go down the drain. Many concerns were expressed over possible instability and lack of continuity as a result of such a market-initiative based regime that could lead to cherry-picking and loss of possibilities for cross-subsidisation. The transport authorities also expressed that they are not keen on having to await the entrance of operators before they initiate tender procedures, and they also expressed that they perceive the "process for searching the market" as too bureaucratic. The removal of entry barriers (such as that created by the de facto exclusivity existing in the regime until now) however, did not seem to raise the same concerns (Westin, 2009).

Note also that Lundin's report contained two alternative proposals, which he both rejected on various grounds.

One of the proposals was to maintain the current regime of tendering by the planning bodies of the transport authorities but (essentially) only to remove the de facto monopoly enjoyed by these authorities in providing public transport services¹⁷⁴. The other proposal was to introduce multiple tendering, a system where the authority would competitively tender out several contracts on the same route, such as to allow passengers to be able to choose their operator.

An important factor in the further evolution of the proposal was the fact that the public transport actors¹⁷⁵ had already jointly started in 2008 a strong cooperation aimed at doubling the number of public transport passengers by the end of 2020 and doubling the market share of public transport in the longer run; the so-called 'doubling project'. Their starting point was their agreement on the need for a new approach in the sector and their agreement on the analysis made in the earlier KOLLframåt (2007) report. This cooperation and their strong collective commitment to change and to improvement was one of the elements taken into consideration by the government during its consultations before delivering its own law proposal to the parliament. These actors had been preparing reports on how they saw the future of the sector (Partnersamverkan för en fördubblad kollektivtrafik, 2009), knowing what Lundin seemed likely to suggest. In the meantime elections also took place – and the left-wing opposition had announced its opposition to free-market based solutions – but the government remained in the hands of the right wing. Further consultations were held and, finally, the government proposed to the parliament a regime very much in line with what the cooperating public transport actors were suggesting. This regime is much less extreme than what Lundin had suggested, even though still quite revolutionary compared to the existing Swedish arrangements in local and regional public transport. Interestingly, this regime is in effect very much akin to one of the alternatives considered and rejected by Lundin, i.e. the continuation of a regime where competitive tendering plays a central role, but with the abolition of the de facto exclusive rights enjoyed hitherto by the planning bodies of the transport authorities. A main difference, though, is that the balance of power at the local and regional level will be shifted from the planning bodies to the political councils forming the transport authority, which in effect

[174] These planning bodies have in the current regime the possibility to provide services without needing an authorization, and to veto requests for authorization by other operators in their area when those services would compete with those provided by the planning body of the transport authority. Formally, operators (and the planning bodies, as 'operators' of the transport authorities) have never enjoyed exclusive rights.

[175] These are the union of public transport authorities, the union of bus operators, the union of train operators, the union of taxi operators and the union of municipalities and counties.

reduces the autonomy of the planners and enhances the decision power of the politicians. This is apparently done in response to a feeling in some parts of the sectors that the planners had got too much power in the course of time and that the balance of power should be shifted towards the political level.

4.3. The New Public Transport Law

The resulting proposal (Prop. 2009/10:200) by the government was eventually accepted by parliament and enacted as new Public Transport Law (*Lag om kollektivtrafik*) on 15 July 2010 (SFS, 2010). It will enter into force on 1 January 2012. This legislation creates the following arrangements.

The counties and municipalities within the county are in principle together responsible for public transport services in the county (some exceptions apply). A Regional Public Transport Authority (RPTA) must be created in each county, in principle in the shape of a multi-authority co-operation (*Kommunalförbund*) or board (*Nämnd*).

This authority is responsible for establishing a Regional Transport Supply Program (RTSP) (*Regional Trafikförsörjningsprogram*) after consultation with neighbouring authorities and other relevant authorities, organisations, operators and representatives of businesses and passengers. The RTSP should discuss the need for PT and aims for its supply. It should cover both commercial services and services to be contracted. It should include measures to protect the environment and measures to ensure adequate access to services by mobility-impaired people. The RTSP, which has to be determined before 1 October 2012, should remain a strategic and long-term document, covering various modes of transport from a passenger's perspective, and taking account of other national, regional and local aims and measures related to sustainable development. It should therefore be coordinated with regional and urban development plans, and other relevant plans. The RTSP is expected to contain a description of the current situation, a common policy vision, main strategic choices, realistic and measurable goals, measures to realise the goals indicating responsible actors, an analysis of the economic and financial consequences and a follow-up.

Operators are in this new regime entitled to initiate commercial public transport services by registering these with the RPTAs involved. The RTSP, indicating the policy aims of the RPTA, is supposed to guide the

operators in their business plans. A regulator may define further specific requirements. The collaboration of actors in the sector has recently suggested adopting a 14-day period for entry and exit registration (Partnersamverkan för en fördubblad kollektivtrafik, 2011).

A key element of the new regime is that the RPTA is entitled to define Public Service Obligations (PSO¹⁷⁶) for public transport services in its area. Several RPTAs may cooperate in determining PSOs, for as much as their collective action is restricted regional public transport services covering commuting or other daily transport needs. These PSO decisions have to be based upon elements of the RTSP, indicating which areas or lines are concerned, which requirements will be imposed and also indicating how the trade-offs should be made between those services that the RPTA is intending to take responsibility for and those (commercial) services that will not be submitted to contract. This is in fact a declaration by the RPTA of the services that it intends to take responsibility for, and is intending to submit to contract.

The RPTA is then responsible for contracting for those transport services for which a PSO is defined. A new decision on the PSO is required at the level of the RPTA for each new contract with an operator, limiting the autonomous power of the planners and enhancing that of the politicians. PSOs may not remain dead letters. When PSOs have been decided, they have to be realised by the RPTA as soon as possible. If the RPTA wanted for some reasons not to realise those services, this would require another formal decision to abolish the PSO in question. The RPTA may decide to delegate its contracting power to a common shareholding company, which is the current planning body for public transport in most counties, and the actual seat of much of the power on the supply of public transport services. The power to contract services within municipalities may also be delegated to the municipality in question.

PSO contracts are in principle to be submitted to competitive tendering procedures according to existing European obligations. Yet, as allowed by the EU Regulation, own production by the authority remains possible (though very exceptional in Sweden). The RPTA must produce a yearly report on the PSOs that have been contracted.

RPTA may also decide to use general rules rather than a contract to impose specific obligations upon services.

[176] In line with what is allowed by the corresponding European Regulation (1370/2007), Public Service Obligations are requirements defined by the authority in order to ensure the realisation of services that an operator, if it were considering its own commercial interests, would not assume or not to the same extent or conditions without reward.

General rules are applicable to all operators, including the commercial ones. A typical example is a tariff obligation creating rebated fares for specific groups of users. The EU Regulation imposes that such obligation be compensated financially according to specific rules described in the Regulation.

In this new regime, exclusivity may never be given to an operator as compensation for the realisation of a PSO. Note that the European Regulation allows such exclusivity and that Sweden has decided not to follow this possibility, despite Lundin's proposal that also allowed some exclusivity for tendered services. This means that commercial operators may always supply their services through the same areas as those served by the RPTA. The government has announced that it intends to closely monitor this market and, if necessary, take further steps to ensure that commercial services are not unduly crowded out by services initiated and paid for by the RPTAs.

Note that the authorities do not have the duty to find out whether services would be delivered on commercial grounds before deciding on PSOs. Services covered by PSOs are therefore likely to include services that could be commercially viable. The RPTA must however announce its intention to organise a competitive tendering procedure one year before starting the actual tendering procedure. A 'consultation procedure before tendering' may be organised during this period to find out which services could be provided on a commercial basis. Note that the RPTA will also have gathered some information on the probable intentions of the operators during the preparation of the RTSP. The RPTA should then make a decision about which services to submit to contracting and take corresponding PSO decisions (including a map showing the area or lines concerned and the services falling under the PSO). Note that operators may complain to the courts within three weeks when RPTA's decide to create PSOs on services that they provide or are planning to provide commercially. The judge can then decide whether the RPTA was acting within its powers. The actual contract may never be signed earlier than when the corresponding PSO decision is taken. This effectively means that, depending upon the complexity of the services concerned, RPTAs must start thinking about their PSOs three years before new contracts come into operation.

All operators must provide information about their service supply to a common passenger information system to be designated.

All operators and all involved authorities must also provide all necessary information to an authority to be designated by the government to enable to follow

and evaluate the functioning of the passenger transport market. This regulator, which is expected to be the Swedish Transport Agency (*Transportstyrelsen*) may then impose injunctions and prohibitions (and fines) to ensure compliance with this law.

4.4. Expectations

This new regime based on a larger space for the free market has not yet been implemented in Sweden, as the legislation will only come into force in January 2012. It is therefore too early to describe its consequences.

5. ANALYSIS OF EVOLUTIONS

The previous chapter covered the amendments recently brought into the British legislation (Local Transport Act 2008) introducing new possibilities for coordination, similar legislative attempts in New Zealand and, finally, the opposite example of Sweden that recently introduced a partial deregulation, very much at odds with its former comprehensive competitive tendering approach. This chapter analyses the evolutions that have taken place.

5.1. Britain

The British regime has recently moved towards a new balance between competition and coordination, greatly reducing its dogmatic anti-coordination component. The first steps in this direction were taken in 2000 but were ineffective. The steps taken in 2008 are bolder and are now being transposed into facts. Now is the time for local transport authorities to put things in practice and to find out what can be achieved with the new instruments put at their disposal. It seems, for the time being, that authorities are still a bit shy in using the powers given to them and devising innovative arrangements that may improve the performances of this deregulated regime. The current budget cuts may, for that matter, be a blessing in disguise if they force the authorities to change their approach and seek innovative ways to stimulate the free market to deliver more coordinated services in ways which were hitherto unavailable.

The key to success will lie in a readiness to question existing practices, and in the availability of an adequate knowledge and stance amongst civil servants and local politicians to develop new instruments and partnerships that could reveal unused potentials of the free market. In this respect, the conclusions of the Competition Commission already indicate that further guidance (i.e. teaching and learning) might be needed to enable the local transport authorities to make full use of the provisions given to them.

5.2. New Zealand

The debate about further regulatory reform in New Zealand has now been going on, more-or-less

continuously, since about 2004, and this continuing uncertainty has itself had adverse effects on the industry (e.g. in inhibiting operator investment, new service initiatives and re-tendering of existing services). At the time of writing, a Government decision on a new 'operating model' is imminent. The draft new model is attempting to address the perceived deficiencies of the present regulatory model and to balance the interests of the key players in the sector – a challenging task indeed!

The draft model that has been developed seems likely to reduce the scope for operator initiative in the provision of commercial services (relative to the 1991 regime), but may impose fewer and less cumbersome controls on such services than would have been expected with the 2008/09 regime (which has largely not been taken up in practice). The current relatively low proportion of 'commercial' bus services in the main cities (now about 20% - 25% of the total) seems likely to reduce further, to a small number of 'fully commercial' units – which will be more heavily regulated than the existing commercial services.

Another aspect of the proposed draft model is that around half of the contracted bus services in the main centres would be offered to competitive tender (compared with all contracted services being tendered at present): the remainder, generally the better-performing services (the major routes), would be contracted through negotiation with the incumbent operator, based on benchmark rates established from the competitively-tendered services. This is an unusual development from an international perspective, going against a broad trend towards increasing competition in bus service provision: it will be watched with interest.

On the other hand, it is perhaps disappointing, from an international research perspective, that the potentially clever but also potentially complex and bureaucratic tools for 'controls' on commercial services incorporated in the 2008/09 legislation may never be put into practice, preventing the international community from learning from their implementation. These tools are/were similar to those devised in Britain after the 2008 legislative change, and they are likely to be similar to those that Sweden will probably need to develop to make its new semi-deregulated regime work. From this point of view, it would have been of wider interest to see how they could have helped to develop the functioning of the free market within the New Zealand context.

The proposed New Zealand model seems likely to evolve towards a less competitive and more regulated and protected situation for the fully commercial 'units' than hitherto, albeit under stricter contractual controls. This evolution is interesting in itself as it indicates a regime

that increasingly resembles that of route licensing which was introduced in the 1930's in many countries, and that was abolished by deregulation or competitive tendering in the 1980s and 1990s. The future will tell us whether this is indeed the case.

5.3. Sweden

The institutional evolution taking place in Sweden and that will take effect in January 2012 is fundamental in that it attempts to combine a competitive tendering regime with elements of a deregulated regime. The regime is very hybrid and includes many flexibilities, it is also much less dogmatic than the British and New Zealand approach.

The new regime gives the impression that much of its functioning remains undetermined. Talks have also been organised by and with all involved parties to facilitate the transition to the new regime. This led to numerous questions and highlighted remaining uncertainties and incomprehension about the future functioning of the regime. Guidebooks on the RTPS and the PSO have been established by all organisations of actors in the PT sector to facilitate the transition, using the results of all talks. But it is practice that will reveal whether it will be possible to avoid the tactical games played by operators in New Zealand, whether network effects (integration) will be lost or gained, and whether over-prescription will develop, stifling the possibilities for free market initiatives to take the lead.

It is striking that the possibilities for transport authorities to use 'general rules' do not go as far in the new regime as what the Lundin proposal suggested (ticketing, information, environmental and accessibility standards, usage of terminals and stations,...) and what has now been added to the legislation in Britain or in New Zealand (though not implemented in this case). Instead, and quite interestingly, the involvement of a regulator is meant to let the sector develop what is needed rather than imposing up front too many requirements that may prove unnecessary or counter-productive. The expectation is that the oversight by a regulator and the threat of additional legislation, especially if the commercial sector is unduly crowded out by subsidised services, will stimulate the sector to find constructive solutions. This gives the regime an interesting learning character where a regulator is given power (threat), the sector is expected to self-regulate and a clear collective movement (doubling public transport) is being used to stimulate progress. The sector representatives continue themselves to stress the importance of continued collaboration to facilitate the functioning of the open market and identify the problems that may appear in the short run and in the longer run in order to solve those problems based upon the view that

actors who will now get more rights should also accept bearing more responsibilities for solving the problems that may arise (Partnersamverkan för en fördubblad kollektivtrafik, 2011, p. 2) Interestingly, this may also result in more national coordination than ever before in a country where public transport was organised at the regional level.

It remains to be seen how the combination of subsidised services with free market initiative will work (note, though, the similarity with Britain's railway regime). The expectation in Sweden is that the market opening will not lead to an immediate creation of many new services. The expectation is that things will be gradual, step-by-step, and that niches will first be found by new and existing operators, with regional routes (and this is the main expectation) serving more local areas underway¹⁷⁷. Contrary to the original Swedish reform proposal by Lundin, that had a clear delineation of the border between commercial and non-commercial, this regime leaves more uncertainty on how to handle the interface between both. Yet, this is likely to become one of the contentious issues in the functioning of this regime and much will depend on the ability and readiness of both the Swedish regional transport authorities and the probable national regulator to develop innovative approaches, if the potential of the free market is to be used. Seen positively, the regime could evolve to a cleverly deregulated market if the authorities realise the potential given by the free market, if too dogmatic approaches remain absent (such as the original British prohibition of coordination), if operators remain constructive, and if local planners are/become/remain open minded. Seen negatively, the regime could evolve towards a status quo if the planners are not open minded and continue as ever before, not trying to give some space to private market initiative, or if the actors start fighting for their interests, not trying to accept the existence of network benefits that need to be organised collectively.

6. CONCLUSIONS

The three cases presented in this paper illustrate different reform paths. The British case started from a rather dogmatic deregulated base, with CT representing about

20% of the supply. The regime was rather inflexible, with a slow institutional evolution in the direction of learning from experience. The regime operates in a context characterised by a lack in sectoral consensus amongst actors. The New Zealand case started from a regime loosely based on the British, though less dogmatic and characterised by a dominance of CT. A controversial compromise was developed a few years ago in a context characterised by a lack of consensus on the way forward. Further changes are currently being contemplated and difficult trade-offs still have to be struck. The Swedish case started from the 'opposite' institutional setting of universal competitive tendering, now to be complemented by the free market. This hybrid regime seems to be set up in a flexible manner, with an institutionalised space for learning (role of the regulator). It operates in the context of a strong sectoral consensus and commitment, across all sides of the table.

Clearly there is no clear-cut evidence yet on what is the best 'deregulated' regime in particular circumstances. This has perhaps also much to do with the lack of proper research on such regimes and the lack of champions pushing forward the idea of market-initiated regimes combined with 'clever' or 'light' regulation, as there is no power to win from such an action, contrary to the promotion of the idea of competitive tendering or closed markets.

The British and New Zealand cases illustrate slow reform paths, away from dogmatism and towards different forms of softer regulation, recognising the existence of network effects and the need for some constructive coordination. The Swedish case illustrates the opposite move. These cases, taken together, could be illustrating a move towards what could become a new middle ground, unless we are simply witnessing a step in what is sometimes referred to as 'the regulatory cycle' or – worse – if the less dogmatic approaches are only a symptom of (a coming) regulatory capture. The near future should be rich in learning in the countries presented here.

REFERENCES

[See reference list at the end of the thesis]

Acknowledgements - We would like to thank Prof. Peter White (University of Westminster) for the help provided in collecting additional facts on the effects of the LTA 2008 in Britain. We also would thank a number of New Zealand colleagues for providing comments on earlier drafts of this paper.

[177] See also van de Velde (2010) for a presentation of the Norwegian long-distance coach deregulation which could illustrate part of what could happen in Sweden in these markets.

The second paper included in this section (Van de Velde, 2014)¹⁷⁸ argues, looking at real world examples, that the role played by market initiative regimes in public transport in Europe is growing: in local public transport (Sweden in 2012 and Germany in 2013) even though in a watered-down way, in the long-distance coach markets (Germany in 2013) and in the railway sector (open access competition in Germany, Sweden, Austria, Italy and the Czech Republic). It reviews these developments, comparing some of the regulatory arrangements implemented. It finds that the balance between competition and coordination was slowly tipping towards coordination, confirming a movement away from dogmatism in some countries. However, it also finds that insufficient attention was paid to the development of adequate coordinative features to regulate market initiative through ‘rules of the game’ and that this may hamper the potential success of such institutional frameworks and of the reforms undertaken.

Finally, the paper draws the attention upon two new facts that may increase the relevance of institutional frameworks based upon market initiative in the future. Firstly, it observes the gradual appearance new types of mobility (shared systems, autonomous vehicles) that have in common that they are intermediates between private and public modes of transport but tend to be provided by the free market. The paper suggests that this will require re-thinking the regulation of the sector, especially where it is organized through monopolies (tendered or not). Secondly, the paper observes that the increased level of cost-coverage achieved under competitive tendering (and budget cuts) brings those services closer to a situation in which provision via market initiative becomes realistic, provided clever incentivising regimes can be devised.

[178] This paper is based on a presentation first held at the 60th UITP World Congress (Geneva, Switzerland) in May 2013 (Van de Velde, 2013a). UITP is the International Association of Public Transport. Its worldwide membership includes operators, authorities, industry, advisors and academics working in the field of public transport. This presentation subsequently led to a plenary paper presented at the 13th International Conference on Competition and Ownership in Land Passenger Transport (Oxford, United Kingdom, 15-19 September 2013).

Market initiative regimes in public transport in Europe: Recent developments

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Abstract - The role played by market initiative regimes in public transport in Europe is growing. Initially limited to Great Britain outside London (1986), a watered-down version was implemented in Sweden in 2012, while the 2013 German public transport law allows increasing the role of 'commercial' market initiative. Long-distance coach markets were already based on deregulated regimes in Britain, Norway, Sweden and various Central and Eastern European countries, while Germany deregulated this market in 2013 and Italy soon opens up its market as well. Finally, open access competition on the tracks exists in Germany, Sweden, Austria, Italy and the Czech Republic, with spectacular results in at least Italy, while the European Commission is pushing for more. This paper reviews these developments, while comparing some of the regulatory features implemented. It confirms a movement away from dogmatism in some countries but it also finds that insufficient attention is being paid to developing adequate regulation for the functioning of market initiative regimes (the 'rules of the game'), especially concerning the issue of fare integration, hampering the potential success of the reforms.

1. INTRODUCTION

This paper is devoted to recent developments in the role played by 'market initiative' in public transport in Europe. 'Market initiative' refers here to bus markets where the decision to supply bus services lies in the market, which means that free entrepreneurs are entitled to create new transport services and can do so autonomously from specific actions or requests by (transport) authorities. 'Market initiative' stands therefore in sharp contrast with other regimes based on competition such as 'competitive tendering' (Van de Velde, 1999) which represent a fundamentally different and very much regulated path to competition precluding autonomous market entry initiative in favour of a regime based upon monopoly provision of one integrated and centrally planned public transport system. Contracted operators in such regimes have no or only a contractually regulated freedom to modify fares, routes and timetables. In other words, under 'competitive tendering' the transport authority (or a monopolistic publicly-owned transport planning company instituted by legal act) is a monopolistic entrepreneur taking the initiative to arrange for the provision of passenger transport services and contracting out the realisation (and sometimes parts of the planning of those services) to independent operators chosen by competitive tendering.

Note that transport authorities are not necessarily absent from market initiative regimes as a wider variety of actions by transport authorities are possible. Authorities can play a role of regulator. This can be minimal, checking

technical standards at the entry but essentially allowing all entrants to the market, even in direct competition with one another. It can also be more extensive, guiding or even restricting market entry. Authorities can also finance or fund specific investments or pay for fare rebates for groups of passengers. Finally, authorities can also themselves behave as entrepreneur, supplying commercial services with their own companies or funding the provision of unprofitable services with their own companies or under contract with other operators.

The workshop on 'deregulated' market initiative regimes held during the previous 'Thredbo' conference formulated a few policy recommendations (Van de Velde and Preston, 2013) for the improvement of the functioning of such regimes. This included recommendations to pay more attention to and devise better 'rules of the game' (entry and exclusivity) such as to realise network benefits and address market failure, and to devise incentivising regulation. It also suggested that there is a bell-shaped relationship between the extent of regulatory prescriptions on market behaviour (design of supplied services) and the 'outcome' (welfare or other measure). Earlier, Van de Velde and Wallis (2013) concluded after studying the reforms put in place in Britain, Sweden and New-Zealand that some of the reform paths tend to evolve away from dogmatism and towards different forms of softer regulation, recognising the existence of network effects and the need for constructive coordination.

This paper starts by presenting the main legislative and regulatory evolutions witnessed in Europe during the past

few years that have had an impact on the role played by market initiative regimes in local public transport services provision, long-distance coach services and passenger rail services. The paper then reviews these developments, comparing the features implemented to see whether the earlier conclusions still hold and whether new trends have emerged.

2. RECENT DEVELOPMENTS

This section reviews notable recent development in the local public transport sector in Europe, followed by a review of developments in the long-distance coach sector and the railway sector.

2.1. Local public transport

The deregulation of the British bus sector (outside London) in 1986 was the start of a fierce debate on the relative merits of 'deregulation' versus 'competitive tendering'. For many years, this regime could, in Europe, only be observed at full scale in the case of Great Britain outside London (since 1986). A watered-down version was implemented in Sweden in 2012, while the edited 2013 German public transport law provides a basis for a similar regime, even though it is highly unlikely that practice will follow. These three cases will be covered at greater length in this paper. While not covered in this paper, one should not forget that market initiative is also present in many local public transport markets in the central and, especially, in the eastern part of Europe. There, minibus services and further initiatives, sometimes at a larger scale, co-exist with or replace failing 'traditional' public transport services. Examples can be found in (at least) Romania, Poland, the Baltic States and Russia.

Van de Velde and Wallis (2013) appraised international developments in terms of 'regulated deregulation' by comparing the experiences of Great Britain, New Zealand and Sweden (where a partial deregulation has been implemented in January 2012). That paper described the expectations that came with the introduction of the regulatory reforms, some of their perceived shortcomings and the legal changes enacted to cope with revealed shortcomings. A brief update is provided in Van de Velde (2013a). Some of the main findings of these papers is summarised hereafter, adding a short update for Britain and Sweden and new information on recent developments in Germany.

2.1.1. Britain

Deregulation was introduced in Britain in 1986 in a rather dogmatic fashion, allowing operators to compete with each other on all routes. Fare rebate schemes compensated by the local transport authorities (concessionary fares schemes), induced operators to supply more services

than what the free market would have permitted. The local transport authorities could then complement this network with socially-desired services not provided by the commercial sector. Under these conditions about 80% of services are provided commercially, and 20% under contract. Note, though, that the proportion of commercial services is much larger in urban areas and much lower in rural areas. This regime did not lead to the expected increase in passengers. Neither did it lead to a noticeable change in the secular decline that was already taking place in the decades preceding the deregulation. Recently, especially with the generalisation of free travel for the elderly, some stabilisation could be observed even though decline resumed in some regions (White, 2013a).

All in all, deregulation received over the years a rather bad press. This negative image is essentially linked to the continued reduced passenger transport ridership, the fare increases and the loss of integration that followed its implementation. While these are facts, they should however be put into context. It is important to distinguish between three points: (i) the effects of deregulation per se, (ii) the budget limitations simultaneously imposed upon the transport authorities by central government, and (iii) the effect of the specific and rather dogmatic way in which its regulatory provisions were implemented in Great Britain.

Concerning the first point, deregulation led to a very substantial improvement in the productivity of the sector, halving the production costs per unit (similarly to what happened in the competitively tendered sector London), it led to a stronger focus on service attractiveness (straightening routes, increasing frequencies, clear and simple communication to the customer) and it introduced a clear split between the commercial focus of the operators and the social focus of authorities. As far as the second point is concerned, the budget limitations imposed upon the transport authorities by the British government at the time severely limited the 'policy space' and budget available to the local authorities within the deregulated regime, probably worsening the outcome. Recently Preston and Almutairi (2013a) made an initial (long-term) quantitative assessment of bus deregulation, attempting to take into account both these points. Their initial conclusion on deregulation as implemented in Britain pointed at welfare gains. However, they also warned that these results are very sensitive to various specifications and assumptions, indicating that the opposite conclusion could also be drawn (see also the update by Preston and Almutairi, 2013b).

It is the third of the points mentioned above, however, that constitutes the main focus of this paper: deregulation has been introduced in Britain in a very specific and

dogmatic way in which almost all forms of co-ordination ('integration') between providers were deemed to be anti-competitive collusive practices that needed to be prohibited. As a result, it can be argued that services were less attractive than they could have been otherwise under a less dogmatic and more 'cleverly' deregulated regime. I would like within this paper and this conference's deregulated public transport markets workshop to spend more time on the implications of this choice and on the alternatives that have emerged elsewhere or that could be designed, comparing the past British experiences with the recent ones since the enactment of the Local Transport Act (LTA) 2008 and those of other countries, such as Sweden, New Zealand or Germany.

The evolutions over the last decade show that the British regime has gradually moved towards a new balance between competition and coordination, greatly reducing its dogmatic anti-coordination component. After the autonomous appearance of Quality Bus Partnerships by simple 'Gentlemen's agreements' in the 1990's, the Transport Act 2000 took first legal steps with creating the possibility for Statutory Quality Bus Partnerships, Quality Contracts (i.e. effectively creating the possibility to abolish deregulation and replace it by competitive tendering) and joint ticketing; this, however, proved ineffective. The steps taken in Local Transport Act (LTA) 2008 were bolder, with Quality Bus Partnerships covering also fares and services, and with easier to implement Quality contracts. With this, some of the most dogmatic parts of deregulation preventing coordination have been removed and local transport authorities have been given some means to re-regulate the market in a clever way. The Oxford scheme is a good example of what is feasible under this legislation (White, 2010). Note that the quantitative assessments by Preston and Almutairi (2013a; 2013b) has not yet been able to cover the implications of the LTA 2008 as its data set stops in 2009/10 when the features enabled by the Act only started to come into effect.

A few official enquiries were also held during the past years. The Competition Commission (2011) investigated the functioning of the local bus markets and the underlying conflict between competition and coordination. It suggested a number of remedies to the problems identified (Competition Commission, 2011, ch. 15). These include measures to increase the number of multi-operator ticket schemes and to ensure that these are effective and attractive to customers; restrictions on aggressive behaviour, such as 'over-bussing' on particular routes and other obstructive behaviour aimed at reducing a rival's ability to compete and ensuring fair access to privately owned and managed bus stations for all operators. Other ideas are the issuing of recommendations to local transport authorities on the circumstances in which to pursue Quality Contracts,

or other franchising models, in areas most affected by a lack of competition; and on how to use other powers (for example, Quality Partnerships) to promote competition or improve outcomes to local consumers. Also, the report includes recommendations to the Department for Transport (DfT) to update its best practice guidance (to local authorities) on supported services in order to increase the number of operators bidding to win such contracts; and measures to make more information available to local transport authorities and potential bidders about the performance of supported services and in bidding processes.

The government decided to move ahead with a number of measures in line with the recommendations of the Competition Commission. Note that this report was received very critically by the British association of passenger transport authorities (PTEG, 2012) that was strongly disappointed at the way in which the Competition Commission looks at the functioning of the bus market, which they consider to be too simplistic and inappropriate, focussing too much on the (dogmatic) necessity to have direct competition on the streets. They do, however, welcome the recommendation to move towards more integrated ticketing.

The House of Commons Transport Committee also published a report in 2012 in reaction to the report from the Competition Commission, followed by a government's response. Concerns about the benefits of competition *per se* were formulated in the Committee's report, especially short-run competition that had produced unstable results with little benefits to users. The recommendations of the Committee go towards more surveys of passenger satisfaction and competition at the local level, giving local authorities the right to decide the best regime for their area on the basis of local evidence, with national monitoring of the outcomes, further multi-operator ticketing and wider disclosure of information on de-registered services (White, 2013a).

2.1.2. Sweden

The Swedish local and regional public transport was since the 1990's organised on the basis of a comprehensive competitive tendering regime. The rest of the collective passenger transport system in Sweden (air, coach, rail) has been deregulated over the past decades. In this respect, local and regional public transport services was rather an exception in the general regulatory picture.

Legislation that entered into force on 1 January 2012 introduced a hybrid deregulated regime in local public transport. The following presents the main arrangements of this regime; Van de Velde and Wallis (2013) and Rye and Wretstrand (2013) provide some background for

the developments that led to its implementation. A Regional Public Transport Authority (RPTA) must be created in each county and is responsible for establishing a Regional Transport Supply Program (RTSP) covering both commercial services and services to be contracted. On this basis, the RPTA is entitled to define Public Service Obligations (PSO¹⁷⁹) for services in its area, effectively declaring which services it intends to submit to contract according to existing European obligations. The RPTA may also decide to use general rules applicable to all operators rather than a contract to impose specific obligations (with financial compensations) upon services, such as fare rebates for specific groups of users. Exclusivity may never be given to an operator as compensation for the realisation of a PSO, contrary to what is allowed by the European Regulation.

This means that operators are at all times entitled to initiate commercial public transport services anywhere by registering these with the RPTAs involved. A 14-day period for entry and exit registration (much shorter than Britain) has been determined. The only compulsory integrative requirement is that all operators must provide information about their service supply to a common passenger information system. A regulator may define further requirements, monitoring has been organised and the government has announced that it intends, if necessary, to take further steps to ensure that commercial services are not unduly crowded out by services initiated and paid for by the RPTAs.

As could be expected, complex issues are arising in this hybrid regime when combining new commercial market initiative services with existing or newly intended subsidised PSO services. In the first place, access to integrated fares and ticketing systems used by the (subsidised) PSO network obviously constitutes a major barrier to entry for new commercial initiatives. Another combination issue arises as well. The RPTA must announce its intention to organise a competitive tendering procedure one year before its start and 'may' start a 'consultation procedure before tendering', enabling them to find out whether services could be provided on a commercial basis. The question is to what extent the authorities are currently able to engage into such an analysis and to what extent they are open to such an approach in view of the ingrained planning traditions of the public sector. Note, also, that operators may complain to the courts when RPTAs decide to create PSOs on services that they already provide or are planning to

provide commercially, but it is yet unclear whether court decisions will be taken quickly enough to be effective.

These are some of the reasons for which it is indeed not surprising to see that, for the time being, entry has happened only to a very limited extent (see Ljungberg (2013) and the reports from Trafikanalys (2012) for a presentation of the new commercial initiatives and a further discussion of these and other issues). The expectation in Sweden was that the market opening would indeed not lead to an immediate creation of many new services but that new and existing operators would first find niches. The first reports from Sweden (Trafikanalys, 2013b) mention that little has happened since the opening of the market in January 2012. In total 35 new lines were opened in 2012, out of which 14 stopped the same year, and another one during the first quarter of 2013, leaving 20 initiatives in existence for the time being, complemented by four more new lines in 2013. One of the new lines is a commuter shuttle in the outskirts of Stockholm but operating only a few services a day. Other initiatives include a few dedicated buses to airports, a few tourist-oriented services, a few passenger ferries and a bicycle ferry. Many of these operate only during specific seasons.

Clearly, the new Swedish regulatory regime for local public transport is not yet mature. The new regional public transport authorities have yet to settle in their new role, especially as far as their openness to facilitating (new) commercial initiatives is concerned and in finding ways to integrate them in the general public transport network to the mutual benefit of passengers, operators and themselves as transport authorities. Trafikanalys (2012 section 9.4) already formulated a few recommendations for improving the functioning of the new regime. Not surprisingly, a more open approach to commercial initiatives figures prominently in the list of recommendations.

2.1.3. Germany

The regulatory regime of German public transport has for many decades been based on the legal principle of free entrepreneurship and market initiative; this in a similar fashion to what was the case in most European countries since the 1930s. Yet, the actual functioning of this regime was and still is characterised by a high degree of hybridity. Publicly owned companies, especially in the urban areas, provide most services, while small private operators continue to exist in the countryside besides larger public operators. The issuance of route authorisations

[179] In line with what is allowed by the corresponding European Regulation (1370/2007), Public Service Obligations are requirements defined by the authority in order to ensure the realisation of services that an operator, if it were considering its own commercial interests, would not assume or not to the same extent or conditions without reward.

and financial support to publicly owned companies is organised in such a way that incumbents have, de facto, a preferential position, markets are strictly regulated, and freedom of initiative hardly exists in practice.

At odds with the principle of market initiative, transport associations (*Verkehrsverbände*) co-ordinate or plan public transport services and fares in larger areas, uniting local authorities and sometimes even transport operators. Legally, commercial (i.e. profitable) services could be awarded without tendering to requesting operators, while non-commercial (i.e. non-profitable) services had to be tendered since 1996. This is in principle similar to the distinction between commercial and non-commercial services in the deregulated areas in Great Britain except for the substantial difference that the German authorisations provide a high level of exclusivity. However, very few services were actually submitted to competitive tendering in practice as many authorities preferred to use various forms of subsidies (in particular cross-subsidisation from other public utilities such as electricity distribution, but also capital grants and investment subsidies) to maintain a fiction of profitability and avoid the competitive tendering obligation. Needless to say, this more or less artificial distinction between commercial and non-commercial services has been at the centre of much debate, both legal and academic (Karl, 2013; Beck, 2012b).

This complex situation has to some extent been clarified by the late and difficult implementation of the European Regulation 1370/2007 into German legislation, at least for what concerns the now more restrictive definition of what is 'commercial' and what is not. However, Karl (2013) shows that the resulting situation is far from simple and that it may still need further amendments to be truly compatible with the European rules.

Let us, for the purpose of this paper, present – in a much simplified fashion – the main features of the resulting legislation (see Karl, 2013, for a more detailed discussion), as they illustrate a framework that could, at least potentially, move towards a 'cleverly' deregulated market initiative regime. Commercial initiative remains at the basis of the new regime with, however, a number of conditions. Transport authorities can start by announcing their intention to contract services (according to a transport plan). After this, operators have a three-month period to register commercial operations in line with this plan. To be awarded the services, the applicant should commit bindingly to the service standards set by the authority (for the length of the authorisation?). In the event of the absence of an application, the authority could then proceed to contract the services. This could then be done by competitive tendering or by direct award (the latter limited by the European regulation to an in-

house operator, or to very small operators). Note that the authority could also refrain from an intention to contract, in which case only awarding after commercial initiative would be possible. Generic rules valid for both cases can also be defined by the authorities (e.g. for the compensation of rebated fares), which could help to increase the potential of commercial initiative. Seemingly at odds with the principles of European Regulation 1370/2007, authorisations for commercial services given according to the above procedure grant the operator an exclusive right. If several operators applied for the same authorisation, then a competitive procedure would set it, leading to the choice of the 'best' proposal by the regulatory authority, based amongst other on the transport plan of the local transport authority.

2.2. Long-distance coaches

There are marked differences in the degree of development of the markets for scheduled long-distance transport of passengers by coach in Europe. Some countries have not allowed the development of this market, except for international services based on international obligations and with a limited level of cabotage, such as Belgium, the Netherlands or Switzerland. Until recently France and Germany, two major European countries, had also kept their markets closed, protecting the traditional monopoly of their railways on long-distance land passenger transport. Other countries, on the contrary, have allowed the development of this market, such as Sweden and Norway, following the example of Great Britain (deregulated since 1980).

Most European countries that have allowed the long-distance coach market to develop have chosen for a regime based upon 'market initiative', with a large degree of deregulation. This is the case in Great Britain, Portugal, Sweden, Norway, Poland, Hungary and the Czech Republic. All of these countries have witnessed the gradual development of very buoyant, competitive and innovative markets in the last few decades. White and Robbins (2012) provide an assessment of the long-term development of express coach services in Britain. Van de Velde (2013b) gives an overview of developments in various European countries.

Three countries currently find themselves in a period of change. Italy, that still has a very fragmented industry, is now in a period of transition towards a deregulated market. A liberalisation was decided in 2007, removing the exclusivity of the line authorisations by the end of 2013.

France has in 2011 allowed international services (operated by Eurolines) to sell national trips on the basis of cabotage operated with these services. Soon after the

national railway carrier SNCF started developing an international coach network (iDBUS) between Paris, Lille, Brussels, Amsterdam and London, and later also towards Italy via Lyon. Services are successful, even to the point where the cabotage rules¹⁸⁰ force the company to refuse passengers despite the availability of free seats. Both operators are now also in direct competition with one another between Brussels, Paris and Lyon, while the operators report that this has only led to a further growth of the market (Viennet, 2013). A piece of legislation opening up the national market had been suggested in February 2011, but has apparently been shelved for the time being.

Germany has moved one step further by fully deregulating and opening up the coach market since the beginning of 2013¹⁸¹. The idea, which had already been suggested in 2005, has now finally been transposed to the real world¹⁸². A growing number of commercial services have appeared. An authorisation procedure still exists but competition on the road is allowed, there is no regulation on fares, timetable or route. However, there are restrictions for safety, a requirement that stops must be at minimum distance of 50 km and the coach services may not be offered if parallel regional rail services exist with journey times of up to 1 h for the distance between the two corresponding stops of a bus route. A notice of withdrawal has to be given three months in advance. Augustin et al. (2013) report on this very dynamic market that has appeared already a few months after deregulation, estimating that more than 150 national routes are run by 1 July 2013, mainly by small and medium sized companies working together under a same brand, often with subcontractors, connecting major cities with high market potential as well as more remote areas. Large or state-owned companies (such as DB) do not seem very active so far.

Authority initiative and competitive tendering are present too in the European coach scene, but to a much lesser extent. The main example is Spain where long-distance concessions are granted by the national government on an exclusive basis for periods varying between 8 and 20 years, and without subsidy. Regional governments award regional inter-urban bus concessions. In both cases, contracts are now mainly granted by means of competitive tendering, although direct contracting has been possible in the past.

2.3. Railways

Providing a good overview of the development of open access in the railway sector across Europe would constitute a study in itself. Suffice it to name here some of the main examples and developments without pretending to be exhaustive. The focus here will be more on mentioning new and notable developments rather than at attempting to quantify their relative importance in the various national and international markets.

The most impressive case is without doubt the entry of NTV (Nuovo Trasporto Viaggiatori) on the high-speed network of Italy. This private¹⁸³ Italian company competes since 28 April 2012 directly on the tracks with the high-speed services provided by the national carrier Trenitalia, providing 50 departures a day. NTV reports that direct competition has led to an increase in supply and quality, to reduced prices and to an increased demand, both for the incumbent and – mainly – for NTV. Another entry can be mentioned on the Italian market, such as in international train towards Austria and Germany, operated by the Austrian and German railways (ÖBB and DB). Another entrant on the traditional network, Arenaways, had a hard time establishing its operations in northern Italy, apparently due to an abuse of dominant position by the national railway holding (FS and RFI) and is currently in a process of re-establishment on different markets, including night trains to the south of Italy. The implications of entry on these more traditional markets for the financial equilibrium of the traditional national and regional Italian train services seem to be one of the causes of the difficulties encountered here, illustrating the need for a proper regulation of these markets. Meanwhile, the national carrier joined forces with VeoliaTransdev under the brand Thello to operate international night train services from northern Italy towards Lyon and Paris. This constitutes the first real open access entry on the French passenger market (besides Eurostar, which has a very different history).

Britain was the first country to have open access operators on its network, notably Hull Trains (owned by First Group) and Grand Central Railway (owned by Arriva), both operating on a specific main route from London to niche markets in the Northern of England. These services continue to represent only a small part of the market that is dominated by a franchising regime protecting

[180] Cabotage passengers cannot represent more than 50% of passengers and more than 50% of the turnover of the line.

[181] See also Schiefelbusch (2013) for a further analysis.

[182] An interurban coach network with Berlin as hub already existed, but as a relic of the division of Germany. Every journey had to have Berlin as starting point or destination.

[183] Note that the French national railway company, SNCF, acquired a 20% share of the company in 2008.

franchised operators from unbridled competition on the tracks. Wrexham & Shropshire stopped operations in January 2011. Further initiatives are reportedly in development, such as the Go-op, which intends to be the first cooperatively owned train operating company in the UK, or Alliance Rail Holdings intending to operate various services after the end of 2013 through Great North Western Railway on the West Coast Main Line, and through Great North Eastern Railway on the East Coast Main Line.

The German railway market is officially open to open access competition for many years (1996) even though very few cases could be observed until now. The most interesting recent new entry on the German market is HKX (Hamburg Köln Express) operating since July 2012, after several postponements, on the route from Hamburg to Cologne in direct competition with DB's intercity trains, although only with three trains per day per direction. One small case operating in the Eastern part of Germany is Veolia, operating under the brand InterConnex a few trains that more or less replace former DB long-distance connections.

The Swedish market was also opened to open access competition in 2011. Since then various market initiatives appeared. All remain marginal compared to the national railway company SJ. Long distance services are offered by Veolia, notably on the Stockholm-Malmö route, though only twice a day, and since 2012 by Skandinaviska Jernbanor between Uppsala and Göteborg via Stockholm and Skövde, but only once a day. The functioning of these markets will be included in the official review chaired by Alexandersson (2013).

Finally, Austria, the Czech Republic and Slovakia should also be mentioned with a few interesting cases of direct competition on main lines. Westbahn, a private Austrian company co-owned for 26% by SNCF, operates since December 2011 an hourly service with modern double-decker trains and much focus on customer comfort between Vienna and Salzburg in direct competition with the national railway's (ÖBB) intercity trains. In the Czech Republic, even two competitors have appeared on one of the main routes of the national railway system. Here both LEO Express and RegioJet operate on the Prague-Ostrava route, albeit at a much lower frequency than the national railways. RegioJet also operates services further into Slovakia towards Zilina. See Tomes et al. (2013) for an extensive analysis of this case.

International passenger services have been opened to open access competition by European legislation in January 2010, though with little effect up to date. The examples presented above constitute almost exclusively

the result of national decisions to open national services to competition, but this could within a few years expand to further countries if the European Commission gets its way. It has recently (January 2013) adopted proposals for further legislative action (the so-called 4th Railway Package) that aim, amongst others, at extending open access to the domestic passenger railway markets from December 2019. This, if adopted, would enable train operators to offer domestic rail passenger services across the EU, either by offering competing commercial services (open access) or through public service contracts (competitive tendering). The general expectation of the Commission seems to be that open access will remain marginal and that the majority of services will be offered on the basis of contracting, which – under these proposals – would also be subject to mandatory tendering. Interestingly, the Commission seems also to be pushing for better coordination between services by allowing or even encouraging forms of ticketing or fares integration.

3. COMPARISONS

Market initiative, as a basis for a transport regulatory regime, used to be limited to the case of Great Britain outside London (since 1986) and to a few deregulated long-distance coach markets, with again Britain as main example (1980). The developments presented in the previous section show that the role played by market initiative regimes in public transport in Europe is growing. The past few years have witnessed a further expansion of regimes based upon market initiative both in local public transport, in long-distance coach transport and in rail. Market initiative based regimes do not, however, dominate the scene, except for the British local public transport outside London and the coach markets across Europe.

3.1. Local public transport

Summarising the evolutions in Britain, one could say that the trend towards a less dogmatic 'deregulation' in Great Britain (outside London) seems to hold. The 'market initiative' basis of the current regime is not fundamentally questioned by the current developments, although a growing space is allocated or advocated for contracting and tendering effectively replacing market initiative at the discretion of local authorities.

The challenge for the British local transport authorities remains to fully understand the potential of the toolbox given to them with the LTA 2008 and to develop appropriate action to counter the negative aspects of the former dogmatic regime. There are interesting issues relating to the amount of competition. The LTA 2008 should, e.g., permit to prevent the perverse concentration trend induced by the former legislation (White, 2010),

although one would have to hope it is not too late and the trend could be reversed in view of the degree of concentration already reached in the market.

It would therefore be interesting to read about further implementation examples and to investigate properly the processes that lead to or prevent the adoption of such schemes. Understanding these processes would be a useful source of learning for a further development of 'cleverly regulated' market initiative regimes in other countries, and for that matter also for a further development of the toolbox given by the LTA 2008 in Britain¹⁸⁴. Various issues are likely to play an important role here, such as the knowledge, experience and general stance of the civil servants responsible for transport regulation at the local level, but also general features of the transport policy of the local authorities concerned in terms of car traffic, parking, public transport infrastructure, etc.

The situation in Sweden is, for the time being, characterised by the lack of both a regulatory toolbox and perhaps even also of compulsory integrative measures. In terms of the international exchange of knowledge, it is interesting to see that the Swedish legislation did not right from the start foresee the need for fares and ticketing integration and other integrative controls, the exception being integrated on-line information on services and timetables. This is at a sharp contrast with the developments observed in Britain with the LTA 2008 that pre-dates the Swedish reform¹⁸⁵, and the fact these had been foreseen in the first – rejected – version of the reform proposal. The problem now seems to be recognised and the RTSP's of some authorities do mention that this issue will have to be solved during the next years (see also the study conducted by Trafikanalys (2013a) on the possibilities given by the current RTSPs to commercial operations).

Further developments in Sweden during the coming years will be interesting to follow to see whether these provide answers to the following. How to realise a better integration of commercial initiatives with the rest of the

public transport network without weakening the whole and without discouraging innovation? Will it, through this, be possible to generate more fertile grounds for commercial operations? Does this lead to a further movement towards further converging structures (see also Rye and Wretstrand, 2013 on convergence)?

It is still too early to draw conclusions on the functioning of the amended German legislation, as it has only been valid since the beginning of 2013. In practice it is to be expected that direct award to internal operators, with a subsidy to compensate public service obligations, will become the dominating mode of organisation, at least for urban areas, probably marginalising true commercial market initiative in the local transport market. Whether real market initiative develops in some areas, will very much depend upon how cleverly local transport authorities define their transport plan and associated obligations, their general rules (such as compensations) and how they go about the traditional preferential treatment for municipal operators. Much of this remains unclear for the time being but it is likely that a lengthy period of adaptation and learning will now start in Germany.

All three countries presented here currently have a public transport regulatory regime that contains at its core the main components to allow, perhaps after further amendments, for the development of 'cleverly' deregulated regimes (though this might be remote from the intention of the legislator and main actors at the local level, in particular in the German case): right of market initiative, possibility for authority guidance (transport plans), general rules (compensations) and procedures for contracting further public service obligations. It is likely that some level of exclusivity should also be part of this list, but the cases covered do not (yet?) show any intermediate solution between fully non-exclusive rights in Britain and Sweden, versus exclusivity in Germany.

[184] It is interesting in this respect to compare the evolutions in Britain with those in New Zealand (see Van de Velde and Wallis, 2013). Both regimes were initially similar after the deregulation introduced in the mid 80's. New Zealand then also engaged into a regulatory reform of its deregulated regime with the Public Transport Management Act (PTMA) of 2008. This reform introduced so-called 'controls' on commercial services that apparently went even further than what is now allowed by the LTA 2008 in Great Britain outside London. Unfortunately for the academic community, this PTMA was never implemented in practice such that it remains impossible to evaluate how these apparently clever features would have performed in practice. They could and probably should, though, remain as an important source of inspiration for the further refining of the regulatory toolbox of other countries basing their public transport regulation on a market initiative regime. This is certainly true for Britain, but also for Sweden or Germany (see further in this paper). Note that in the meantime New Zealand decided to move to a fully contracted model, based on both direct negotiations and tendering, with features supposed to incentive commercial behaviour (Alexander and Maguire, 2013; Hewitt and Drew, 2013).

[185] See in this context also the earlier remark on the possibility of 'controls' as introduced in the New Zealand PTMA legislation from 2008.

The comparison of the three cases showed both a variety of approaches but also – at least from a historical perspective – a degree of convergence¹⁸⁶. Further evolutions will depend on the capacity of the regimes to learn from experience in the coming years. It seems here that Sweden is better equipped, as the legislation clearly foresaw monitoring and additional regulatory processes, whereas both the British and German are more likely to require lengthy consensus-making and legislative procedures.

3.2. Long-distance coaches

The variety of approaches witnessed in local public transport across Europe cannot be seen in the express coach market. There is here a much greater consensus amongst the legislators of European states that a liberalised and deregulated market is the way to go. There is also ample evidence on the ground that these markets work to the satisfaction of both operators and passengers, unfortunately, though, not that many studies cover this from an academic perspective.

The most interesting unknown for the years to come will be the development of the German market, and subsequently that of the Italian market starting in 2014. The last remaining question is the direction that France will take if it eventually decides to open up its national market. Its traditional approach to public transport markets could lead to a choice for a tendering concession regime, akin to that of Spain, and differently from the path taken by most other European states that have opened this market.

3.3. Railways

Substantial and surprising changes have taken place in the European rail market over the past years. It is now possible to witness several concrete cases across the continent while competition on the track was considered unrealistic and perhaps also inappropriate only a few years ago. That being said, almost all cases remain very marginal, with the exception of the Italian and perhaps also the Austrian case, and most changes have occurred at the national level, rather than on international connections.

It will be interesting to see whether larger scale entry takes place on the German market in the years to come and whether the pending French railway reform will also lead to further initiatives based upon market initiative.

4. CONCLUSIONS

The advantages of a ‘deregulated’ market initiative based regime above a regime based on monopoly, central

planning and competitive tendering are in principle related to the potential given by free entrepreneurship, autonomous innovation, marketing directed at customer rather than political marketing, responsiveness and flexibility. In this vision, central planning and monopoly operations are more likely to lead to inefficiencies and lack of customer orientation. Yet, as the examples presented show, it is not easy to reap those benefits and all too dogmatic implementations of deregulated regimes in the bus sector have certainly not been able to deliver in line with these high expectations. Designing successful deregulated regimes is far from easy.

The workshop on ‘deregulated’ market initiative regimes held during the previous Thredbo conference formulated a few recommendations (Van de Velde and Preston, 2013). The main ones were (i) to pay (more) attention to and devise better ‘rules of the game’ in terms of entry timing, entry selection (service) and exclusivity level such as to favour the realisation of network benefits and address market failure; (ii) introduce smarter market entry rules (professionalism, safety requirements) such as to raise the standard; and (iii) to devise incentivising regulation (rebate compensations, passenger incentives, supply incentives) such as to promote innovation. It stressed that (iv) new technologies make new approaches easier, facilitating the distinction between ticketing integration and fares integration, and facilitating the integration of service information. It also suggested (v) that there is a bell-shaped relationship between the extent of regulatory prescriptions on market behaviour (design of supplied services) and the ‘outcome’ (welfare or other measure).

The cases presented in this paper show that many of these issues have for the time being hardly been addressed in practice. The rules of the game issue, relating to the first and fifth point, have got more attention, especially in Great Britain, but the discussion is only starting in the Swedish local bus market and it remains to be seen whether a constructive discussion will start in Germany and in the railway sector. The second is probably correctly addressed in most cases but it was formulated mainly at the attention of improperly regulated minibus services. Much of this remains a problem in the Eastern parts of Europe (though this was not discussed in this paper). The issue of the incentivising regulation (third point), taking the shape of the so-called general rules in the European context, remains unfortunately largely unexplored in practice, in all markets.

The absence of ticketing and fares integration as a standard feature of newly implemented market initiative

[186] This should also be compared to the New Zealand experience, as many similarities are to be found.

regimes is probably disappointing, though perhaps not surprising in view of the autonomous innovation aim that comes with such transformations. Yet, experiences in the local bus markets in Britain (and elsewhere) seem to indicate clearly that this is a very short-sighted approach. It will be interesting to see how quickly Sweden manages to solve this problems and whether Germany follows suit (if ever the market initiative core of its legislation gets to be used to the fullest). The policy of the European Union in its pressure for a further liberalisation of the railway sector is strongly inspired by the regime implemented in the airlines, which is characterised by a very low degree of fare integration. The question is whether this is will be the right path for the rail sector, which is characterised to a large extent by overlapping regional markets rather than by simpler point-to-point relationships; making its market characteristics more similar to local public transport than to airline markets. Fortunately, the European Commission seems recently to be thinking that fare or ticket integration could be a good thing and even a necessary feature. This could then help to prevent the perverse concentration effects and barriers to entry that appeared in the local bus markets in Britain.

Van de Velde and Wallis (2013) concluded earlier that some of the reform paths evolve away from dogmatism and towards different forms of softer regulation, recognising the existence of network effects and the need for some constructive coordination, perhaps illustrating a move towards what could become a new middle ground, unless this would be a step towards regulatory capture. The developments presented in this paper do not contradict this, especially in local public transport, although much remains to be discussed in the railway sector. They also concluded that: *“... there is no clear-cut evidence yet on what is the best ‘deregulated’ regime in particular circumstances. This has perhaps also much to do with the lack of proper research on such regimes and the lack of champions pushing forward the idea of market-initiated regimes combined with ‘clever’ or ‘light’ regulation, as there is no power to win from such an action, contrary to*

the promotion of the idea of competitive tendering or closed markets.” The evolutions presented in this paper, covering the last few years since the previous ‘Thredbo’ conference, have not allowed us to come to a different conclusion and it is reassuring to see that more papers studying the functioning of ‘deregulated’ market-initiative regimes have been submitted to this conference.

As far as champions for market-initiated regimes are concerned, it is likely that some will appear in the years to come following recent developments in various countries. It is to be hoped that their voice and that of the academic community will be heard in the context of the further reforms of the European legislative framework, for instance in the context of the pending discussion on the proposed 4th Railway Package. Only then will it be possible to implement ‘cleverly’ deregulated markets in these markets.

Finally, I believe it is important to mention two trends that might increase the relevance of deregulated markets and the need for finding working solutions to the issues discussed above. Firstly, various new types of shared mobility systems have appeared in the recent past (shared car, shared bicycle, etc.) and more systems could appear in the future (automatic cars, etc.) These systems have in common that they are intermediates between purely private modes (car, bicycle, taxi) – organised on the free market – and traditional public transport – often organised via monopolies (tendered or not). This will require rethinking the general regulatory structure of the sector. Secondly, the credit crisis and current budget cuts are requiring public transport systems to become more efficient, often allowing the sector to reach levels of cost-coverage that exceed 60-70%, a level at which it is possible and perhaps also becomes easier to organise transport on the basis of market initiative complemented by a cleverly incentivising financial regime.

REFERENCES

[See reference list at the end of the thesis]



12.2 Process analysis: country cases

In this Section, we revisit and complement the process analysis of developments encountered in the countries presented in the first two papers (Great-Britain, New Zealand, Sweden and Germany, to which Finland is added for a brief update). General observations as to these developments are made at the end of each country's discussion.

Great Britain

Overlooking a period of about 30 years of bus deregulation in Great Britain, the move away from the original dogmatism becomes clearly apparent and a feedback from practice at L3 towards redesign or new institutional components L2 can be seen: three acts of Parliament gradually led to constituting and filling a regulatory toolbox for local transport authorities (Transport Act 2000, Local Transport Act 2008 and Bus Services Act 2017)¹⁸⁷.

Early papers on the British bus deregulation engaged into thorough academic discussions on the expected merits and drawbacks of deregulation versus competitive tendering (Banister, 1985; Beesley and Glaister, 1985a; Gwilliam et al., 1985a). Later publications tended to be more focussed on quantitative and econometric analyses, and further commenting of its results (see, for example, Beesley, 1991; Mackie et al., 1995; White, 1997; Van de Velde et al., 2009; Preston and Almutairi, 2013a; 2014; Cowie, 2014; Warburton, 2015; KPMG, 2016)¹⁸⁸. Most of those publications studied resulting economic performances or described institutional amendments.

In view of the importance of the institutional developments at play, it is surprising to see that few publications engage into a deeper analysis of the processes that led to introducing and upgrading the resulting regulatory toolbox. A professional website¹⁸⁹, created by British sectoral associations of transport operators and transport authorities, started providing practical resources for authorities and operators when setting up quality partnerships. This provides some idea on the uptake of the toolbox instruments through brief reports on a number of implemented cases. A number of academic publications¹⁹⁰ provide brief descriptions of implemented quality partnerships (which is L3.2). Davison and Knowles (2006) studied in greater detail a quality partnership in Greater Manchester and the reasons for its

[187] This development was presented in the papers included in Chapter 12. Further papers written for the workshops are referred to in Chapter 13 (White, 2010, for Thredbo 11; White, 2014, for Thredbo 13; and White, 2018, for Thredbo 15).

[188] The papers by Cowie and by Preston and Almutairi are an output of the Thredbo 13 workshop reported upon in Chapter 13. Our 2009 study provides an overview of the main quantitative developments of public transport performance indicators in London, Great-Britain outside London and Northern-Ireland, as published in an appendix to Mr. Lundin's report to the Swedish government (SOU, 2009).

[189] www.buspartnership.com

[190] For example: the Oxford and York quality partnership cases (Van de Velde et al., 2009), the bus stop slot reservation system introduced in Nottingham (Godfrey and Taylor, 2018), the Birmingham quality partnership (Hrelja et al., 2018), or the Sheffield network redesign with timetable coordination (Godfrey and Taylor, 2018) that seems to have been one of the sources of inspiration for the 2017 Act.

lack of success. Rye and Wretstrand (2014) looked at the uptake of quality partnerships¹⁹¹, though without analysing the reasons behind the uptake or not, nor the resulting satisfaction of the participating actors. More recently, Godfrey and Taylor (2018)¹⁹² described at greater length the functioning of a larger number of quality partnerships made possible before the last legal amendments and looked at practical conditions for success and failure of such partnerships (which moves towards L4). However, there is on the whole a lack of research on the actual uptake of those new regulatory features (L3.2), the reasons behind their actual uptake or absence of uptake, their actual functioning (L4) and on the extent to which adoption leads to expected performance improvements. This results in a knowledge gap for the understanding of the success and failure factors of various arrangements, which is unfortunate for those involved as advisors or law-makers in the design of new arrangements. The workshops reported upon in Chapter 13 were an attempt to contribute to closing this gap, even if few papers were delivered on this specific topic.

A related observation is that existing quantitative studies hardly ever question the details of the design of the existing institutional framework at L2, or the details of the arrangements at L3, or the actual practices at L4. Existing institutions are mainly ‘taken for granted’, with a tendency to compare the results of extant institutional frameworks rather than advise on their redesign. The main institutional advice then, if there is one, is to switch to ‘the other regime’ (i.e. London-style tendering), rather than attempting to redesign some of the components of the deregulated regime.¹⁹³ Policy oriented consulting reports are more likely to venture into suggesting amendments to the institutional framework. This is the case with a study by KPMG (2016), but this study was written for that purpose for the Department of Transport in the context of the preparation of the Bus Services Act (2017).

All in all, the British institutional framework has now come to a point which, as concluded in the Thredbo 15 workshop (Van de Velde and Karl, 2018), seems to be close to what the workshops considered an optimal point on the hypothetical bell-shaped curve of optimal regulation. So if structures are present, the challenge now is for the local authorities to actually bring them into practice, making use of the toolbox, devising clever coordinative arrangements where needed, while not inadvertently killing the market and competition in the process (Van de Velde and Wallis, 2013). Two main barriers seem present: the budget cuts imposed on them might severely limit their ability to realise this (White, 2018) and they may lack the knowledge and manpower resources needed to carry out the task. From the point of view of entrepreneurial orientation, the British deregulation freed entrepreneurs from most if not all constraints, allowed them to exhibit—if they wished to—the behavioural characteristics that we listed in Part II. Clearly, the operators are posited as entrepreneurs in this institutional framework. The growing regulatory toolbox that devel-

[191] This paper, presented at Thredbo 13, also looks at the possible convergence between regulation in Great-Britain and Sweden.

[192] This paper was written for our Thredbo 15 workshop and is discussed in Chapter 13.

[193] Preston and Almutairi (2014), for example, compare the performances of deregulation outside London with the London competitive tendering regime. They conclude—put simply—that the London tendering regime performs better for society than deregulation outside London, and that a switch to a tendering regime would therefore be advisable for the areas outside London. See also the remarks made about this comparison in section 2.5 of the first paper included in Chapter 12.

oped subsequently did not fundamentally change this position. It did, however, increasingly allow local authorities to guide, to limit their behaviour.

New Zealand

Practice resulting from the New Zealand 1989 deregulation (Transport Services Licensing Act – TSLA, largely implemented in 1991) showed that only a minority of services could be provided on the basis of commercial operation, the majority having to be provided on the basis of subsidised (net cost) contracts. Some commercial operations were present in the larger urban areas, almost none in the more rural areas; a pattern that was similar to but at a much lower level than in Great Britain—with the difference reflecting the lower population density, higher car ownership and to some extent the lower prevailing fare levels in New Zealand.

The functioning of the deregulation model was perceived to be plagued by cherry-picking and tactical registrations of commercial services by incumbent operators to thwart the tendering process. This pattern of operator behaviour resulted in considerable dissatisfaction by regional councils and some operators with the workings of the ‘deregulated’ model. A 2006 review showed that regional councils were not satisfied with the situation¹⁹⁴ despite some acknowledgement that commercial operators provided services without need for subsidy and generated some service innovations (such as new routes) that the authority would not otherwise think of. Operators believed that much criticism resulted from misunderstandings about what the legislation allowed (as reported in a review produced by the New Zealand Government, 2006).

Various reform options were discussed, from status quo to full contracting. A clever piece of guidance mechanisms (see section 3.2.1 of Van de Velde and Wallis, 2013) was eventually designed and enacted (through the Public Transport Management Act - PTMA, 2008). However, a change of government occurred very shortly after this act was passed, with the new government promising to repeal it. A substantial proportion of the major bus operators lobbied the new government, as they were concerned that the new legislation would tip the balance of responsibilities for service planning etc. towards the regional councils, leading (they feared) to a fully-contracted situation.

After extensive debate, working parties and consultations, new legislation was finally passed by the new government in 2013 (the Land Transport Management Amendment Act – LTMAA). This legislation embodied the Public Transport Operating Model – PTOM (although that term is not used in the legislation itself) and provided for an all-contract model on a gross cost basis (with very limited exceptions). Although competitive tendering is the default basis for awarding contracts, the legislation also required regional councils to allocate contracts on a negotiated (12 year) basis to previous operators of commercial services in their region. These were allocated on a ‘like-for-like’ basis¹⁹⁵ fol-

[194] See section 3.1.3 in Van de Velde and Wallis (2013), which is included in this chapter.

[195] For every 1 million bus-km the operator previously provided commercially in the region, the operator would be entitled to negotiate contracts with the regional Council for 1 million contracted bus-km, though not necessarily in the same part of the region as their previous services.

lowing a negotiation process set out in the PTOM guidelines and based on benchmark cost rates obtained from the tendered contracts in the region. However, this requirement was generally not followed in practice: the operator was in a very dominant position in the negotiation process, as ultimately the regional council had no option but to agree contract rates put forward by the operator. As a result of this process, while the tendered contracts have generally seen competition and resulted in contract prices generally lower than the equivalent prices previously, the prices agreed for the negotiated contracts in the main centres have been very significantly higher than the tendered prices and generally higher than the previous prices for equivalent contracts (Wallis, 2019).

In sum, one may conclude that the 1989/1991 New Zealand deregulation was either ill-designed or ill-suited to the 'thinner' New Zealand market with lower prevailing fares than the British bus market. Although it did result in some significant cost savings (but arguably more from the competitively tendered services than the commercial services), a lengthy period of disappointment ensued. The reform designed in 2008 would have allowed the regional councils greater control over potential market-initiated commercial services, but it was never brought into operation. The 2013 legislation then introduced a contracted regime with no open entry and a predominance of competitive tendering and gross-cost contracts, somewhat paradoxically reducing the previous influence of the operators on services provided and their responsibility for patronage and fare revenues. As a result, the possibility for operators to exhibit entrepreneurial orientation ultimately vanished and the resulting contracted regime approximates what is feasible in other contracted regimes (see Part III), yet with a level of protection for incumbent 'commercial' operators.

Sweden

The 2012 Swedish deregulation constitutes an interesting case of a government-led and to some extent dogmatic attempt to overturn at L2.1 an institutional framework originally based upon central planning by authority agencies, to transform it into an institutional framework based on market initiative.

Mr. Ulf Lundin was nominated in 2008 by the Swedish government as special Commissioner charged with making a proposal for a new regulation of local and regional public transport in Sweden. Mr. Lundin asked us in 2008 to produce a report presenting the main features, institutional developments and results of the British and New Zealand bus deregulation. He also requested us to produce an expert opinion about his own proposal for a Swedish deregulated regime. The resulting report (Van de Velde et al., 2009) was translated into Swedish and included as appendix to Mr. Lundin's report before being transmitted to the Swedish government and parliament for official publication. Our report found that Mr. Lundin's proposal was much less dogmatic than the initial deregulation implemented in Great Britain and New Zealand. On that basis, we found that its implementation would be less likely to lead to the same level of instability as what had happened in the first phase of the British deregulation. We found the proposal remarkable in the sense that it had incorporated coordination issues that had only been addressed more recently by new legislation in both Great Britain and New Zealand. Our report drew the attention on a number of challenges. One was the market situation and authority organization in Sweden that had led transport operators to having no experience in public transport marketing. This

pointed to the need for a transfer of competence and the need for a change of attitude on the side of the authorities' traffic planners if the proposed regime was to be workable. Our report drew the attention on the possible tendency of transport authorities to over-specify general market requirements (transport plan), which would de facto leave little freedom for private initiative. It pointed at the probable necessity to have a regulator charged with enforcement and competition issues. It mentioned that there might be a number of difficult sequencing and combination issues between market initiative and additional authority initiative, with a conflicting logic between the route approach of the public service obligations instrument proposed, and the functional approach to market requirements as included in the transport plans.

Mr. Lundin's proposal to the government may to some extent have been influenced by our report (Alexandersson, 2010, p. 83), but the hybrid reform that was ultimately implemented in Sweden in 2012 was in several respects substantially different from Mr. Lundin's proposal. This was presented in two of the papers included in Chapter 12. Major factors in the eventual course of events were, arguably, the fact that the sector was already involved in a cooperation project (L3.2 and L4) aiming at improving public transport (the 'doubling' project) and recommending a less fundamental reform (essentially more at L2.2 than at L2.1). Furthermore, as public transport funding in Sweden originates from local and regional authorities, this arguably gave them a strong bargaining power towards central government on this issue.

The reform has in the meantime—unsurprisingly in view of the reasons discussed in the papers—led to very limited autonomous market entry (L4). Service provision has, by and large, continued to be organised essentially by the regional transport authorities on the basis of competitively tendered contracts. Some observers say that this was exactly what regional authorities intended to achieve by averting the adoption of Mr. Lundin's original proposal. An official analysis of the effects of the reform was undertaken and an official report (Trafikanalys, 2014) showed that only 2,9% of total supply is effectively provided on commercial grounds, even when including pre-existing commercial airport shuttle buses. This share is much lower than what can be observed in long-distance passenger transport (coaches and trains). Three main factors are put forward. Firstly, local passenger transport markets appear to be thin, with a low customer propensity to pay. Secondly, commercial operators have to compete with competitively tendered services provided by the regional transport authorities with as much as 50% subsidies. And thirdly, strong barriers to entry result from a lack of clarity in the legislation or its implementation; for example in relation to access to operational rights, integrated ticketing systems, access to interchange stations and access to integrated information systems for passengers.

A later background report for the same government agency confirms that the commercial market does not work as expected (Stälner and Leufstadius, 2015). Interviewing operators, they found it was their strong perception that regional transport authorities had no intention of cooperating in facilitating the development of commercial services and that the action of the authorities (defining PSO, etc.) only led to a further limitation of market

opportunities for commercial operators¹⁹⁶. The authorities, however, reported being positive in principle about the idea of commercial services but having difficulties solving all practical aspects linked to such entry (access to facilities, ticketing systems, information systems, etc.) Politicians reported being positive too, though some mentioned that there was no demand from the population for more commercially-based services and that there was more desire to have a properly integrated, simple and cheap system. Furthermore, the vision of public transport as a social service also proved deeply rooted and the possibility of quick exit (21 days rule as foreseen in the regulation) worried many. The report concluded that the main barrier to the establishment of commercial services was the clear difference of assumptions and attitude between society and operators. As the political perspective ultimately dominated this process, operators appear to resign to focus on the traditional competitively tendered markets rather than attempting to pursue the limited commercial market opportunities that opened up with the new legislation. Coming back to the challenge mentioned in our papers, the analysis conducted by Stälner and Leufstadius (2015) corroborates that an open approach to commercial initiative, though recommended by the Swedish government agency for transport policy analysis (Van de Velde, 2014, section 2.1.2), cannot be observed and that the negative perspective on the evolution of this regime that we sketched (Van de Velde and Wallis, 2013, section 5.3) appears predominant. From an entrepreneurial orientation perspective, even though the 2012 reform in principle grants operators freedom in most respects, reality is utterly different.

Germany

The German public transport legislation is at L2.1 based upon the principle of market initiative, this has been the case for many decades. Yet, actual practice is quite different from open competition. Operators effectively have benefited from exclusivity and grandfathers' rights (at L2.1 or L2.2) and subsidised publicly-owned companies increasingly dominated the market. Consequently, practice had to a large extent become more akin to that of authority initiative and authority monopoly and the functioning of the regime has for several decades become hybrid and is struggling with its own market-initiative core (Beck, 2010). The legal reforms that intervened in 1996 (Karl, 2013) and more recently with the inclusion of reforms resulting from the EU Regulation 1370/2007 have kept and even increased this hybridity. They combined elements of central planning and authority initiative with the core of the legislation that remained based upon market initiative, while also continuing to protect operators from competition. A complex question then, is whether the result is fully compatible with the European requirements pertaining to the attribution of exclusive rights (Karl, 2018). The main question is that of the level of exclusivity can may be granted by an authorisation delivered under a market-initiative procedure. It is beyond our scope to comment further upon the diverging legal opinions that have arisen in Germany in relation to this issue. Let us only observe that the current official German interpretation of the European rules sees the granting of some level of protection against competition as

[196] For example: SJ (state-owned railway operator) took SLL (the transport authority in the Stockholm region) to court because SLL defined the whole region as a PSO, effectively closing it for SJ's commercial traffic. SLL won the court case, showing it was in the interest of the public to do so, to realise higher frequencies and one integrated ticket (personal communication with Alexander Paulsson and Claus Sørensen, K2, Lund).

not incompatible with European requirements, which is surprising as European texts clearly state that exclusive rights require a contract and a tendering procedure.

In other words, market initiative appeared moribund but remained legally feasible in Germany. Recent cases showed that, under the right conditions, an awakening could take place. For example, state-owned operator DB replaced the city-owned public transport operator in the city of Pforzheim in 2016, unexpectedly making use of the existing market-initiative provision in the legislation. This effectively forced the cancellation of the competitive tendering procedure (L3.2) that had been started (Eerdmans et al., 2017; Karl, 2018)¹⁹⁷. The entrant (L4) proved able to operate without the direct subsidisation that the former municipal operator had received, while continuing, as had the former operator, to benefit from the fare rebate compensations that are part of the 'rules of the game'. Although this had a positive effect on the local public purse, these (and further such events or attempts elsewhere in Germany) were not unanimously met with enthusiasm. Sectoral actors and trade-unions asked to amend the legislation (L2.1) in a way that would prevent further 'private takeovers'. While this has not led to legal amendments so far, it shows that the existing compromise reached under the previous legal amendments is seriously undermined (Karl, 2018). Some German states have even decided (L2.2) to prevent the general usage of 'income compensations' by operators (the 'rules of the game') by integrating them into public transport contract financing streams, effectively reducing the possibilities for operators to provide public transport on a commercial basis and reinforcing the position of the public sector as initiator of public transport services (Karl, 2018). From the entrepreneurial orientation perspective, as exemplified by the Pforzheim case, the institutional framework allowed to exhibit innovative, pro-active, risk-taking and competitive aggressiveness, though limited in autonomy as markets are submitted to temporary exclusive rights. This entrepreneurial freedom, however, is not welcomed by all and constraining measures are being contemplated. If successful, this might result in a hybrid situation that will bear increasing resemblances with the Swedish case: a formal freedom, but no effective possibility for autonomous entry.

Finland

A recent case should be added to the list of countries reviewed here¹⁹⁸: Finland. This country introduced very recently a radically new legislation for the whole of its transport sector.

[197] The paper by Karl (2018) was presented in the 15th edition of the Thredbo conference (see Chapter 13).

[198] There are undoubtedly more interesting cases of market-initiative regimes to report upon across the world, both in developed economies and elsewhere. For example, some Eastern European cases are interesting due to the fortuitous appearance of private operators as a result of publicly-owned systems failing to sustain production after the revolutions, or as a result of illegal entry due to a failing regulatory system. Latin America provides further interesting cases. Hidalgo and King (2014) reported to the Thredbo conference that public transport in most Latin American countries is characterized by semi-deregulated services by private providers where individual vehicle owners affiliate their vehicles to co-operatives or firms owning route permits, which are subject to insufficient supervision by the public authorities granting those permits, with poor results as an outcome. Northern America is less interesting as it has a public transport market characterised by a high degree of organisation and production by the public sector. The Japanese public transport is also interesting as some level of deregulation was introduced in 2002 (Sakai and Takahashi, 2013). Unfortunately, the study of these cases is made difficult by the limited availability of academic publications and the language barrier making further desk research and interviews impossible.

The resulting “Transport Code 2018” revolutionizes the regulation of the sector, welcoming autonomous entrepreneurship by basing the whole framework on an increased market access freedom, a very large degree of deregulation, and various obligations pertaining to data access and ticket sales that are meant to facilitate the development of new services by third parties, the development multi-modality and that of “Mobility as a Service (MaaS)”.

It is at this point unclear what the consequences of this new legislation will be for the existing centrally-planned and contracted passenger transport services that Finland had, in particular in large urban areas as Helsinki. The details of this legislation and its later uptake in implementation would require a new in-depth study, which is outside the scope of this thesis. It will, though, be interesting to investigate how existing public transport authorities, and their public transport services, will combine with the enhanced possibilities for market access and third-party provision of information and tickets that the 2018 legislation creates. Note in particular that this opening is very much in line with the discussion on new paradigms that was initiated in the last workshop of the Thredbo series on market regulation (see Section 13.5).

13 Workshops on market regulation

The International Conference Series on Competition and Ownership in Land Passenger Transport, known as “Thredbo conference series” focussed from its first edition in 1989 in Thredbo (Australia) on competitive and contractual arrangements to regulate the functioning of passenger transport markets. The introduction of route tendering in London in 1984, the deregulation of the local bus market in Great Britain in 1986 and in New Zealand in 1989, have constituted major initial sources of controversy amongst the participants to the conferences.

With the years passing, it became clear that most countries and regions contemplating the introduction of competition-based institutional frameworks in public transport did not perceive the British deregulation to be the way forward. Most preferred competitive tendering, a choice that was stimulated in Europe by the endeavours of the European Commission to introduce a new Regulation that saw competitive tendering of exclusive contracts as the preferred way to organise public transport markets. Reflecting this situation, also from a wider international perspective, the conference tended with the years to focus more on contracting than on deregulation.

However, several signs led us to believe that deregulated regimes could come to play a growing role in public transport (Van de Velde and Beck, 2010): long-distance coach deregulation in a number of countries, the introduction of open access in international rail services, the development of unregulated minibus services in suburban passenger transport markets in some Eastern European countries, Sweden contemplating the introduction of some forms of deregulation in local and regional bus passenger transport, following the earlier deregulation of the Swedish air, coach and rail markets, Germany suggesting to liberalise long-distance coach services and securing the specific German framework for autonomous market initiatives for commercial short-distance services. This indicated a possible change in mindset towards an increased relevance of market-based institutional frameworks in Europe.

With this in mind, we started and were given the opportunity to lead a series of workshops devoted to the functioning and regulatory needs of deregulated markets during the Thredbo conferences held in 2009, 2011, 2013, 2015 and 2017. The formula of the Thredbo conference series is based on intensive parallel workshops based around keynote papers and a series of resource papers providing a range of international perspectives on each issue. The conference workshops are set up to have a strong emphasis on what policy lessons can be learnt from recent experience internationally and what issues warrant further investi-

gation (Hensher, 2006). In line with this formula, the overarching aims for this series of workshops have been:

- ▶ To discuss concrete experiences with deregulation, with a particular interest for the development of additional regulatory features (such as service coordination rules) that have—or have not—appeared in the course of time within such institutional frameworks;
- ▶ To enrich the academic perspective on regulatory developments in the sector and identify possibly diverging visions of a wide array of researchers and practitioners;
- ▶ To generate and test new ideas as to the regulatory needs of institutional frameworks characterized by at least a substantial proportion of market-initiative in their institutional components; and
- ▶ To draw conclusions on regulatory and research needs.

This Chapter presents the findings of this workshop series. While the previous chapter was more descriptive and analytical, this chapter being based on the workshop series is more prospective and prescriptive, attempting to come up with recommendations. The workshop series was set up such as to lead to cumulative and intersubjective findings, based on the results of successive workshops as published in five papers (Van de Velde and Beck, 2010; Van de Velde and Preston, 2013; Van de Velde and Augustin, 2014; Preston and Van de Velde, 2016; Van de Velde and Karl, 2018), each ending with policy recommendations and research recommendations for the next conference. The following main topics resulted for each of the workshop:

- ▶ 2009 Delft: Suggesting ideal-typical options
- ▶ 2011 Durban: Regulatory priorities and optimal intervention
- ▶ 2013 Oxford: Main guidance mechanisms
- ▶ 2015 Santiago: Evaluating regulatory arrangements
- ▶ 2017 Stockholm: Threats and new paradigms

The call for papers issued before each edition of the workshop included a list of research questions revolving around those overarching workshop aims¹⁹⁹. Abstracts were submitted and reviewed by the conference's academic review team. Accepted abstracts led to conference papers that were presented in the workshop and discussed with workshop participants. The Thredbo conference is set up such that each workshop, after hearing and discussing all of the workshop's papers, engages in about two days of collective discussion on the workshop's main research questions. The discussions are guided and moderated by the workshop chair and rapporteur. Various methods were used in our workshop series, including brainstorming, role-play, sub-group break-out sessions, etc. The workshop chair and a rapporteur subsequently summarise the workshop's findings for the conference's final plenary session. They then write a workshop report, which is submitted to the participants for comment before peer review and publication. The best workshop papers are also submitted to peer review for publication in academic journals.

[199] International developments led the workshop to be interested not only in local public transport but also in the long-distance coach sector and in the railway sector, giving a wider perspective to its results. We will focus here mainly on the local public transport part of the findings.

The results of the first two workshops are summarised below. The last three workshop papers are included in full, each preceded by a brief summary of their main findings.

13.1 Suggesting ideal-typical options

The first of the five workshops was organised at the 11th International Conference on Competition and Ownership in Land Passenger Transport held (Delft, the Netherlands, 20-25 September 2009)²⁰⁰ and titled “Beyond competitive tendering”. This workshop wanted to revisit one of the foundation themes of the Thredbo conference series (i.e. ‘deregulation’) in view of a number of recent developments, as explained above.

The main workshop question was “what institutional alternatives to competitive tendering can provide efficiency and service improvements?”—hence the title of the workshop “Beyond competitive tendering”. The main sub-questions were: Is it possible to devise well-functioning competition-based alternatives to competitive tendering and should free markets play a larger role in the future of public transport markets? Are there clever ways to combine competitive tendering with autonomous market initiative? How should such competition-based alternatives be regulated, and can this be done without ending up monopolising service design initiative on the authority’s side? Are there ways to reconcile the absence of competition in a direct award regime with efficiency and performance improvements? (Van de Velde and Beck, 2010)

The workshop discussions led to the following regulatory recommendations for the design of enhanced market-initiative based institutional frameworks (Van de Velde and Beck, 2010):

- ▶ Setting minimum standards with respect to quality, environment, social aspects and security;
- ▶ Defining a (functional²⁰¹) public transport plan to inform and guide potential suppliers about desired services;
- ▶ Minimising entry barriers for commercial services;
- ▶ Designing integration and cooperation features;
- ▶ Developing a regulatory ‘toolbox’ for (competent and powerful) transport authorities.

On that basis, the workshop formulated three ideal-typical options (see Figure 22):

- ▶ Having several competitively tendered contracts in the same area, while allowing additional market initiative and imposing ticketing and fare integration;
- ▶ Having an institutional framework based upon market initiative, guided by a functional transport plan and complemented by additional competitive tendering; and
- ▶ Having one negotiated contract for each area, combined with the threat of competitive tendering and market initiative, to compensate for the absence of competition.

[200] This conference was organized by the author of this thesis together with W.W. Veeneman (Delft University of Technology).

[201] Functional refers to a definition that specifies desired service outcomes rather than a detailed definition of services to supply.

Interestingly, only the second of these three options qualifies as fundamentally based upon market initiative. Indeed, the other two relegate market initiative either to a role of complement to authority initiative, or to playing a role of ‘threat’ to directly awarded contracts. One way to interpret this result is to say that the workshop participants’ embeddedness in institutional frameworks whose institutional basis is not market initiative made it difficult to conduct discussions where pure market initiative constituted the discussions’ starting point. A more pragmatic way to interpret this result is to say that the introduction of market initiative in public transport cannot start from a clean sheet: an institutional framework based upon competitive tendering or direct award is likely to be in place. In this sense, options 1 and 3 could be seen as an incremental step towards a larger role for market initiative, with a hypothetical switch to model 2 as a future option. In other words: circumstances matter.

Model 1	Model 2	Model 3
<ul style="list-style-type: none"> ▪ Several tendered contracts in one area + additional market initiative ▪ Awarding steps: <ul style="list-style-type: none"> ▫ 1. Authority designs and tenders core-network ▫ 2. Market initiative for commercial services possible (based on some minimum criteria) ▪ Authority sets concessionary fares schemes, interavailable fares and ticketing; lower fares by operators allowed ▪ Discussion club (transport authorities, operators, passengers) 	<ul style="list-style-type: none"> ▪ Market initiative + additional tendering ▪ Transport plan (only functional) by transport authority ▪ Awarding steps: <ul style="list-style-type: none"> ▫ 1. Commercial services as market initiative (headway regulation, only clever exceptions, and fare freedom) ▫ 2. Additional tendering to fulfil transport plan ▪ Concessionary fares schemes and/or superincentives to avoid fare regulation ▪ Maybe some exclusivity linked to headway regulation ▪ Need for quick response to unfair behaviour 	<ul style="list-style-type: none"> ▪ One tendered contract for each area + (threat of) market initiative ▪ Awarding steps: <ul style="list-style-type: none"> ▫ 1a. Negotiating contract with incumbent ▫ 1b. Threat of competitive tendering if negotiations unsuccessful ▫ 2. Threat: commercial entry (if incumbent is not affected negatively) ▪ National body to support transport authorities in contracting ▪ Performance based penalties and benchmarking ▪ Partnership between transport authority and operator

Figure 22 | Options proposed by the Thredbo 11 workshop (Van de Velde and Beck, 2010)

13.2 Regulatory priorities and optimal intervention

The second of the five workshops was organised at the 12th International Conference on Competition and Ownership in Land Passenger Transport (Durban, South-Africa, 10-16 September 2011). It focussed on regulation and the relevance of circumstances. It addressed the following main question: what is the best way (or ways) to regulate deregulated markets? (Van de Velde and Preston, 2013). Sub-questions were: how much regulation is needed to make deregulated markets work? Can hybrid regimes combining competitive tendering with autonomous market initiative work in practice? Can lessons be transferred between countries and transport sectors? Do circumstances²⁰² matter to the optimality of alternative configurations of free market regimes?

[202] For example the institutional environment (L1, L2) in a specific (developing) country.

A main contribution resulting from this workshop was the suggestion of a pyramid²⁰³ of regulatory priorities to bring order in all possible regulatory actions on free markets, ranking them from the most basic and essential ones to the most 'luxurious' and less essential ones. Given this pyramid, the challenge was then to provide the appropriate mix and extent of interventions so as to optimise welfare.

The second main contribution of this workshop was to represent this conceptually using a bell-shaped curve²⁰⁴. This representation suggests that 'clever market guidance' (or 'rules of the game') can help to solve some market failures but that too much guidance is likely to increase costs for (potential) operators beyond the positive network effects generated by the guidance. Guidance is essentially to be seen as related to network effects, such as guidance on fares integration, timetable co-ordination and cherry picking to ensure that market-initiated services provide a more extensive network of services than would be the case without such guidance. Too much guidance would then limit entry, which might in turn decrease the quality of the outcome and hence the level of welfare achieved.

The workshop could not agree on the best shaping of a deregulated regime and stressed, again, the importance of local circumstances in the determination of optimality. Coming back on the three models postulated by the previous workshop, the workshop found striking similarities as:

- ▶ The Swedish regime, as expected at the time of the workshop, bore similarities with model 1, although practice still had to develop;
- ▶ The British regime had by the time of the workshop moved one step further in the direction of model 2, while remaining at some distance from some of its main tenants;
- ▶ The New Zealand PTOM model, as it was expected to unfold at the time the workshop, was close to Model 3.

13.3 Main guidance mechanisms

The third of the five workshops was organised at the 13th International Conference on Competition and Ownership in Land Passenger Transport (Oxford, United Kingdom, 15-19 September 2013). It concentrated on finding smarter ways to organise a 'deregulated' regime, in particular it was interested in the issue of market 'guidance'. The workshop focussed on the practices encountered in Great-Britain outside London, New Zealand, Sweden, Germany and Japan²⁰⁵. The workshop report paper (Van de Velde and Augustin, 2014) is included in full below.

Four parallel group discussion sessions were organised during this workshop to stimulate the participants to generate ideas and devise ways to improve a particular regime. Each group took one country (Britain, Japan, Germany and Sweden) as a reference case. Starting with the extant institutional framework, the groups attempted to devise regulatory im-

[203] Included as Figure 23 in the Thredbo 14 workshop paper included below.

[204] Included as Figure 24 in the Thredbo 14 workshop paper included below.

[205] The evidence presented at the workshop, the workshop discussions and the results presented in the paper included in this section complement the analyses and papers presented in Chapter 12.

provements aimed at delivering more entrepreneurship, more innovation based on autonomous market initiative and, through this, generate welfare improvements. Subsequently, a plenary discussion between the groups was organised and structured along three main guidance types. The intention was to identify common themes and agreements.

The findings of the workshop were:

- ▶ Firstly, the majority of workshop participants reaffirmed the need to have a public transport plan including minimum functional standards as non-restrictive service design guidance, including integration requirements. However, there was no agreement on the amount of detail needed.
- ▶ Secondly, the opinion of the workshop on measures to stimulate entry and competition was that integration requirements are desirable and should not to be seen as anti-competitive (thus welcoming the recent change of stance taken by the British legislator and regulator) and that “network effect facilities” (such as information and ticketing systems) should be accessible to all potential operators²⁰⁶. The opinions were more divided as to the usage of financial incentives to stimulate market initiative. Divergent opinions were also present as to the perception that subsidised services were unduly crowding out market initiative.
- ▶ Thirdly, the discussions on measures to restrict undesirable entry did not lead to a clear agreement between workshop participants (for example: should exclusivity or partial exclusivity of operational rights be a regulatory feature of these markets or not, could some cream skimming test help address this issue).

Several general observations after this workshop were that:

- ▶ Institutional frameworks based upon ‘deregulated’ market initiative were still few and far between in local passenger transport in Europe, which stood at a contrast with developments in long-distance coach markets. Furthermore, successful cases of actual bus deregulation seemed highly dependent upon local anti-car and pro public transport policies.
- ▶ The dogmatism with which deregulation had been implemented in some countries continued to be a barrier to the actors (and workshop participants) perceiving the possibility of institutional tweaking contributing to improved performances of deregulated regimes. As a result, institutional improvements, even when seen as conceptually feasible, were slow to materialise. A preference for ‘certainty’ of the outcome (such as a contractual approach, which is antinomic to market initiative) therefore seemed to have a stronger appeal for many, even when apparently well-designed free market regulatory toolboxes were at hand, as in New Zealand. From this, it appeared that being a champion for contracting and competitive tendering is an easier stance to adopt, with a more palatable message, especially in the presence of actors that are more inclined to be receptive to suggestions for a regime that increases authority control. Being a champion for the implementation or improvement of deregulated regimes is, in view of the reputation and perceived unpredictability of market-initiated regimes, much more difficult to ‘sell’.

[206] This topic would later become one of the central discussion themes around regulatory measures needed to facilitate the development of “Mobility-as-a-Service” (MaaS), with the legislative reforms undertaken in Finland as one example of such undertaking.

- ▶ It is essential to avoid further simplistic and dogmatic implementations of ‘deregulation’. Deregulation requires a regulatory toolbox for the authority and clever regulators at the local level. While devising improved ‘rules of the game’ (that are currently often lacking) may be difficult to realise, the alternative (good contracting and tendering) is also difficult to realise, leading to the conclusion that there is no simple solution, whichever regulatory regime is chosen.
- ▶ Finally, the recent development and success of market initiative regimes appear to be influenced by external factors (such as new media and internet technologies revolutionising sales channels and sales and search costs). It is in this respect important to pay attention to the development of new ‘intermediate’ modes (such as shared modes and autonomous vehicles), much of which are based upon free market initiative, standing at odds with a regulatory approach based upon contracted (and competitively tendered) regimes²⁰⁷.

[207] This theme announced the “mobility as a service” (MaaS) topic that would become central in sectoral discussions in the following years.

Workshop 4 Report: Governance, ownership and competition in deregulated public transport markets

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Research in Transportation Economics, 2014, vol. 48, p. 237-244.

Abstract - This workshop discussed the functioning of deregulated public transport markets, examining competition options for deregulated markets. The regulatory needs of such market initiative 'deregulated' markets have been considered both from practical and theoretical evidence, covering both local and long-distance markets (bus, coach and rail). Practical evidence has been presented from mature deregulated markets (such as buses in Great Britain outside London) and updates on experiments in countries such as Japan, New Zealand and Sweden. Emerging evidence on the liberalisation and deregulation of long-distance and international markets in Europe and elsewhere was considered, both for coach and rail. The devising of 'rules of the game' formed a centrepiece in the discussions, looking at alternative ways to organise the regulatory guidance of such markets.

1. INTRODUCTION

The main discussion topic within this workshop's theme was: how do deregulated markets work and how to improve their performance? A policy decision in favour of having a regime based upon 'deregulated' market initiative was taken as a starting point for all discussions in the workshop. From there, this workshop discussed ways to optimise the functioning of such markets without questioning that fundamental choice in itself. That means that alternatives to market-initiated regimes – be it a policy decision for public monopolies or for a regime based on comprehensive competitive tendering, by line or network, with or without service re-design freedom for the operator – were not covered by this workshop (see the other workshops of the conference for extensive discussions on the relative merits of negotiated contracts and competitive tendering).

Deregulated scheduled passenger transport regimes constitute one of the main objects of research of the Thredbo conference series. Following the deregulation of local public transport by bus in Great Britain outside London in 1986, and ever since the first conference in Thredbo in 1989, workshops of this conference series have debated the relative merits of 'deregulated' markets versus 'competitive tendering' (Van de Velde and Veeneman, 2010; Walters, 2013). Deregulated markets are defined here as those public transport regulatory regimes based upon the principle of market initiative, i.e., not those based upon the principle of authority initiative (see Van de Velde, 1999 for a discussion of these concepts). The main characteristics of market initiative regimes are that

entrepreneurs in these markets are expected to decide autonomously about entry into the market and service supply in the market. Decisions are made on a commercial basis and are as a matter of principle not subjected to a prior ordering by a transport authority. This does not mean that transport authorities should be absent or have no role to play; quite the opposite. Authorities can have various roles in such markets, such as that of a licensing authority checking technical standards, or that of a regulatory authority guiding or restricting entry, or that of a subsidising authority stimulating and guiding supply, or even that of a social-entrepreneurial authority ordering additional non commercially viable services via competitive tendering.

While the British choice for a regime based upon deregulated markets (outside London) appeared for many years to be an exceptional and minority case within the regulation of land passenger transport, the last few conferences identified a policy-led growing relevance of deregulated regimes in particular within the European Union. This was visible not only within transport sectors that are traditionally more likely to be organised according to a 'deregulated' regime such as long-distance coaching, but also in the railway sector and to a growing extent in local passenger transport by bus.

The two conference workshops devoted to deregulated markets prior to this conference discussed this growing relevance while papers presented also showed a tendency to slightly re-regulate more mature deregulated markets (Sergejew, 2007; Ashmore and Mellor, 2009; White, 2010; Van de Velde and Wallis, 2013).

The workshop held in 2009 (Van de Velde and Beck, 2010) showed that deregulation in various guises was expected to play a growing role in local and regional transport in Europe, despite the growing role of competitive tendering as further stimulated by the European Commission's endeavour to enact a Regulation that put forward competitive tendering of exclusive contracts as the preferred way to organise local public transport markets. This growing relevance of deregulated regimes was by then already visible in long-distance scheduled coach operations and, although in an embryonic stage, in some European railway markets from 2010 onwards, while Sweden was discussing options for deregulating its local bus markets (Westin, 2009). While this tendency towards a further spreading of deregulation was observed, the workshop also discussed the simultaneous developments identified in both Britain (especially with the new legislation enacted in 2008) and New Zealand towards fine-tuning and slightly re-regulating the existing deregulated local bus markets.

This resulted in the workshop tentatively designing three conceptual avenues for regulatory improvements to such 'deregulated' regimes. This effectively resulted in hybrid regimes characterised by different combinations of free market initiative and contract awarding by competitive tendering. Several requirements seemed necessary for these regimes to be effective; the workshop agreed on the need to develop and enforce minimum standards as well as a proper functioning of the different relationships between actors, on equipping competent and powerful authorities with a sufficient 'toolbox' to be used with self-restraint, on the need for a definition of services of general interest and a general guidance on the authority's ambitions via a general public transport plan, on the minimisation of entry barriers, and on accepting integration and cooperation between operators as desirable and crucial in delivering appropriate services to the passengers rather than looking at them as collusive features that ought to be avoided.

The workshop held in the 2011 conference (Van de Velde and Preston, 2013) continued this investigation of developing hybrid regimes, based loosely on experience in local bus markets in Great Britain, New Zealand and Sweden – the latter still being at the pre-implementation stage by the time of the workshop. Reviewing these and other international experience, the workshop argued that deregulated public transport markets are a global phenomenon but that regulatory measures need to focus on different items to reflect local requirements. To this effect, a hierarchy of regulatory needs was identified according to which, for example, the development and enforcement of the rule of law should be a primary concern (such as in market initiated urban transport in

Sub Saharan Africa, or in the then soon to be deregulated inter urban coach markets such as in Germany) while the issuing of further 'rules of the game' (such as guidance for network integration) and the devising of incentives for welfare maximisation would become an issue when basic regulatory needs have been enforced in more mature public transport markets (such as the local bus market in Great Britain, New Zealand or Sweden).

That workshop suggested priorities to policymakers and regulators of mature markets, in line with the items identified in the pyramid of regulatory needs. An urgent recommendation was to pay more attention to the designing of smarter (i.e., less dogmatic) 'rules of the game', in particular concerning entry timing, entry selection and exclusivity levels. This touch of clever regulation was seen to be largely underdeveloped but of utmost importance to favour the realisation of network benefits and – through this – address related market failure issues, including those that are caused by all-too-dogmatic implementations of deregulated regimes. A second set of priorities that were formulated related to smarter regulation of market entry, with more attention being paid to licensing requirements (referring to professionalism and safety). A third set related to devising incentivised regulation with respect to fare compensations, passenger incentives and supply incentives, particularly to promote innovation. Finally, the workshop wished to remind policymakers and regulators that new technologies (including 4G mobile phones and smart cards) would make new approaches easier throughout both the developed and developing world, potentially revolutionising the way we currently look at the need for ticketing integration and fares integration.

2. EVIDENCE PRESENTED

The workshop held during this conference continued to examine regulatory options for deregulated markets, covering both local and long-distance markets (bus, coach and rail). The main discussion focus of the workshop subsequently was: "how to make deregulation work?" This discussion was fed by practical evidence from mature deregulated markets (such as buses in Great Britain outside London) and updates on countries such as Sweden, Japan and New Zealand, but also by emerging evidence on the liberalisation and deregulation of long-distance and international markets in Europe and elsewhere, both for coach and rail.

The workshop involved 26 participants with 16 papers presenting evidence from seven countries. The papers in the workshop evaluated the functioning of the current regulatory regimes in the local bus markets of Britain, New Zealand, Sweden, Germany, Japan and Zimbabwe, regulatory reforms in the long-distance coach sector in

Germany and the US, and railway reforms towards more open-access in the Czech Republic and Sweden.

2.1. Deregulation in local public transport by bus

The workshop started by discussing the updated evidence presented on the functioning of mature deregulated local public transport markets. A welfare analysis (Preston and Almutairi, 2013b) was presented to update earlier findings on the long-term effects of deregulation on the British passenger transport market by bus outside London. While their earlier paper (Preston and Almutairi, 2013a) indicated that deregulation mainly had positive welfare effects, the updated findings found both positive and negative welfare impacts, all depending upon the assumptions made. A study on customer sovereignty shed additional light on the functioning of the deregulated bus markets, looking in particular at its imperfect functioning (Cowie, 2013). It found that some operators were clearly “bad” company focused profiteers, while only a minority seemed to be “good” consumer led operators. It showed that several strategies to make profit can be taken, and that not all of them need to be against the customer’s interest. A paper analysing some of the recommendations of the Competition Commission report and subsequent outcomes, discussed some of the implications of the findings regarding possible ‘excessive’ profit levels in the industry (White, 2013b). It found using case studies that high levels of profit could also be associated with higher customer satisfaction, suggesting that a more refined approach may be needed to distinguish between management behaviours. Unfortunately, qualitative case study papers about existing successes were missing, while developments over the past few years seem to indicate a shortage of adequate staffing and knowledge at the local level to interpret and make full use of the regulatory toolbox provided by the Local Transport Act 2008. We wish therefore to reiterate here a call for further research and publications on this topic, attempting to identify reasons for successes and failures by analysing relevant local factors, such as the local transport policy, level of expertise of the local transport authority, the attitude of the local operators and management style and policy at ‘group’ level.

The workshop was presented with an update on the New Zealand case, where transitioning from a malfunctioning deregulated bus market to a negotiated/tendered approach is underway (Alexander and Maguire, 2013). The deregulation and divestment of public transport services introduced in 1989 did not lead to the expected results, neither did further corrections to the regime. Interestingly – and unfortunately from an academic perspective – one of the world’s most well-thought of

attempts to improve the functioning of a deregulated regime, i.e., the set of ‘controls’ on commercial services made possible by the 2008 Public Transport Management Act, was never fully implemented. The new public transport operating model (PTOM) now turns away from deregulation of urban and local services towards a competitive tendering and negotiated contract regime with a degree of benchmarking and a partnering approach including performance incentives for operators. Inter-regional services are exempted from this regime and remain deregulated. For New Zealand, a strong argument for a fully contracted model for urban and local markets were the relatively thin markets and the low level of commerciality, relative to the significant government subsidy being provided.

Two countries moved towards more liberalised regimes since the last conference and workshop. In Sweden, preliminary results of this move can be drawn as the Swedish law has been enacted in 2012 allowing operators to set up commercial services additionally to public transport services subsidised by the public transport authorities (Jansson, 2013; Ljungberg, 2013; Petersen, 2013; Bösch et al., 2013). Although the new legislation for local public transport has only been in force since January 2012, the workshop sensed a lot of scepticism about its current functioning amongst the Swedish participants as only a few new commercial initiatives had been made in the local and regional bus markets during the first year. The discussion focussed on what the key drivers could be for a successful increase in market initiative. The discussion revolved around themes such as reliability, geographic availability, integration and ease-of-use. The main priority was seen to be the need to find ways to open the ticketing system for new entrants if any further progress is to be made. This will require a fundamental change of mindset for many authorities.

In Germany, a long overdue amendment of the local public transport law was finally adopted to implement the requirements of European Regulation 1370/2007. While the new law offers an increased number of market access options, it appears that keeping the status quo was the main intention, heavily influenced by most actors of the German public transport sector. As far as we can judge, competitive tendering is likely to remain an absolute exception for the next couple of years, still being observed with great fear and suspicion by both operators and authorities. A further opening of the market, not even speaking of full deregulation, does not seem to be an option that is likely to be realised in the short term, even though the law amendments may have paved the way in that direction (Karl, 2013). This is in contrast to the deregulation of long-distance coach services introduced in Germany in 2013, which has developed towards a fast

growing new coach transport network, and this with substantial levels of competition (Augustin et al., 2013).

Papers from Japan presented the overall effects of the deregulation of local bus services (Kurosaki and Oyauchi, 2013; Sakai et al., 2013). While the deregulation has been implemented in 2002, the results seem to have had only little impact on local public transport. Various obstacles and barriers to entry seem to be present, but it also appears that, after such a long time of extensive regulation, the local bus market may need more stimulation to detach itself from its traditional rigidity. A paper investigating the development of price elasticities in the Japanese public transport market confirmed the previous results (Utsunomiya, 2013).

A paper from Zimbabwe examined the extent of divergence or convergence of a wide spectrum of stakeholder views on the form that public transport should take in Harare (Mbara et al., 2013). Issues of coordination between a formal and an explosion of informal services figured at the centre of this. It showed how difficult the situation is in Harare and how divergent views are amongst key stakeholders in urban transport operations (public sector, academia, transport operators and users) as to the path to take. The public sector and the academia seemed more inclined to stress the need for conventional buses as a sustainable mode for urban mobility, while inherent advantages were also associated with informal transport, which confirmed the need for detailed studies on how these can be integrated with conventional buses.

2.2. Deregulation in long-distance passenger transport (coach and rail)

Three papers discussed the first findings from the effect of deregulating the rail sector in the Czech Republic and Sweden. The Czech example showed the actions of three competitors on the same route, indicating an uncertain future as all operators are reportedly making losses (Tomes et al., 2013). The more successful Italian case was discussed even though it was – unfortunately – not covered by a paper in the workshop. Presentations from Sweden showed that the deregulated rail market shows only little competition for the time being, but it was reported that major entry is scheduled for the coming years (Alexandersson, 2013). Clearly, open access in the railway sector is still at its very beginning in several countries. It will be of major importance for the future of the industry to understand the market developments and performance impact of current and future cases, in particular the current experiences in Italy and Sweden. The workshop expected that further papers on this topic will be delivered at the next conferences.

In contrast to rail, deregulation in the coach market seemed to lead to much faster reactions and even to buoyant developments. A comparative presentation was made of the still very young German long-distance coach market and latest findings of the matured but still vibrant US market, both reporting success (Augustin et al., 2013). The discussion in the workshop showed that other countries with deregulated coach markets also reported successes such as in Scandinavia, Japan and New Zealand. The next opening will be that of the Italian market in January 2014 when existing exclusive rights will expire.

3. SYNTHESIS OF THE WORKSHOP DISCUSSIONS

3.1. Introduction

As the main focus of the workshop was “how to make market-based initiatives work?”, the discussions were centred on finding smarter ways to organise a ‘deregulated’ regime. This revolved essentially around three themes related to whether increased ‘guidance’ by the transport authority, as regulator of the market forces, was needed to reach this improvement. We distinguished three main means to organise such guidance, each of which will be discussed hereafter:

- The establishment of a public transport policy plan for the territory of the transport authority;
- Measures to stimulate entry and competition;
- Measures to restrict undesirable entry.

Those questions strongly relate to the bell shaped curve discussed at greater length in the previous workshop (Van de Velde and Preston, 2013). The key question put forward by that curve is to what extent regulation should be applied. According to this view, the lowest outcomes in terms of supply or welfare effects are to be expected at both ends of the curve, i.e., when no rules at all or absolute comprehensive regulation is imposed. This approach assumes that the right balance of regulatory requirements and entrepreneurial freedom results in the best or ‘optimal’ outcome.

Four group discussion sessions were organised in order to stimulate the workshop participants to generate ideas and devise ways to improve the functioning of a particular regime. Each group took one country as a reference case and attempted to devise regulatory improvements to improve the functioning of the ‘deregulation’, i.e., devise rules of the game and other regulatory features that would not only generate more entrepreneurship and innovation on the basis of autonomous market initiative, but also produce greater welfare improvements, compared to the existing regulated or deregulated situation. In a plenary report to the whole workshop, groups presented and

discussed their findings, attempting to identify common themes and agreements between the groups.

The countries chosen represented the width of situations presented in the workshop papers. Britain represented the most extensively deregulated market initiative regime. Japan represented an intermediate case, based upon market initiative although with much stability and tradition, and only limited new entry. Germany represented a hybrid case, legally based upon market initiative, but dominated by a history of public companies and functioning under a complex hybrid regime with extensive subsidisation and partly contracting. Germany was chosen here as the recent legal change has reinforced – though imperfectly – its ability to become a ‘deregulated’ market initiative regime. Sweden, finally, represented a case based on comprehensive competitive tendering moving towards a deregulated regime by being recently opened up to some level of deregulation by the abolition of all exclusivity rights that used to protect the contracted and subsidised services tendered by the transport authorities.

3.2. Transport policy plan

A transport policy plan as a policy document established by the transport authority is common in many parts of the world. It usually analyses the current transport situation and the expected needs for the coming decade or more. It presents the main policy goals of the authority related to transport, usually including planned major investments in transport infrastructure (if any) and the main characteristics of the public transport network. Such a document can form the basis for contracting and tendering a public transport network, if such a regime is chosen. However, it can also become an instrument of regulatory guidance in areas that choose for a market-initiated (i.e., ‘deregulated’) regime.

The main question then becomes: what should be included in such a transport plan? Should it only include a functional definition of the intended level of service, very much like a functional network definition prior to competitive tendering, or should it be more concrete, indicating precise routes and frequencies, perhaps even timetables? The main threat of such a plan is that the more detailed it becomes, the more it bears the risk of becoming a market entry barrier for commercial services, effectively preventing potentially desirable market innovations by imposing too many costly requirements to entrants. At the other extreme, the absence of guidance through a plan or a lack of quality in its content may also be suboptimal, as potential network benefits may then be jeopardised by an excessive free-for-all situation, preventing the realisation of welfare improvements compared to an unregulated situation. In other words, the more detailed

the plan becomes, the more one moves forward the bell-shaped curve, ultimately reducing the chances for well-functioning market initiatives. The less detailed, the more one stays in front of the curve, reducing the chances for realising network benefits.

The majority of the workshop participants agreed on the need to have a public transport plan, defined here as a policy document from the local or regional public transport authority, including minimum functional standards for at least major transportation corridors and some indication of service quality (in term of frequency and service period) on those axes. Most participants thought such a plan should also include a definition of accessibility standards for several groups in society. It was agreed that the transport plan should work as a non-restrictive guidance document in terms of service design, even though it should include compulsory integration requirements for all operators. It was felt that the plan should also contain the authority’s aims regarding service, ticketing and fare integration, indicating its vision on regulation or effectively guiding the regulator’s actions.

The difficulty of the issue of the amount of detail to be included in the plan was very much felt as the participants’ discussions did not result in a clear agreement on the optimal level of guidance to include in such a plan. Headway regulation, i.e., the imposition of regular interval timetables, leaving the determination of the actual frequency and departure times to the market, was one such item that was felt to be potentially beneficial to avoid some of the ‘bad’ practices of deregulated markets (a discussion of this range of practices can be found in Foster and Golay, 1986).

3.3. Measures to stimulate entry and competition

Actual entry or – following contestability theory – a credible threat of entry, is obviously a crucial feature of market initiative regimes. It requires the absence of barriers to entry. The provision by transport authorities of integrated passenger information has been a feature for intervention right from the start of the British bus deregulation but essentially under permissive powers, with a wide variation in extent and quality of such information at local level. Fares and ticketing agreements were seen as anti-competitive and have only become possible since the 2008 reform, while further amendments are pending in terms of making compulsory integrated ticketing possible. The position of fares and ticketing agreements being anti-competitive has now been completely dismissed, with the contrary view given both in the papers presented and in the discussions conducted during the workshop (inspired in particular by the report from the British Competition

Commission, 2011) that access to ticketing and fares systems and to passenger information systems plays a major role in reducing barriers to entry in local passenger transport. In short: the opinion was that integration is good and should not be seen as anti-competitive, quite the contrary.

While further legislative amendments are on their way in Britain, the evidence presented from Sweden supported the view that the lack of openness of the current ticketing arrangements²⁰⁸ is a likely source for the limited level of entry and competition observed hitherto. Several Swedish authorities have announced that the opening of the ticketing and fares system is their next challenge. Unfortunately, although Britain is more advanced in this field, no paper presented details on concrete actions taken in Britain, on the basis of the powers provided to local transport authorities under the Local Transport Act 2008. Although there was no formal paper, the presentation on the Oxford case by the county and operators provided as an additional component of the conference partly filled this role.

Although some believed there was already enough entry in some markets, such as in Japan, the discussions between the participants led to the conclusion that market entry should be stimulated by further appropriate action by the transport authority. It was agreed that “network effect facilities” (including at least information and ticketing systems, less fares systems) should in particular be accessible to all potential operators.

Many participants expressed the view that the main challenges to encourage market initiative also lie in both the provision of equal access conditions to operators and in the enforcement of a sharing of as much of that information as possible between authority and operators. Information availability was felt to be essential to increase entry by elucidating market potentials in order to enable operators to calculate their actual prospects and risks.

A second means to stimulate entry and/or market initiative is financial incentives. Financial incentives are meant to convert non-commercial services into services that could be provided by commercial initiatives. The opinions of the workshop were more divided on this issue, especially on the possibility or even desirability to replace direct competitive tendering with such schemes. Similarly, the workshop did not agree on whether subsidised (tendered) services should be seen as unduly crowding out market initiative, which is a question of major relevance for the current Swedish case that is still

very much in search of a new equilibrium. The idea of passenger vouchers was also briefly discussed as a possible way to help operators finding autonomously prospective market niches.

3.4. Should entry be restricted, and if so, how?

Discussions on whether and how entry should be restricted were less fruitful than those on the need to stimulate entry. The idea was to discuss whether exclusivity should be a feature of a market-initiative regime and whether there are ways to regulate the level of exclusivity given to operational rights.

The major part of the discussions circled around the need to prevent undesirable cream-skimming initiatives. The British deregulated bus case is still based, essentially, on non-exclusive rights and the evidence presented to the workshop has not reviewed the slight variations made possible by the Local Transport Act 2008. Restriction of entry by some form of cream-skimming test is seen in Britain in the railway sector but the basis is quite different here as the major part of the market is provided by tendered and contracted services, open access playing only a minor role. Yet, this was perceived to be a well-functioning case of entry restriction test. Its transferability to free markets was not obvious though. While Sweden chose full non-exclusivity in both bus and rail, Germany is now seen to be moving towards a still very uncertain and hybrid regime that accepts the principle of exclusivity (although this might be contrary to some interpretations of the European regulatory framework), yet no variation in degree of exclusivity seems to be part of this new regime. The papers presented did not reveal any smart new practices over and above what has been discussed in earlier workshops; neither did the workshop discussions lead to innovative new ideas. As a matter of fact, the analysis of the Japanese cream-skimming test even led to opposing views on what would constitute cream-skimming practices and under which conditions such practices would be desirable or undesirable.

3.5. Some considerations on rail and coach

The workshop was very puzzled by the entries observed in the rail sector in some European countries, the Czech Republic and Sweden mainly, but also Italy and Germany. The dominant opinion of the workshop was that the rail sector is not really suitable for a deregulated environment. It was felt that encouraging competition in this network industry, especially with low (or too low?) track access charges such as in Sweden, bears the threat of costly excessive entry, ultimately resulting in additional

[208] Those are currently provided by transport authorities for the services they plan and tender out, often under gross-cost contracts.

infrastructure needs, the costs of which are then shifted to the taxpayer with unclear welfare consequences. Furthermore, it was felt that the life span and extent of the infrastructure investments in this sector were seen to be difficult to combine with the potential volatility of entries and exits, leaving again the taxpayer to foot the bill.

In contrast, there was much more agreement amongst the workshop participants that the coach sector does not suffer from the same issues as the rail sector due to the completely different scope of investments, the different balance of costs between infrastructure and operations, and due to the much simpler technical nature of operations on the road compared to rail. Furthermore, it was perceived that many of the network benefit issues present in local public transport were much less relevant, though not absent, for the coaching business. The papers presented, and the additional discussion, provided evidence of a well working deregulated coach industry, despite voices raising criticism before market opening and expressing strong concerns regarding the competition this could cause to more or less parallel subsidised train services. This was one reason for the German legislator to arrange for a partial protection (i.e., at least one example of partial exclusivity, or 'rule of the game') for local railway services. However, further evidence presented showed with international statistics that train ridership continued to increase simultaneously with coach deregulation.

4. CONCLUSIONS

4.1. General remarks

The evidence discussed in the workshop illustrated that deregulated regimes are currently few and far between in European local passenger transport. The slow developments in local transport stand as a sharp contrast with the developments in the long-distance coach markets, where deregulation is gaining grounds at a rapid pace across Europe. This also stands as a sharp contrast with the European Union's actions to deregulate the international and in the future – if the suggested 4th Railway Package goes ahead – the extension of open access competition to the national railway markets; while – in the perception of the workshop – these railway markets seem less suited to deregulation.

A number of workshop participants had general doubts about deregulated regimes, although these seemed to a large extent related to the way deregulated regimes have been implemented, and it appears that dogmatism stood and still stands in the way of improvements to the functioning of deregulated regimes. The regulatory evolutions observed in Britain outside London did, however, show that improvements are feasible, even if these are slow to materialise. Unfortunately for academic

research, the high expectations linked with the regulatory controls suggested in New Zealand in 2008, which were more substantial and appeared to be potentially very beneficial, have not materialised as these regulatory controls have never been truly implemented due to various local circumstances. In particular, New Zealand governments sought more certainty, given the significant government subsidies to the public transport system. This ultimately led this country away from an improved deregulated regime and towards a fully contracted model. Clearly, the lack of champions for deregulated regimes and for finding ways to improve their functioning seems to be a major issue for this type of regime.

It also appears that in many cases of success, deregulated regimes seem to be driven at least to some extent by external factors. For instance, new media and internet technologies have facilitated competition in the coach sector due to an increasing number of simpler information and sales channels. With this, small new operators need to spend less time and effort in gaining market visibility beside the incumbent. The importance of external influences can also be exemplified by the fact that most successful cases of bus deregulation in Britain seem to be highly dependent upon the local authority's anti-car or pro public transport policy, although success is ultimately also dependent upon the management style adopted by the bus operator.

4.2. Policy recommendations

The workshop agreed that no unique solution for all modes and all places could be provided as both technical constraints (rail) and market potential are key drivers for well working deregulated markets. There were, however, a number of points of agreement on at least some of the regulatory needs, such as a need for general safety standards and – contrary to dogma – a general need for finding ways to allow for integration between services, especially when it comes to connecting points between modes.

A major problem for the future of deregulated regimes is that champions for a nuanced view on deregulated regimes seem to be absent. Being a champion for competitive tendering is apparently much easier a stance to adopt, with a simpler message to present; those at whom the lobby is directed more easily understand that message and they are probably also more inclined to be receptive to such a message as it leads to a regime which increases the direct control power of authorities on such a sensible political item as public transport compared to the less predictable results of market-initiated deregulated regimes.

A main recommendation of the workshop was that where deregulation is actually sustained as a regime, and if it is to improve its performance, it will be essential to avoid a repetition of the simplistic and dogmatic interpretations that have dominated earlier implementations of 'deregulation'. A more balanced view will need to be developed and this should be based both on theoretical considerations and on a thorough review of experience, both in terms of performance itself and in terms of the mechanisms that lead to such performance. This includes an appraisal of the regulatory toolbox of the authority, and a better understanding of the stance and origins of the stance of both the authority and the operators. Only this will allow devising the improved 'rules of the game' that are currently still lacking. To function, this will clearly also require clever regulators at the local level. While this may be difficult to realise, we also have to realise that the alternative (good contracting and tendering) is probably just as difficult to realise. In other words, there is no simple solution, whichever the regulatory regime chosen.

In this context, it will also be important to pay more attention to the current development of new 'intermediate' transport modes, such as bike sharing or car sharing systems, not to speak of automatic cars and the like, which are mainly based upon market initiative. This constitutes one of the next challenges in public transport regulation, as the free-market dynamics of those developments currently stands at odds with the regulatory approach taken in the public transport sector that is to a growing extent dominated by contracted (tendered) regimes.

The research recommendations formulated hereafter provide, together with the elements presented above, further advice on elements that need to be elucidated for progress in the field of deregulated market initiative regimes.

4.3. Research recommendations

Future research should continue to focus on the regulatory 'rules of the game' of market-initiated public transport regimes, including changes taking place and the reasons for these changes, such as to draw conclusions on the processes that generate success or failure. More case studies of both good and bad practices are needed to enlighten this debate. This is true in particular for the British bus case but there is also a need for more research on the coach and railway sectors and on the extent to which coordination needs appear in those sectors, especially in view of the developments in the Czech Republic and in Italy. An issue for further thoughts here is to see how market consolidation develops once the gold rush atmosphere disappears.

It would also be helpful if further research could enrich our understanding of the relationships between the entrepreneurial stance of operators, features of the regulatory regime and the behaviour of the transport authorities.

The most difficult research task would be to move beyond the analysis of the current regimes and find the courage to develop new ideas for a clever 'light-touch' regulation of market-initiated regimes. This would include the development of new concepts for what should be included in the three guidance mechanisms discussed in the workshop (the transport plan, entry stimulation measures and entry restriction measures). Cream skimming tests, levels of exclusivity, precedence between social and commercial services, and optimal arrangements for access to 'network effects facilities' (such as ticketing, information, etc.) are only some of the items that need to be studied here.

Research should also include the identification of the most appropriate balance between guidance through prohibition and guidance through financial and other incentives. In this respect, it will be necessary to look in more detail at hybrid regimes combining deregulation with competitive tendering. Several countries have or are implementing such regimes and this is expected to be a growing feature in many markets, especially in the railway sector. While such hybrid regimes appear at first glimpse to give new services a chance, a closer look may reveal that they inadvertently easily hinder possibilities for innovative services.

4.4. Workshop papers

British deregulation and New-Zealand regulatory reform:

- *Evaluating the long-term impacts of transport policy: the case of bus deregulation revisited*, John Preston and Talal Almutairi Transportation Research Group, University of Southampton, UK.
- *Performance, profit and consumer sovereignty in the English deregulated bus market*, Jonathan Cowie Transport Research Institute, Edinburgh Napier University, UK.
- *An assessment of the Competition Commission report and subsequent outcomes*, Peter White Department of Planning and Transport, University of Westminster, UK.
- *Transitioning to a new partnering approach – New Zealand regulator perspective*, Julie Alexander New Zealand Transport Agency Viviane Maguire New Zealand Ministry of Transport.

Swedish bus deregulation and German regulatory reform:

- *The Swedish experiment – results so far and implications for the future based on the need for subsidisation*, Anders Ljungberg Trafikanalys, Sweden.
- *Commercial bus operations in Stockholm – will it work? A simulation analysis*, Kjell Jansson Transport Analysis, Sweden.
- *How will the deregulation affect ambitions for increase public transport use?* Stephan Bösch, Anna Clark and Lena Smidfelt-Rosqvist Trivector Traffic AB, Sweden.
- *Legal and organisational developments in the German land passenger transport*, Astrid Karl KCW GmbH, Germany.

Japanese bus deregulation:

- *Estimating welfare change from local bus deregulation in Japan*, Hiroki Sakai Faculty of Business Administration, Tottori University of Environmental Studies, Japan; Kenichi Shoji Graduate School of Business Administration, Kobe University, Japan; Yoshinori Takahashi Faculty of Business Administration, Kinki University, Japan.
- *Deregulation of local bus services in Japan*, Fumio Kurosaki and Hajime Oyauchi Institute of Transportation Economics, Japan.
- *Local bus services in Japan: price elasticity and public transport policy*, Kiyohito Utsunomiya Faculty of Economics, Kansai University, Japan.

Formal/informal sector:

- *Convergence or divergence perspective: multi-stakeholder dialogue on formal and informal forms of public transport in Harare, Zimbabwe*, Tatenda Mbara Department of

Transport and Supply Chain Management, University of Johannesburg, South Africa; Smart Dumba Department of Rural and Urban Planning, University of Zimbabwe; Tapiwa Mukwashi Department of Rural and Urban Planning, University of Zimbabwe.

Railway competition:

- *Competition in the railway passenger market in the Czech Republic*, Zdeněk Tomeš and Martin Kvizda, Department of Economics, Masaryk University Brno, Czech Republic; Tomáš Nigrin, Institute of International Studies, Charles University Prague, Czech Republic; Daniel Seidenglanz, Department of Geography, Masaryk University Brno, Czech Republic.
- *Subsidised and non-subsidised public transport side by side – a socio-economic analysis of the Arlanda case*, Tom Petersen Trafikanalys, Sweden.
- *Next stop for Swedish rail reforms? New Government committee reviewing the organisation of the sector*, Gunnar Alexandersson The Government Offices, Sweden.

Coach competition:

- *Analysis of the US intercity coach market / A first evaluation of the young long-distance coach market in Germany*, Katrin Augustin KCW GmbH, Germany; Regine Gerike, Josue Sanchez and Carolina Ayala Technische Universität München, mobil.TUM, Germany.

REFERENCES

[See reference list at the end of the thesis]



13.4 Evaluating regulatory arrangements

The fourth of the five workshops was organised at the 14th International Conference on Competition and Ownership in Land Passenger Transport (Santiago, Chile, 30 August - 3 September 2015). The workshop examined recent case studies and discussed emerging practices in both market initiative and hybrid frameworks. On that basis, the workshop first considered whether new ideal-typical institutional frameworks had emerged and discussed regulatory requirements for alternative institutional frameworks to function. The workshop report paper (Preston and Van de Velde, 2016) is included in full below.

The main observations and conclusions of the workshop were:

- ▶ The workshop reconfirmed the desirability of both attempting to implement light touch regulation²⁰⁹ in market initiative regimes and incorporating market initiatives in authority initiative regimes. Additionally, it stressed the need for a more pro-active developments of new measures by all involved actors (operators, authorities and third parties) to permit service coordination and fare, ticketing and information integration.
- ▶ The workshop observed that progress in the implementation of model 2 had been limited, while the disappointing evidence from New Zealand and Sweden could point to sequencing issues and interdependencies between market and authority regimes with respect to the outcome of hybrid regimes. The result being crowding out of market initiative in Sweden (representing an imperfect implementation of model 1) or even dismissal of the market initiative altogether (with New Zealand transferring to an imperfect implementation of model 3).
- ▶ A fourth regime based on exclusive commercial licences was suggested. The exclusive character of the operational rights promoted in this regime led the workshop to wonder whether this constituted a return to pre-deregulation licensing. However, its proposed combination with integrative features warranted its positioning as a fourth notional regime in the workshop's typology of market-initiative regimes.
- ▶ With respect to competition, the workshop concluded that it is difficult to detect (and prevent) wasteful competition²¹⁰ as it is happening, although in retrospect it may be easier to identify. It also found that the approach taken to this issue will depend on the theoretical point of view taken. Some will see this as part of a process of creative destruction, ensuring productive and dynamic efficiency, others will focus more on the allocative inefficiencies it creates.
- ▶ With respect to regulation, the workshop concluded that it appeared difficult to implement middle level regulations and incentives (in the sense of the pyramid of regulatory requirements introduced earlier), such as clever guidance and 'rules of the game' to stimulate 'desirable' market initiative. On this point, the workshop expected that this issue would only get more complicated with the growth of shared mobility services and initiatives.

[209] An example of light touch regulation is the system of 'quality partnerships' that developed in Great Britain. The concept was already introduced by Carr (1997) during the 5th Thredbo conference.

[210] See, for example, Savage (1984) or Foster (1963) for a discussion of this concept in the context of public transport.

Workshop 7 report: Market initiative: Regulatory design, implementation and performance

Preston, J. and D. Van de Velde

Research in Transportation Economics, 2016, vol. 59, p. 343-348.

Abstract - This workshop reviewed recent good and bad practice with respect to market initiatives in public transport, with consideration of express coach, rail, local bus and unconventional modes. The options for market-led initiatives and the associated regulatory requirements were re-assessed with a new model posited, inspired by the ski-lift industry. It is recommended that more pro-active development (by operators, authorities and third parties) of new measures is required, particularly to permit service coordination and fare, ticketing and information integration.

1. AIMS OF THE WORKSHOP

This Workshop focuses on a theme that dates back as a Workshop to Thredbo 11 in Delft (Van de Velde and Beck, 2010) and that was developed further in Thredbo 12 (Van de Velde and Preston, 2013) and Thredbo 13 (Van de Velde and Augustin, 2014), but arguably as a topic dates back to at least Thredbo 5 in Leeds and the concept of light touch regulation (Carr, 1997). As in these previous conferences, this workshop discusses the current functioning and regulatory options for public transport regimes where autonomous market initiative²¹¹ plays a role. This could be the main institutional feature of public transport organisation (deregulated regime) but discussion could also include hybrid regimes where market-initiative constitutes a marginal or additional feature to a market organised by contracting/tendering.

The workshop started by examining recent case studies provided by the workshop participants and discussed whether these could be considered good or bad practices in both market initiatives and hybrid regimes. On that basis, the workshop first considered whether new ideal-typical regimes had emerged, compared to the main options for market-initiated regimes outlined by Van de Velde and Beck (2010) during the Thredbo 11 workshop. The workshop then moved to discussing the regulatory requirements for alternative regimes to function. This included the need for coordination between services

and the extent to which the regimes considered delivered this. The discussion also covered the scope for industry concentration encountered in the various regimes along with the observed impact on competition both in the market and for the market.

Given the above, the outline of this workshop report is as follows. In section 2, we review some case studies, looking for examples of good and bad practice. In section 3, we go on to summarise the workshop discussion, covering the main setups for market-initiative regimes and discussing associated regulatory requirements. We finish by drawing some conclusions (section 4) and making some recommendations for future conferences (section 5).

2. REVIEW OF EVIDENCE AND DISCUSSION OF GOOD AND BAD PRACTICES

The evidence base drew on the presentation of 12 papers (listed in the references) and the discussion drew on around 20 participants (see acknowledgement) from 12 countries²¹². These presentations focused on three conventional modes. Firstly, there were presentations on express coaches where there had been some de facto coach deregulation in Brazil, at least in terms of fares (de Aragão), some very real deregulation in Germany (Knorr) and deregulation about to start in France literally as the workshop convened (Guihery). Between 2012 and 2014, the coach market in Germany grew rapidly from around 2

[211] The main characteristics of market initiative regimes are that entrepreneurs in these markets are expected to decide autonomously about entry into the market and service supply in the market. Decisions are made on a commercial basis and are as a matter of principle not subjected to a prior ordering by a transport authority (see Van de Velde, 1999 for a further discussion of these concepts).

[212] Australia, Brazil, Cameroon, Chile, Finland, France, Germany, Japan, the Netherlands South Africa, Sweden and the United Kingdom.

Table 18 | Notional regimes to introduce market-initiative in largely authority initiative regimes

Regime 1	Regime 2	Regime 3	Regime 4
<ul style="list-style-type: none"> ▶ Several contracts in one area ▶ Authority designs and tenders core-network (net-cost contract) ▶ Market initiate for commercial services (based on some minimum criteria) ▶ Inter-available fares and ticketing, lower fares by operators allowed ▶ Authority sets fare rebates and compensates ▶ Discussion clubs (PTAs, operators, passengers) 	<ul style="list-style-type: none"> ▶ Transport plan (only functional) by PTA ▶ Commercial services as market initiative (under general rules: headway regulation + clever exceptions, and fare freedom) ▶ Additional tendering (transport plan) ▶ Fare freedom + authority sets fare rebates and compensates ▶ Super incentives to reduce need for regulation ▶ Maybe some exclusivity linked to headway regulation ▶ Need for quick response to unfair behaviour 	<ul style="list-style-type: none"> ▶ One contract for one area ▶ Negotiating contract with incumbent + threat of competitive tendering if negotiations unsuccessful ▶ Threat of commercial entry (market initiative) if incumbent is not affected negatively ▶ National body to support PTAs in contracting ▶ Performance based penalties and benchmarking ▶ Partnership between PTA and operator 	<ul style="list-style-type: none"> ▶ Route licensing with exclusivity ▶ Network integration through inter-available fares and ticketing ▶ Authority as the Community Franchisor sets integrated fares ▶ Ownership rights on routes to induce focus on long-term developments with related businesses

million to almost 20 million passengers per year. Similar growth is anticipated in France. In Germany, this period of growth has been accompanied with rapid concentration, with one firm currently controlling around three-quarters of the market²¹³. The response from the incumbent rail operator (DB) has been muted until 2015, although that might change in the next phase of competition.

Secondly, there were presentations on rail including a productivity study of European operators (Bouгна), an assessment of the business structure of private railways in Japan (Song) and reviews of development in Sweden (Alexandersson, Andersson). Song demonstrated the inter-relationship between rail-related businesses and other businesses (e.g. leisure, property, retail) for Japanese train operating companies, which complicates regulation of these firms. Bouгна found that competitive tendering had a greater effect on productive efficiency than other reforms (such as open access competition and vertical separation), with Andersson highlighting issues in Sweden with transition costs, transaction costs and misalignment costs. Alexandersson has noted that tendering of rail services in Sweden has reduced the need for operating subsidies and has reduced costs by over 10%. Open access competition has been permitted on rail routes in Sweden since 2011 and major competition has emerged between SJ (18 trains a day) and MTR (8 trains a day) on the Stockholm – Gothenburg route.

Thirdly, there were presentations on local buses in Sweden (Wretstrand and Danielson) and Wales (Preston). In Sweden, contracting-out was moving away from pure cost-based models to patronage-based models – the so-called Verified Passenger Boarding (VPB) model. In Wales, the market has been deregulated since 1986, but devolution

in 1999 has seen the Welsh Government attempt to exert some control through its subsidy policy, particularly so as to encourage community-based initiatives.

In addition, there were presentations on other, less conventional, public transport modes. Emerson studied ski lifts in the Dolomites (Italy) and compared the arrangements there with those for ski lifts in Austria, Australia and New Zealand. Mbara examined tuk-tuks in Johannesburg in South Africa, a form of paratransit that seemed to have found a niche as a feeder mode to informal mini-bus services.

3. SYNTHESIS OF WORKSHOP DISCUSSIONS

The workshop discussions were organised around two main themes. The first was that of the institutional setups encountered or envisaged in market-initiative regimes. The second was that of the regulatory requirements associated with the functioning of these regimes.

3.1. Options for market-initiated regimes

The discussion on the main options for market-initiative regimes was framed by the options outlined by Van de Velde and Beck (2010) and illustrated by the three first regimes included in Table 18.

It should be noted that this framework initially looked at the prospects for introducing market initiatives into public transport markets that are predominantly shaped by authority initiatives. This is because authority initiatives are the predominant market form at least for local public transport in developed countries. However, this workshop is also interested in authority initiatives in predominantly market initiative regimes, such as local buses in Great Britain outside London and express

[213] Following the merger of MeinFernbus and Fixbus.

coaches in Germany. Indeed the on-going liberalisation of long distance public transport markets in the European Union has given some impetus to regimes of this type.

There was particular interest from this and past workshops in the development of regime 2 but progress has been limited. New Zealand has shifted to contracting rather than this regime, whilst the Swedish pseudo-deregulation seems – so far – to have been something of a damp squib. In both New Zealand and Sweden there may be an issue with sequencing. In these public transport markets, authority initiatives and subsidised services predominate, with commercial services effectively crowded out. There has also been little development in regime 1 (multiple contracts) or regime 3 (negotiated contracts with competitive entry threat), although the CMA (2015) seems to be proposing something akin to regime 1 for rail franchising in Britain. Furthermore it seems to be suggesting another option akin to regime 4 as well, though without the same level of exclusivity.

The discussion initially focussed on the case study of the ski lifts, not least because this seemed to suggest an additional regime 4 in Table 18 that is associated with Individual Line Ownership (ILO). The key features of the industry organisation of the ski lifts in the Dolomites indicated a market initiative with exclusivity based on payment per passenger carried. There was integrated network level ticketing and pricing, which was by the authority organisation, or Community Franchisor in the case of Dolomiti SuperSki, although this role could in other contexts be played by an operators' association. Ownership rights induce a focus on longer-term developments with related businesses (the skiing

leisure industry) – which has some parallels with the set of incentives encountered in the private rail industry in Japan.

However, there were some concerns that the putative regime 4 could be a case of 'back to the future'. There were clear elements of pre-deregulation licensing, as existed for example in Great Britain between 1930 and 1986, and Route Associations, such as the *Colectivos* that dominate urban bus transport in parts of Latin America. Moreover, there may be irreversibility once property rights are assigned and there are also the dangers associated with grandfather rights, with monopolization likely if there is no competition of any kind. In the case of ski lifts, there is some competition in terms of the technology offered (e.g. tow bar, chair lift, gondola, etc.) and in the quality of service (e.g. heated seats). For urban and inter-urban public transport intermodal competition is important, not least because of the car, whilst there may also be alternative routing options through the network.

3.2. Regulatory Requirements

The discussion of regulatory requirements was framed around the pyramid of regulation put forward by Van de Velde and Preston (2013) and illustrated by Figure 23.

The view of this workshop was that there is a need to focus, both in terms of research and actual regulation, on the middle layer of the pyramid. In particular, there is a need to detect and disseminate examples of clever guidance and rules of the game. At the base of the pyramid, it was felt that the rules of law are generally well established with respect to safety regulation and competition policy, although safety enforcement was flagged as an issue in

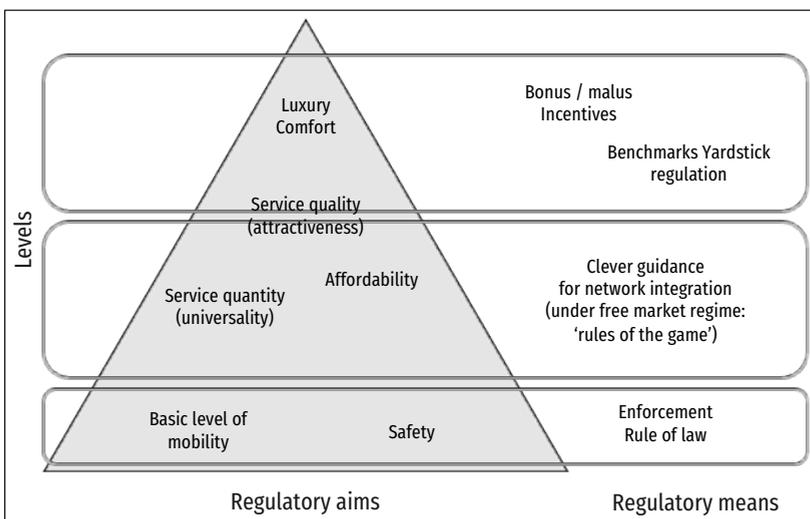


Figure 23 | The Pyramid of Regulatory Requirement

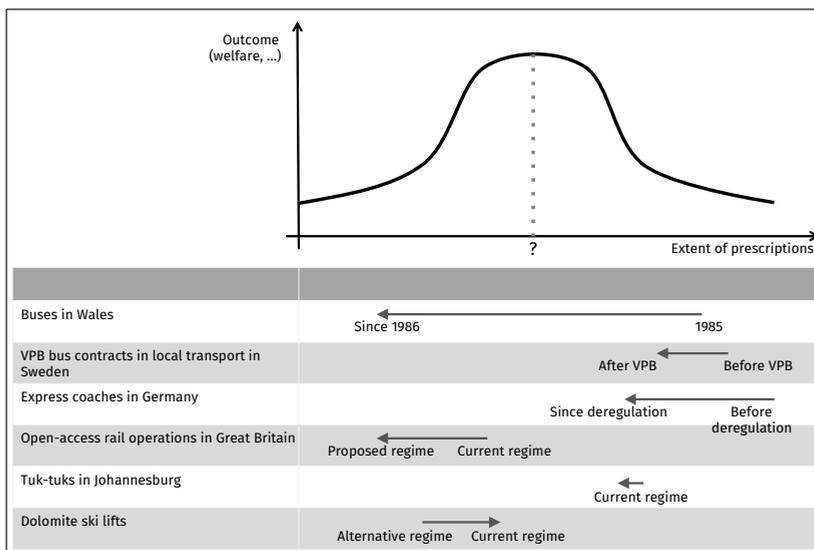


Figure 24 | Evolutions in structure and possible relationship to performance

the cases presented at the workshop both in developing (Brazil) and developed (Japan) countries. Towards the apex of the pyramid, there has been substantial work on benchmarks and Key Performance Indicators (KPIs), not least at Thredbo conferences (for example, Veeneman and Smith, 2014) but mainly in the context of contract-based, tendered regimes. Further investigation at this level would be welcome for regimes based on market initiative.

The discussion of regulatory devices at the middle layer of the pyramid was based on the three options identified at Thredbo 13 in Oxford (Van de Velde and Augustin, 2014), with possibly a fourth type of measure added:

- Measures to guide desirable entry to provide strategic guidance through a Transport Plan, within which there would be a Public Transport Authority component that identifies gaps in the market and possible innovations.
- Measures to stimulate desirable entry, which might include access to (and compulsory usage of) ticketing and fare systems, information systems and stations. This might build on the essential facility doctrine that originates with US anti-trust (Tye, 1987; Farquharson, 2000). These measures might also include headway regulations to ensure even interval services (although enforcement can be an issue) and financial incentives, such as the compensation of fare rebates, to stimulate desirable entry and subsequent good behaviour.

- Measures to restrict undesirable entry, such as the cream skimming tests applied in the bus industry in Japan or the not primarily abstractive tests used by the rail regulator in Great Britain. This might also include minimum standards for new vehicles (such as floor height, environmental emissions) and for driver training.
- Some ‘new’ basic requirements might be required (although these might be a sub-set of the second and third set of measures). This relates to management training for both operators and authorities so to be able to develop more effective (and trusting) partnerships.

Unfortunately, while a number of good practices or concepts of middle layer regulation were discussed at the Workshop, it was recognised that there was only a very limited number of good examples available or actually implemented²¹⁴, and a lack of research and hence papers devoted to the topic.

Regulatory optima for different market configurations were discussed with respect to the bell-shaped curve posited at Thredbo 12 in Durban (Van de Velde and Preston, 2013) and illustrated by Figure 24. It should be stressed that this Figure is meant to be illustrative and the extent of the movements depicted and relationship with performance have, in most cases, still to be established.

Figure 24 illustrates a variety of outcomes. In Wales, deregulation was very briefly associated with welfare

[214] One example would have been the PTMA regulation developed in New Zealand, but that regime was never implemented in practice (Van de Velde and Wallis, 2013).

enhancements but these were dissipated as the industry concentrated and on the road competition ceased. This was followed by strong welfare losses, which have only been slightly reduced by increased governmental intervention, particularly through subsidy policies. In particular, since 2002, there has been a generous concessionary travel scheme, with concessions making up 40% of the total bus market. Given the ways operators reimbursed, this has led to an unintended consequence of rapid increases in adult fares. It seems that the Welsh bus market has a level of prescription that is below the optimal level.

In Sweden, it seems possible that the level of prescription is greater than the optimal level but the VBP regime does seem to have some modest increases in desired outcomes in terms of value for money, although detailed welfare calculations have not been made. In South Africa, the level of prescription is much less than that of Sweden and this is an example of how the scale and shape of the relationship in Figure 24 is notional. However, permitting tuk-tuks is an example of reducing prescriptions and the market surveys undertaken by Mbara indicates a high level of satisfaction, although again detailed welfare calculations have not been made. However, it should be noted that this is very much an example of niche entry and that if the number of legal tuk-tuks and/or illegal tuk-tuks increase then the position could change.

With respect to long distance public transport, i.e. the case of express coach, deregulation seems to have been largely beneficial within the coach market itself, although it could have knock-on impacts on inter-related rail markets. This could have parallels with the experience of coach regulation in Britain in the 1980s, where one of the benefits was the competitive pressure exerted on the rail sector (Douglas, 1987; Thompson and Whitfield, 1995). In rail, with its much higher element of fixed costs and greater capacity limits, the position could be different, with open access leading to too much service, provided at too high price and possibly with too low quality of service in terms of punctuality (Preston, 2008). Large-scale open access competition is currently characterising the passenger rail market in a number of European countries, such as Austria, the Czech Republic, Italy and Sweden, although in Germany such competition has receded (possibly in the wake of coach deregulation). However, it is known that in some of these cases the protagonists are losing money so head-on competition may not be feasible in the longer term.

As far as the Dolomite Ski-lifts are concerned, the case might be characterised as being a market initiative with relatively low levels of prescription (aside from standard safety and competition regulation) that has persisted in its original form and operations up to the present time

with centralised fare setting and revenue pooling based on prescribed remuneration rates which seems to have had good outcomes, at least in terms of market growth, diversity and economic performance.

With respect to service coordination and headway regulation, the Oxford Statutory Quality Partnership (SQP) and its qualifying agreements and block exemptions were discussed. Examples of possible headway regulation were also highlighted in Valparaiso (Chile) and in Estonia. The role of GPS in enforcement might mean headway regulation is more feasible than it once was, although public interest tests may be required to prevent cartelisation.

Bus stop allocation was seen as being problematic, with the Nottingham SQP providing some solutions, as might airport slot allocation procedures. Access to express coach stations was emerging as a problem in Germany and was likely to become a problem in France.

With respect to fares/ticketing regulation, legal powers to ensure participation in concessionary fares schemes may be desirable and could be extended to Travelcards and network Smart cards/contactless payment. With respect to the latter and based on experience in Great Britain outside London, the challenge may be to ensure that the network cards do not have an excessive price premium over operator specific cards.

In terms of competition, the rapid concentration that occurs following deregulation was noted but, at least for the express coach market, was not thought to be an area of concern. Economic, social and environmental externalities are less important in long distance public transport markets than in local markets and hence the case for regulation is less. In any event, the coach market may approximate to a contestable market, with potential competition having a similar disciplining effect as actual competition (Jaffer and Thompson, 1986). Even if the coach market is not contestable, intermodal competition will ensure efficiency. Some public transport markets exhibit high sunk costs (rail, ski lifts) and hence are unlikely to be contestable. For rail, this will be mitigated by intermodal competition, particularly in circumstances where coaches are deregulated. Overall, the workshop believed general pro-competition authorities could deal with concentration issues. However, in some cases, the speed of response of such bodies may be inappropriate and hence sector specific regulators are required.

The workshop discussed why the evidence base might be so limited. It was speculated that this might be due to uneven power relations between operators and authorities (both national and local). For example, in the deregulated bus market of Wales, it seems likely that the operators have

the greatest power, limiting what the Welsh Government can achieve and inhibiting, for example, plans for a *Traws Cymru* nationwide bus network. In the largely, regulated bus markets of Sweden, the local authorities have greater power than both the operators and central government, with the latter being the main sponsor of deregulation. In Oxford, good practice might have emerged because the authority and operators are relatively evenly balanced with a record of working together that dates back to the mid-1970s. Furthermore, the two main bus operators in Oxford are of broadly equal size and status.

The lack of good practice in terms of regulating deregulated markets might be exacerbated by poor knowledge of the benefits of practices such as timetable and fare coordination and of service stability (including route numbering, liveries etc.) Although there are now guidance manuals on appropriate fare, journey time and other elasticities to apply in the bus and rail industry (Preston, 2015), there is less evidence on the impacts of even interval timetables, good connections and stable services.

4. CONCLUSIONS

This workshop drew the following conclusions on the basis of the cases presented, the additional evidence and the further workshop discussions.

Firstly, it was evident that there were interdependencies between market and authority regimes. In Sweden, there were suggestions that tendered services were crowding out commercial services. This could be a form of path dependency in that tendered services have been specified first, leaving few gaps for commercial services. An alternative sequencing could be for commercial services to be specified first, with tendering services filling the gaps and being required to not inhibit competition (as in Great Britain outside London) which might lead to different results (but might not – and in New Zealand's case seems to have led ultimately to the prevalence of negotiated contracts). Commercial networks could include user-side subsidies, for example in the form of concessionary fare subsidies. However, such fare subsidies can have unintended consequences, as the rise in adult bus fares in Wales illustrates.

Secondly, with respect to competition, it is difficult to detect (and prevent) wasteful competition as it is happening, although in retrospect it may be easier to identify. Some of the on-track competition in the European rail market could be wasteful, but this will not be evident until the losses to operators are revealed and this can be compared to increases in consumer surplus and other net benefits. The approach taken to this issue will depend on the political economy viewpoint

taken. Neo-liberals will see this as part of the process of creative destruction that ensures productive and dynamic efficiency, interventionists will focus more on the allocative inefficiencies it creates.

Thirdly, with respect to regulation, the workshop demonstrated that it was difficult to implement middle level regulations and incentives (such as clever guidance and 'rules of the game') to stimulate further market initiative.

Fourthly, the workshop believed that this was only likely to get more complicated with the growth of shared mobility services and initiatives such as *Yourbus* (buses in Germany), *blablacar* (shared cars) and *uber* (taxis) – not least because many of these services are exploiting a variant of Goodhart's Law – when given the opportunity, economic activity will shift from more to less regulated sectors (Goodhart, 1981).

Finally, this points to the fact that implementation problems also relate to unequal power balances and knowledge skills between the regulators and the regulated and the lack of clear reporting guidelines (e.g. on route costs) for evaluation.

5. RECOMMENDATIONS

In terms of future policy, the workshop believed land passenger transport should continue to implement light touch regulation in market initiative regimes and continue incorporating market initiatives in authority initiative regimes. However, what is also needed is more pro-active development (by operators, authorities and third parties) of new measures, particularly to permit service coordination and fare, ticketing and information integration.

Future research should monitor and evaluate such schemes (and competing conventional regimes) and disseminate the results. Some of this dissemination should be via future *Thredbo* conferences and via the conference's website (<http://www.thredbo-conference-series.org>).

Workshop Papers:

- Alexandersson, G. Development of Swedish railway organisation and policy – status report from on-going Government Committee review.
- Bougna Tchofo, E. and Crozet, Y. Towards a liberalised European rail transport: Analysis and modelling the impact of competition on productive efficiency.
- Emerson, D, Mulley, C. and Bliemer, M. A Case Study of an Individual Route Ownership business regime for public transport service delivery.

- Emerson, D, Mulley, C. and Bliemer, M. A theoretical analysis of business models for urban public transport systems, with comparative reference to the case of the Individual Line Ownership regime.
- Guihery, L. New development of intercity bus market in France: is it the comeback of the Road?
- Hulten, S, Alexandersson, G. and Andersson, M. Transaction and transition costs during the regulation of the Swedish railway market.
- Knorr, A. and Lueg-Arndt, A. Intercity Bus Deregulation in Germany – Intra-modal and Intermodal Effects after Two Years.
- Mbara, T. Tuk-tuk, ‘a new kid on the block’ in Johannesburg: Impacts and performance.
- Preston, J. Big Buses in a Small Country: The Prospects for Bus Services in Wales.
- Song, Y.-J. and Shoji, K. Effects of Diversification Strategies in the Investment of Railway Business: The Case of Private Railway Companies in Japan.
- Wretstrand, A. and Danielson, H. From production to service: novel ways of contracting public transport services in Sweden.
- Yamashita, Y., Aragao, J. Orrico, R. and Almeida, C. Deregulation in the Brazilian Interstate Coach Transport: A new perspective?

REFERENCES

[See reference list at the end of the thesis]

Acknowledgements - Workshop participants included: Pekka Aalto, Gunnar Alexandersson, Matts Andersson, Nicolás Badiola, Javier Boncompte, David Bray, Hans Danielson, Joaquim de Aragão, Peter Dwyer, David Emerson, Emmanuel Bougna, Laurent Guihery, Vicente Huerta, Andreas Knorr, Tatenda Mbara, Carlos Melo, John Preston, Yeon-Jung Song, Didier van de Velde, Anders Wretstrand and Théo Yeche.



13.5 Threats and new paradigms

The fifth of the five workshops was organised at the 15th International Conference on Competition and Ownership in Land Passenger Transport (Stockholm, Sweden, 13-17 August 2017). It continued the discussion on the need for measures to improve the performance of deregulated markets. The development in legislation and practices in Great-Britain, Sweden and Germany got particular attention. The workshop also discussed the possibility of the emergence of a new paradigm in view of the consequences that technological changes linked to information technologies might have on the functioning of the markets studied. The workshop report paper (Van de Velde and Karl, 2018) is included in full below.

The main conclusions of the workshop were that:

- ▶ The degree and mix of regulatory prescriptions and market freedom implemented (or implementable) in Britain, and to a lesser extent in Germany, seemed to move in the right direction. These were coming closer—from opposite directions—to the optimum of the hypothetical bell-shaped curve. This meant also coming closer to the ideal-typical model 2. The workshop also observed that this was not the case in Sweden, in line with earlier expectations.
- ▶ Transport plans, as guiding feature for market initiative regimes, seemed to be gaining ground but they also appeared to be a potential cause of substantial sluggishness in market response when implemented as in Germany.
- ▶ The size and stratification of passenger transport markets in most areas studied seemed to leave little room for direct intra-modal competition, while the workshop had more trust in the viability of intermodal competition.
- ▶ The development of new intermediaries for information and ticketing purposes seemed to point to a possible gradual replacement of the 'old' public transport integration dogma with some new paradigm; hence the title of the workshop report: "Recent developments, threats, developing paradigms and regulatory needs". Three levels of entrepreneurship seemed to appear as a result: the transport operator, the network management company or 'risk-bearing integrators' and the search engines or information integrators.
- ▶ The call for papers mentioned the need for more research on the process leading to the adoption of regulatory arrangements and their evolutions. Unfortunately, very few contributions were delivered on that topic. This points to a lack of academic studies focussing on the process leading to demand and supply of regulation in institutional frameworks based on market initiative. Research appeared lacking in relation to several issues: What leads to the uptake by local authorities (L3.2) of enacted regulatory toolboxes (L2.1, L2.2)? What are requirements for regulatory tools to function in line with their design? What level of knowledge is required by those supposed to use the toolbox? What determines whether this knowledge is developed? Are the financial means necessary for the implementation of specific regulatory tools present?

Workshop 3 report: Market initiative regimes in bus, coach and rail: Recent developments, threats, developing paradigms and regulatory needs

Van de Velde, D. and A. Karl

Research in Transportation Economics, 2018, vol. 69, p. 254-259.

Abstract - This paper synthesizes evidence from Workshop 3 'Market initiative regimes: experience and measures to improve performance' of the 15th International Conference on Competition and Ownership in Land Passenger Transport. This workshop discussed the growing importance of market initiative regimes in public transport focusing on the market and regulatory developments in three sectors: local and regional bus, long-distance coach and passenger train services. The comparison of these sectors illustrated impressive but also very substantial differences between countries in terms of market potentials, success of market initiative, regulatory paths taken and resulting performance. Various observations were made. The size and stratification of passenger transports markets in most countries or regions studied seemed to leave little room for direct intra-modal competition, while there was more trust in the viability of intermodal competition. The lack of data was perceived to be a major issue, not only for research but also for market transparency and well-functioning. The development of new intermediaries for information and ticketing purposes seems to point at a possible gradual replacement of the 'old' public transport integration dogma with some new paradigm. There is still a lack of academic studies focussing on the process leading to demand and supply of regulation of market initiative regimes and of studies looking subsequently at the factors leading to the uptake of such regulatory tools or at the practical requirements for such specific regulations to function.

1. OVERVIEW OF WORKSHOP

This workshop builds upon the results of past Thredbo conference workshops focussing on regimes based on autonomous market initiative²¹⁵. Such regimes are characterised by autonomous market entry as a main institutional feature, possibly within a hybrid regime where market initiative is only an option (for example in addition to a market otherwise characterised by competitive tendering, i.e. authority initiative). The focus of this workshop, however, is on discussing market initiative as a feature within all possible regulatory configurations for public transport regimes.

The workshop announcement had invited contributions to different aspects of market initiative regimes, such as demand revelation, entrepreneurship and innovation in service provision, covering collective modes of transport (bus, coach or rail) in local, regional and long-distance markets. It was in particular interested in discussing whether measures may be needed to improve

the performance of such markets (such as all kinds of regulatory arrangements and measures to reorganise market supply, knowledge, etc.) Another point of interest mentioned was the process leading to the adoption of regulatory arrangements, their evolution, and the conditions that can contribute to better performances. The call-for-paper for the workshop asked for studies on both good and bad practices, on legislation and regulation or local action by transport authorities.

The workshop papers received covered all three modes of collective transport (5 papers on the bus sector, 5 papers on the coach sector and 6 papers on the railway sector) fairly evenly, taking up diverse aspects and using differing approaches. A short summary of the contributions will be given by mode in the rest of this section.²¹⁶

The workshop itself was divided into four parts: a presentation of a brief summary of the main findings of the previous workshops, presentations of the 16 workshop

[215] See Van de Velde (1999) for an introduction to the concept of 'market initiative' versus 'authority initiative'. See Preston and Van de Velde (2016) for a short overview of the results of the past workshops.

[216] The presenting author is given as source, the co-authors and the title of the corresponding workshop papers are listed in the references.

papers, parallel group discussions organised by mode of collective transport and a general discussion.

1.1. Key themes – buses

The experience-based presentations of this group had the background of the hitherto deregulated regime in Great Britain and of two different hybrid regimes (Germany, Sweden)²¹⁷.

The Bus Services Act 2017 was introduced in Great Britain as a next step of transport legislation displaying a shift to, on the one hand, an easier replacement of the market initiative regime by franchising procedures (i.e., 'contracting' by competitive tendering) and, on the other hand, a stronger encouragement of using partnerships between operators and local transport authorities with the free market initiative environment (White). The partnership schemes 'Advanced Quality Partnership' and 'Enhanced Partnership' give Local Transport Authorities differently graduated powers to influence fares, frequency and timing of services, to set out standards of vehicles or even to impose integrated ticketing. It remains to be seen what the effects of the new mandatory and permissive powers of the 2017 Act will be. The case of Great Britain was further examined during the workshop through a comprehensive analysis of the past experiences with partnership concepts in existence prior to the 2017 Act (Godfrey), such as the recent experience with the Sheffield partnership that seems to have been one of the sources of inspiration for the 2017 Act. This analysis showed their major effect on bus services with regard to investment and the development of relationships between operators and transport authorities, thereby influencing the functioning of the pure market initiative model. The positive achievements realised over 25 years lead to the prognosis that partnerships are likely to persist.

Sweden opened up its local bus market for commercial initiatives in 2012, while retaining a strong public commitment to public transport via regional transport authority provided (and subsidised) services²¹⁸. Evidence of different market reports shows that, under such setup, commercial initiatives can only be minimal and face tremendous difficulties as subsidised transport services leave only limited business opportunities. Furthermore, the lack of, or the very slow, adaptation of the rules for access to physical/digital public infrastructures (such as integrated ticketing or passenger information systems)

continue to create substantial barriers to commercial success in these markets (Grönlund).

Germany continues with its hybrid regime, amended in 2012 (Karl, 2013), which prioritises market-initiated services in competition with planned contracted services by transport authorities (Karl). The priority given to market initiative services is submitted to the condition that standards (previously set in regional transport plans) for local services are met. Interestingly, since 2015, several cases of market initiatives occurred, surprising both experts and the public. Demonstrating serious competition, they started providing commercial services there where, until then, highly subsidised contracted urban bus networks were provided. In the case of the city of Pforzheim the incumbent's contracted services were successfully replaced by market initiative. It has to be pointed out that market initiatives in local/regional transport in Germany, once established, are protected from competition, a phenomenon which is rather unique and for which one can doubt whether this approach is compatible with European legislation.

A theoretic approach completed the presentations on bus services, comparing via a computer game a Community Franchise urban transport regime²¹⁹ with a Government Enterprise regime (provision via authority initiative and planning) showing the comparatively greater potential of the Community Franchise regime to generate producer surplus and also social welfare (Emerson).

1.2. Key themes – coaches

Presentations of the coach group dealt mainly with aspects of market development of intercity coaches in Germany, Italy and France and cross-border coaches in Switzerland.

Germany liberalised the coach market as of 2013 and the market has seen a dynamic development since then. Yet, data on user behaviour and user preferences so far hardly exist. Knorr gave insights into the results of a survey which starts to fill the blank and enables an assessment of the long-term market potential. The study suggests a realistic but limited chance for a further growth of the market (reference point 2014). Another study from Germany analysed the impact of that liberalisation on regional railway services (Gremm). The study concludes that regional railway services are in general not cannibalised by the new competition, but some connections with distances between 200 and 300 kilometres do suffer from losses of

[217] See Van de Velde and Wallis (2013) for a presentation and discussion on earlier developments in Great Britain, New Zealand and Sweden.

[218] See Rye and Wretstrand (2013); Ljungberg (2013) for further details.

[219] See also Emerson et al. (2015a; 2015b).

sale. Connections from and to Berlin, and, to a far lesser degree, Munich and Frankfurt are especially concerned. Operators are likely to demand amendments of fares and/or additional subsidies when they contractually bear the revenue risk substantially or fully as supply adjustments are often not practically possible.

Italy's liberalisation of the coach market dates back to 2007 but was fully deployed only in 2014. Market development shows, so far, coexistent different market models, depending on distance, existence of competing rail services with regard to comfort and/or price, and travel purpose (Beria). The analysis of the pricing policies points at atypical seasonal effects as a probable result of a (temporary) price war; it confirms the aggressive strategies of newcomers that are nonetheless sometimes picked up by incumbents; and it shows the effects of the presence of other incumbents, of distance and of competition by other modes.

The analysis of the development of the coach market in France since the liberalisation in 2015 shows a rather unique situation (Guihéry). As in other countries, the market is dynamic but increasingly concentrated and dominated by (partially) publicly owned actors on the one hand, and a – so far – continuous lack of profitability on the other hand. The most influencing factor for the latter is the strong intermodal competition by comparably cheap high-speed train services, low-cost airlines and car-pooling. Contrary to the diagnosis for Germany it is still open whether the coach market will be able to persist with a noticeable market share.

In Switzerland four distinct types of cross-border coach services have evolved: intercity services, short services, airport links and ethnic services (Von Arx). Market opportunities arise where direct railway connections do not exist or have been reduced. In other cases, coach services can be seen as complementary to rail and airline services or do compete with well-established rail connections.

1.3. Key themes – rail

Rail themed papers revolved around empirical and theoretical results of open-access competition in Sweden and Italy, complemented by a Delphi study on factors influencing open-access competition in Europe; an overview of international passenger train services from and to Switzerland; and a closer look on the business strategies of the vertically integrated Japanese railway companies.

Vigren's analysis of the so far only example of substantial directly competing railway services in Sweden (Stockholm-Gothenburg) gives evidence of the effect

on prices of the incumbent. Prices decreased on average by 12.8 per cent in the research period. A simulation on the welfare effects of open-access competition showed nonetheless that price competition can be 'avoided' with nearby departures by the same operator (Broman).

Italy has opened up its high-speed railway network to open-access competition. An innovative and ambitious private company entered that new market in 2012 – the 'Italo'-services by the operator Nuovo Trasporto Viaggiatori (NTV). Desmaris presented the relating developments, reactions of the incumbent, the regulatory background and central decisions of the Railway Regulator. So far, competition of high-speed railway services seems to be working in Italy and it is a success for the passengers (supply, fares), but the question of a long-term financial success for the operators is open. Low access charges for high-speed trains seem to be a key supporting factor for the development of high-speed railway services and for enabling competition in that specific market.

A Delphi study explored the current state of open access competition on the European level and the main influencing factors (Feuerstein). The study demonstrates a positive perception by the panel members of the impact of open access competition on long-distance rail services but shows also that the market is still fragmented and that many barriers prevail, their significance varying by country.

The analysis of international train services from and to Switzerland (von Arx) shows a mixed picture: some connections, profiting from the expansion of high-speed rail infrastructure, exhibit shorter travel times, the travel time of other connections has increased and, lastly, some connections have stopped operations. The 'surviving' services are mainly run by incumbents using different business models (cooperative model, joint company, intra-modal competition).

Japan privatised the state railway operator in 1987: the company was split into several passenger railway undertakings and a freight railway undertaking. The most recent regulatory change in 2000 lessened the regulation on market entry and exit. Song's study on the business strategies of (the vertically integrated) Japanese railway companies before and after that last regulatory reform reveals that the railways reacted by closing the operation of non-profitable lines, by opening new lines enhancing their networks into city centres and by stimulating railway demand through the (further) development the stations' area and area along the lines which can be best described as a competition for inhabitants.

2. SYNTHESIS OF WORKSHOP DISCUSSION

As mentioned above the workshop was divided into three parallel group discussions focusing on the market and regulatory developments in the three sectors (bus, coach and rail). Leading discussion points were suggested to the group, while allowing them to choose alternate leading questions for their discussions:

- What evidence is there on entrepreneurship, demand revelation and service innovation?
- Evidence on regulatory aspects – which regulation or which combination of regulatory regimes facilitates good performance? Do regulatory ‘gains’ outweigh or at least balance regulatory ‘costs’?
- Is there any evidence that regulatory arrangements, once adopted, result in effects best described as ‘path dependency’? Are regulatory approaches matched by pertinent skills, information and incentives at the local level (‘regulatory uptake’)?
- What are conditions for better performances?
- Is the regime viable in that competition is not neutralized by concentration?
- Is the regime able to react to a changing environment (demand and supply)?

2.1. Bus market: Are guiding plans conquering the sector?

Great Britain’s Bus Services Act gives authorities more options to ensure an improved bus supply. Before that, besides a *laissez-faire* approach of minimal intervention (which some authorities actually carried out to the extreme by ceasing all provision of service subsidies), the basic choice for a Local Transport Authority (LTA) considering to intervene in the market was to negotiate a Partnership or to enter into franchising (i.e. competitive tendering), the latter qualified by a rather high threshold of requirements. With the Bus Services Act, while the *laissez-faire* approach remains as base option, intervention choices are made easier, at least for Mayoral city regions. The instrument of ‘Advanced Quality Partnership’ (AQP) further develops the negotiated partnership by the possibility of requiring bus operators to sell and accept a multi-operator ticket, specifying marketing requirements and certain technology for ticket sales. However, the Act stops short of what the group considered to be more optimal as it does not alter the competition authority’s requirement for operators to retain their own tickets alongside the introduction of integrated ticketing. ‘Enhanced partnerships’ (EP) cover almost all authority powers of franchising (subject, however, to agreement with operators, i.e. a scheme cannot go ahead if a specified

proportion objects) with the exception of setting the price of the bus operator’s tickets.

Making use of the new powers will require local transport authorities to think about what service levels and quality of services they want to achieve and what they can achieve considering available funds. Local transport authorities are, thus, very likely to become more involved, possibly increasing their reflections on measures that could be supportive for public transport, like parking policy or bus priorities, and local transport plans seem useful instruments to guide this process.

The discussion evaluated the new regulatory instruments (AQP, EP) and the ultimate sanction of the LTA taking over from market initiative. The possibility of such a move to a tendering regime might be perceived as a threat mechanism: the threat of a ‘franchising scheme’ is the threat of abolishing market initiative and replacing it by authority initiative regime with competitive tendering for the realisation of those services. Details and consequences of such a change are, however, not clear yet as – at the time of the conference – no compensation was foreseen for loss of ‘networks’ and no powers were foreseen for compulsory acquisition of depots, vehicles etc. Further implementation guidance to be issued by Government might help to answer what happens to invested interests of incumbent bus operator(s). The group observed that this lack of clarity on rules and guidance causes considerable uncertainty in the market.

The lack of substantial new developments in ticketing and fare integration meant that this issue could not be brought much further in the group discussions than the pre-existing general wisdom that passengers might greatly benefit from higher coordinated services and integrated tickets, with actual implementations being the ‘*Verkehrsverbünde*’ in Germany. The Community Franchise approach, which the group struggled to classify, was perceived to allow for this in a clever way. Planning in this case is left to ‘individual franchisees’ who develop and exploit ‘their’ line but do not have to compete with other operators. The question was asked whether this approach was different from the system of licensing routes to only one operator (exclusivity) known in the first half of the last century in many countries in Europe. The main difference is, however, that subsidies (pre-defined per sold ticket) and multi-operator tickets were not known in that time, while the Community Franchise approach allows for this, and more, by virtue of the franchisor controlling ticket pricing, operating times and general standards; the franchisees only being able to succeed by attracting patronage to their lines within those fixed constraints.

The group discussed in what direction the regulation and markets in Great Britain and Germany are developing using the 'bell shaped curve' developed in previous workshops (Preston and Van de Velde, 2016; Van de Velde and Augustin, 2014; Van de Velde and Preston, 2013). That model discussed the right degree and mix of regulatory prescriptions and market freedoms with respect to the outcome in terms of public transport supply or welfare effects. Pending the actual implementation of these new features now available in the LTA's regulatory toolbox, the workshop concluded that AQP's seemed to be a move in the right direction, even allowing to be close to the optimum of the hypothetical bell-shaped curve, while there was a feeling that EPs might overshoot that optimum. From the other extreme, the space currently given in the German regime for market initiatives seems to be at least a move up the curve, starting from a pole of extensive prescriptions, even though the level of prescriptions remains very high. As to Sweden's approach, the group concluded that the way leeway had been given to market initiative was going nowhere so far, but that this did not come as a surprise, since pronounced doubts on the chosen path's success were there since the very beginning (Jansson, 2013; Ljungberg, 2013; Van de Velde and Augustin, 2014).

The workshop considered that the recent German cases of market initiative, exemplified by the Pforzheim case during the workshop besides other similar cases, were extremely interesting and ought to be studied further, as both success and failures here will contribute to ascertaining under what condition market initiative can work successfully. A particular point of attention here was the seemingly opposed dogmatic and pragmatic views on guiding regulations (such as transport plan and fares) and exclusivity.

Focussing on this 'transport plan' idea as a guiding principle (as now seen in different guises in Britain, Sweden and Germany) the group placed a caveat, observing that, while this development was in line with the recommendations made in earlier editions of this workshop (Van de Velde and Augustin, 2014), its actual implementation tended to involve (very) long term political planning processes, forcing – in the case of Germany's hybrid regime for instant – market initiative to take account of plans that might be up to 27 months old, leading the group to be quite critical about the adequacy of such implementation, in view of more quickly evolving market needs.

2.2. Coach market: Dynamic market under threat?

The coach group discussed the vibrant experiences in the coach market with the examples from Germany, Italy,

France and Switzerland. The coach market appeared to leave, at least in some countries, room for different types of entrepreneurship (small operators, risk-bearing 'integrators', search engines/GDS, niche markets for migrant workers, etc.) The group agreed that deregulation resulted in a fast market evolution that stimulated and pushed innovation, especially with regard to such features as free on-board WiFi, ticketing systems and yield management, influencing both intra-modal and intermodal competitors.

The group emphasized the positive impacts of the fast-developing coach markets on rail services that started introducing various innovations to react to the challenges posed by coach competition. However, it was also observed that the development of coach services made it especially difficult for niche open-access rail operators to survive (e.g. in Germany), and some market exit has already happened. This, with further developments towards market concentration in the coach sector itself, pointed at the difficulty of sustaining intra-modal competition, while intermodal competition appeared stronger.

For most of the countries the group diagnosed that the market might be too small for long-term intra-modal competition. See the example of Flixbus: following a series of mergers Flixbus is now dominating the German market and was able to eliminate overlapping services. Similar developments are seen in France. The coach market seems to be able in most of the examined countries to establish a meaningful role in the intermodal competition. However, this diagnosis was again questioned in cases where a dominant incumbent rail operator creates an own coach operator (with some fears for cross-subsidisation). Furthermore, the scope for coach market initiatives also appeared to be interdependent with the height of infrastructure access charges for rail undertakings.

With respect to the so far successful 'Flixbus model', parallels were drawn to the tendering of contracts in the bus market by transport authorities, and to the original Verkehrsverbünde in Germany in the 1960s (and the success of such models) as, similarly, Flixbus does not own any (vehicle) assets but relies on contracting them in, while developing and planning the network, managing marketing, customer service and uniform quality standards and being able to dictate the prices. It appeared that operators who, as in France, did not rely on that model started changing towards it, pointing at the growing success of the network operator federating independent carriers as the most successful model in this sector. In the margin of this, some questions were asked and debated as to whether the competitiveness of the coach sector was sometimes made possible by low wages

of the subcontractor's drivers. In any case, economies of scale were largely seen to be absent in the operations of this sector, though clearly not in the marketing of the brand itself. That being said, the so-called 'ethnic' market (catering for long-distance flows of migrant workers within Europe) would continue to exist besides the market that came to fruition with players such as Flixbus.

Additionally, French experience showed that parts or even all of the coach market might also be under a severe threat by more 'digital' services, such as carpooling services like BlaBlaCar ('ridesharing'). It was thought that both markets could complement one another to meet peak demand as fixed coach services are not able to manage demand for flexible (shared) point-to-point services.

Concerning transparency and access to the services for passengers, the group reiterated that a reasonable supply with bus stations and fair access to those stations are of significant importance. It was stated that cities show ambiguous to negative attitudes ('cities do not really want them!') while issues of ownership (public/city? private?), control (necessary?), regulation of access charges (too high?) were not solved or left to singular solutions.

Evidence also suggested that the role of meta-search engines and GDS has increased substantially, which led to a discussion on the relative importance of these players and features versus that of (competing) network operators in providing clarity and certainty for the passengers as to the services offered and other network effects, such as guaranteed interchanges between services (although the relative importance of interchanges considered to be much lower for coach than for rail). The possible concentration of market information in the hands of a few or even one major intermediate (as is currently the case in the hotel reservation market) was perceived in the discussion to be a serious issue and potential threat to the well-functioning of the coach market, leading to questions on the need for regulation of those issues. As to the existing levels of regulation, the group considered that France had probably too much, Italy too little and Germany about the right amount.

2.3. Rail market: A difficult bunch of unresolved questions

The rail group was confronted with very diverse issues in a huge field with varying conditions and approaches in the examined countries and sub-markets (international/cross border services, national operations, regional services) and a general lament about the unfortunate lack of proper data to analyse these markets.

As a very general observation the group agreed that open access competition (at least for long-distance services)

goes along with positive effects like a push on innovation and efficiency along with reduced fares but requires huge investments to become more than a marginal feature. At the same time, these seemed to be balanced or maybe even outweighed by negative effects of questionable profitability, a lack of efficiency with regard to overhead, issues of capacity utilisation and continuity of services. There was no evidence of open access competition working on shorter distance services.

One of the (many) unresolved questions was whether discrimination against entrants exists or not. This remains difficult to prove. Necessity for regulation was also asked with regard to access to sale channels (which for instance was denied to MTR in Sweden). However, the importance of this issue was questioned, for reasons similar to the developments in the coach market, as new sales channels have started to appear, facilitating integration between providers (even combining modes) and services. So here too meta-search engines and GDS are developing.

Behind this, and causing substantial difficulties in drawing unequivocal conclusions, is the fact that European Member States differ widely in their approach to the allocation and charging of infrastructure costs: Germany has adopted the full cost recovery strategy. Other states require only marginal costs, with Sweden being an example for going further applying lower than marginal costs, and Britain possibly questioning its low access charges for open-access operators. Consequently, are low track access charges only a way to subsidise private commercial initiative on the tracks that may be questionable from a societal point of view?

An issue that was only touched upon in the discussion was the need for the availability of unutilised but attractive train paths for open-access competition to be successful, and the questionable efficiency of such over-capacity requirement. Again, this is another issue of feasibility and societal desirability – and cost – of such intra-modal competition, bearing in mind that infrastructure costs represent a large share of total costs in rail service provision. It is worth mentioning in this context that the lack of such open access provision in the privatised and substantially deregulated Japanese railways does not interfere with the provision of comprehensive and competitive services as any line proprietor has the incentive to maximise throughput of passengers, in cooperation with neighbouring operators where useful, thereby achieving service frequencies that other countries can only dream of. Interestingly, such regulatory arrangement bears some resemblances with that of the Community Franchise idea.

Consequently, the group also raised concerns whether the concept of open access competition – intra-modal competition by nature – is a suitable and sensible approach under conditions of a growing presence of growing intermodal competition from both air and coach, and even car-sharing. It might prove to be a theoretic European idea that is facing a dead-end as rail competitors have several times appeared to fail – so far, as the tide might be turning and, as the session progressed, it was reported that Finland was also opening up its railway market for competition. So, will new evidence appear here as well, or are markets too slim, especially in the presence of strong intermodal competition (plane and coach) both on longer and shorter distances?

3. CONCLUSIONS AND RECOMMENDATIONS

When considering the last decades, it is obvious that competition through market initiative, as a regime for creating scheduled land passenger transport services, has grown in importance at the expense of authority monopolies. Its growth,²²⁰ however, differs widely from market to market and from country to country.

The comparison of the markets studied in this workshop (bus, coach and rail) illustrated substantial differences between market potentials, success of market initiative, regulatory paths taken and resulting performance. Nonetheless, these observations did not provide evidence for new types of regimes, enriching the typologies developed earlier in this series of workshop, nor did it lead the workshop to formulating new types of regimes expanding the typology of notional regimes to introduce market initiative regimes within authority initiative regimes as identified in the previous editions of this workshop (Preston and Van de Velde, 2016).

Recent developments in the long-distance coach sector are particularly impressive (Germany, France, Italy), and increasingly also in the railway sector (Italy, Sweden, Czech Republic, Austria). Researchers see innovation and intermodal competition leading to further improvement, but also concentration and profitability issues. The workshop discussions also provided some insight on the relative merits of intra-modal and intermodal competition. The gist of the discussion was that the size and stratification of passenger transports markets in most countries or regions studied seemed to leave little room for direct intra-modal competition, while there was more trust in the viability of intermodal competition.

The workshop pointed at a major issue being the lack of data, creating problems not only for research purposes but also, it is argued, for market transparency and for the well-functioning of these markets. The general picture, though, is that open competition works well for long-distance coaching. The workshop papers and the ensuing discussion showed that the picture remains considerably less clear for rail open-access (competition on the track). Substantial concerns exist about the potentially perverse effects of low track access charges and issues related to track capacity utilisation and thus total system costs; at the same time, positive effects of competition on innovation and train operations efficiency are also reported.

A general observation based on those developments, although currently more in the coach and rail sectors than in the bus sector, is the development of new intermediaries linking with the customer, both for information purposes (meta-search engines) and for ticketing purposes (including GDS), which also creates an interesting parallel with pre-existing discussions on the role of similar features for network integration in the local (bus) markets. Does this point to some kind of universal, though mutable, ‘network company’ or ‘franchisor/franchisee’ model? Does this point to the gradual replacement of the ‘old’ public transport integration dogma with some new paradigm? Should we reconsider the role of property rights and the non-exclusivity dogma of ‘free competition’ (see in this context the ‘Community Franchise’ discussion where exclusivity contributes to market development)? Three levels of entrepreneurship should be distinguished here, from the transport operator, via the network management company or ‘risk-bearing integrators’ to the search engines or information integrators. There is clear scope for further research here, comparing the whole scale of transport sectors, from the airlines down to the local bus service.

Another overall observation is the limited number and depth of academic studies focussing on the demand and supply of regulation of market initiative regimes, and thus also on the design process of such regulation and the role of path dependency. More often studies focus on describing specific real-world cases and specific regulations (i.e. the results and not the processes that led to those results), and on quantitative analysis when the (often scarce) data allow for it. Workshop discussions touched upon this issue, indicating that legislation and regulation allowing for clever or ‘light-touch’ regulation (as posited in earlier

[220] Note that competition through authority initiative has grown even more as a regime, but this workshop was not focussing on the provision of passenger transport services upon the initiative of transport authorities, whether via public monopoly or via competitive tendering of route or network contracts.

editions of this workshop²²¹) often seem to be absent or inadequate, despite the progress observed in, e.g., Great Britain. This observation could or should point to the need for a deeper understanding of the processes that lead to legislation and regulation in these sectors – or their absence for that matter – while distinguishing between the experiences of various countries and implementation areas.

Furthermore, even when regulations approaching that idea are in place (as in Great Britain, where gradual steps in that direction were made over the past two decades), no study seems to look at the factors leading to the uptake of such regulatory tools or at the practical requirements for specific regulations to function. In other words, legislation – even when excellent – is only half the work. Skilled people are then needed to make such regulation ‘work’, which probably points to the need for incentives that lead transport authorities (or whatever other body is involved in supervising the land passenger transport sectors) to develop such skills. Let this be a repeated call for such studies for future editions of this conference.

Workshop Papers:

- Beria, P., Nistri, D. and Laurino, A., Intercity coach liberalisation in Italy: fares determinants in an evolving market.
- Broman, E. and Eliasson, J., Welfare effects of open-access competition on railway markets.
- Crozet, Y. and Guihéry, L., Developments of new coach services in France: “Much Ado about Nothing?”
- Desmaris, C. and Croccolo, F., The HSR competition in Italy: how are the regulatory design and practices concerned?

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- Eisenkopf, A., Burgdorf, C. and Knorr, A., User acceptance of long distance bus services in Germany.
- Emerson, D., Mulley, C. and Bliemer, M., A computer experiment to examine network development in two different business regimes of public transport.
- Feuerstein, L., Busacker, T. and Xu, J., Factors influencing open access competition in the European long-distance passenger rail market - a Delphi study.
- Frölicher, J., von Arx, W. and Mahrer, M., An analysis of long distance cross-border coach services in Switzerland: An overview and a case study.
- Godfrey, J. and Taylor, J., The role of bus partnerships.
- Gremm, C., Impacts of the German interurban bus market deregulation on regional railway services.
- Grönlund, A., The Swedish open market for bus and coach services develops (too) slowly.
- Karl, A., Commercial services in German local public transport.
- Song, Y.-J. and Shoji, K., Business strategies of private railway operators and regulatory change: lessons from the case of Japanese major railway companies.
- Vigren, A., Competition in Swedish passenger railway: entry in an open-access market and its effect on price.
- Von Arx, W., Maarfield, S., Thao, V. T., Wegelin, P. and Frölicher, J., An analysis of international passenger train services development from and to Switzerland from 2007 to 2016.
- White, P., Prospects in Britain in the light of the Bus Services Act 2017.

REFERENCES

[See reference list at the end of the thesis]



[221] See, e.g., Preston and Van de Velde (2016) and Carr (1997).

14 Conclusions

The main purpose of this Part of the thesis was to find out how public transport institutional frameworks that are based on the usage of market initiative have fared since their introduction over the course of the last decades. The experience of Great Britain constituted our main focal point.

Our analysis shows that the tension between coordination and competition stands at the centre of much of the discussions and institutional feedback in the sector. Starting from rather dogmatic forms of deregulation, we observed over the period studied a reduction of anti-coordination components in the institutional frameworks, away from dogmatism and towards the development of regulatory toolboxes for coordination (L3.2, then also L2). Yet, the development of such 'rules of the game' appeared far from easy, which probably hampered the success of these reforms.

We showed that the developments in Great Britain and New Zealand showed interesting parallel developments, both evolving away from a dogmatic anti-coordination implementation of deregulation towards approaches that allow for more coordinative regulation by transport authorities. Developments have been rather slow in both countries, spanning twenty to thirty years after the initial radical change introduced with deregulation. In that pursuit, only Great Britain actually reached a stage where a regulatory toolbox for coordination is now ready for use (at L2.1 and L2.2) in a framework that is still based upon market initiative. Its actual uptake (at L3.2) will be contingent upon solving issues of a different nature: the lack of budgets and skills at the local level (L4). New Zealand also developed a set of coordination tools, but various fears and perceptions by vested interests managed to avert implementation at L2. Paradoxically, the resulting situation only restricted operator freedom even more as a full contracting regime has now been implemented at L2, effectively replacing the market initiative institutional framework by authority initiative. We concluded that the developments in both countries, showing the design and appearance of 'light-touch' regulatory toolboxes, are no guarantee for adoption and implementation.

The developments in Sweden came from the other end of the spectrum. Having had a rather successful experience with competitive tendering, Sweden attempted to design a market-initiative regime for rather dogmatic reasons. A first proposal came a long way on the track of becoming a less dogmatic, 'clever' version of the British or New Zealand regulatory toolbox. Yet, here too, things did not materialize. Vested interests managed to act in a way that effectively resulted in saving the existing competitive tendering arrangement close to its original state (at L3.1 and L3.2), while formally combining it with something that was presented to be a deregulation (at L2.1). We observed that this compromise between proponents and opponents of an ill-devised deregulation never took off, as we expected, and operators increasingly seem to have surrendered to the situation (L4).

Developments in Germany were less spectacular at first as there was no intention to change a legislation that was already based on market-initiative but had been hybridized towards authority-initiative and contracting. Yet external events—European legislation (L2.1)—required some amendments. The German coordination tradition was translated into a coordinative toolbox (L2.1 and L2.2) that—despite good intentions—appeared to generate a substantial level of sluggishness (L4). Further actions appeared essentially geared towards maintaining the status quo (L2 and L3). Surprisingly, market initiative woke up from a moribund state in a few provincial cities by unexpected market entry (L4). This apparently sparked actions aimed at containing or preventing a repetition of such surprises, rather than embracing change and making proper use of the coordinative toolbox that has the merit of already being in place; even though it may be suboptimal (in the views adopted by the workshops, see further).

The next candidate for successful fireworks or a damp squib is Finland. New market-initiative based legislation has been adopted in 2018 (L2). This potentially revolutionises the existing institutional framework based on authority-initiative and central planning, at least in the large urban areas as the situation might be different in the regions and for long-distance traffic. This is reinforced by the strong pro-MaaS stance adopted by the Finnish Ministry. How this will evolve is difficult to tell for the time being.

All in all, what we could observe is a very hybrid world. We see feedback, gradual developments spanning several decades and ‘muddling through’ (Britain, New Zealand) and we see ‘grand design’ types of changes (Finland). We see differences in assumptions between society and operators, we see constellations of actors using their power to avert major changes (Sweden). We see legal rights being used, but action taken to attempt to reduce their uptake (Germany). We see regulatory arrangements being created but not implemented (New Zealand), or for which it remains to be seen to what extent they will be used (Britain), drawing once more the attention on the difference between the ideal and the feasible.

In the workshop series, we had the opportunity to reflect on these observed developments, to discuss concrete regulatory issues of deregulated markets and to attempt to generate or test ideas as to their regulatory needs. Based on the intersubjective findings of the workshop participants, we developed four suggestions for ideal-typical hybrid ‘models’ based on market initiative, remote from the dogmatic implementation of deregulation in Britain and New Zealand. These included different combinations of a number of regulatory features that were discussed with the participants: a guiding transport plan, entry stimulation measures and entry restriction measures. We could observe similarities between these suggested models for organising market initiative and real-world developments as they later unfolded in the period during which the workshops have been organised (2009-2017). The workshops also resulted in suggesting a pyramid of regulatory priorities and a hypothetical bell-shaped curve of optimal regulation. These proved useful to discuss the relative optimality of various types and levels of intervention observed in the real world.

Part V

Conclusion

15 Conclusion

The central research aim of this dissertation was to gain a deeper understanding of the variety of institutional frameworks that exist in the public transport sector and on how these develop, focussing in particular on the growing and evolving role that ‘competition’ as an institutional feature has come to play over the last decades in the provision of public transport services. The three main research questions were:

- ▶ What main institutional frameworks have arisen in the European public transport sector since the pressure for a wider usage of competition appeared in the 1980s? (Part II)
- ▶ How have these institutional frameworks fared since? In particular, can evolutions be witnessed and what can be said about these developments? (Part III and IV)
- ▶ What are the main resulting policy challenges and options? (Part V)

Section 15.1 provides a general overview of the topic of our research, including the resulting main policy options and challenges. Section 15.2 summarises the research process and findings of Parts II, III and IV. Section 15.3 formulates concluding observations, reflecting on the general findings. An outlook and challenge for the future of public transport regulation is discussed in Chapter 16.

15.1 Overview: The path to reform and main policy options

This section, published as book chapter in *The Routledge Companion to Network Industries* (Van de Velde, 2016b), provides a general overview of our research. By giving an overview of the main policy options, it also answers our third main research question. It starts by reviewing two fundamental choices: competition or not and, if there is competition, the choice between market initiative and authority initiative. Major influences that have led to a growing role for competition, as discussed in Part II of the thesis, are summarized while discussing the first choice. The second choice refers to the typology of institutional frameworks introduced in Part II of the thesis. A link is made to the introduction of a new European legislative framework (EU Regulation 1370/2007), which is discussed in greater detail in Part II. This leads to a categorization of main options for reform, differentiating between various ways to use competition. The four resulting options are summarized. Deregulation is discussed in Part IV of this thesis. Competitive tendering is discussed in Part III. The two other options (competitive regulation and public sector reform) are mentioned in this book chapter but not covered by this thesis. We follow by making some general remarks on the institutional setup of transport authorities and their coordinative role. We stress the resulting diversity and complexity of institutional frameworks and indicate that further challenges lay ahead.

We conclude that the main design challenge facing those managing existing institutional frameworks, or in a position to co-determine their design, is to design them in such a way as to avoid ossification (both of the framework and the markets) in order to accommodate the needs generated by future socio-economic changes and collective priorities, while at the same time contributing the avoidance of inefficiency and the facilitation of innovation

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The organization of local public transport has undergone considerable change over the past 20–30 years. De facto area monopolies by municipal or state owned companies dominated the sector in many European countries until the 1980s, with smaller local businesses only playing a marginal role under route authorization regimes. A very different and mixed picture has emerged since. Multinational private operators have appeared alongside municipally owned operators and a decreasing number of local family businesses. Operators affiliated to state-owned railway companies that operate outside of their country of origin play a growing role in the sector. Time-limited exclusive rights submitted to contractual requirements, including various sets of financial incentives, have increasingly replaced old de facto area monopolies with ex post subsidization. Competition is playing a growing role as a means of organizing the production of public transport services, particularly through the competitive tendering of contracts, but also via deregulation.

The reforms behind these developments are embedded in the main streams of political thinking of the period, such as the growth of neo-liberalism and new public management. They aim to address the problems observed at the time in the sector, such as productive inefficiency, the growth of public transport subsidies while public transport market share was declining, and a non-innovative or bureaucratic image in a rapidly changing world where new technologies started playing an increasing role.

These reforms are also interesting in the light of the wider local, national, or European policies that, over the course of the past few decades, have expected the sector to play a growing role in passenger mobility in view of the issues that characterized the period, such as a growing focus on environmental policy, sustainability, road traffic congestion issues, urban densification policies, and tighter

public budgeting. Moreover, these reforms often took place within the context of a decentralization of local transport policies from central government to regional and local authorities. This decentralization presented an opportunity to adopt new regulatory approaches, which were fed by the growing practice and evidence provided by fellow authorities.

The next section summarizes the major influences that led to the appearance of competition within the institutional setup of the sector. The section after that summarizes the main policy options that have appeared in terms of institutional reform, along with the role of competition therein. Prior to drawing some general conclusions, there is a discussion about the size and scope of the transport authority as a major player in this sector, and the related issues of policy coordination.

1. FUNDAMENTAL CHOICE: WHAT KIND OF COMPETITION, IF ANY?

The most fundamental controversy related to regulatory reform in local public transport in the past three decades has been the choice for or against the use of ‘competition’ as a means to improve efficiency, customer orientation, and innovation in the sector in order to address the issues of sector inefficiency and low modal share of public transport. A complex related issue is that of the choice of the way to organize competition. This section starts with a summary of the main influences that have led to the introduction of competition in European public transport at the local level before presenting a classification, based on the concept of entrepreneurship, of the resulting organizational forms that can be encountered in European public transport.

1.1. Competition or not

The rising subsidy requirement of the public transport sector in the 1970s and 1980s, together with growing

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(suspicions of) inefficiencies in the public transport sector (Button, 1984), were triggers to start looking for new ways to organize the sector. The rise of neo-liberalism in the 1970s, with such major proponents as the governments of Margaret Thatcher in Britain and Ronald Reagan in the United States, had already been a major trigger for market-based economic reforms in a growing number of sectors and countries. Influential ideas within that movement included the theory of contestable markets reinterpreting the ways in which competition can work in the free market (Baumol, 1982) and a renewed interest in competitive tendering (also called 'franchise bidding') as a mechanism to regulate utilities (Demsetz, 1968) and control monopoly operations in the absence of a free market. These market-oriented reforms – which were also inspired by the policies of 'New Public Management' (Hood, 1995), which aimed to improve the efficiency of the public sector – did not remain without impact in the public transport sector.

In the European public transport context, it was mainly the market-based reforms introduced in Great Britain since the 1980s under successive conservative governments that initiated significant waves of reforms and inspired other European countries to follow suit. This happened in various configurations and at various speeds, often in conjunction with decentralization policies and further local reforms generated by budgetary constraints. These changes in local conditions stimulated authorities (to which public transport regulatory powers had newly been delegated) to re-think the organization of the sector under the influence of this mixture of impulses from economic theory and concrete reform experiences that could be observed elsewhere.

Concrete reform experiences with deregulation had been present in the British long-distance coach sector since 1980. Deregulation spread to the bus sector outside London in 1986 with some clear influence from contestability theory, and later also to the long-distance coach sector in Scandinavia. In parallel, further reform experiences based on the usage of competitive tendering grew in the bus sector in London (1984) and later in Denmark (Copenhagen in 1991), Sweden (1989), France (reform of contracting in 1981 and stricter tendering rules in 1994) and the Netherlands (2001). The British government also introduced railway franchising in 1994, generating further policy developments across the world. These trends were further fostered by the growing involvement of the European Union in competition and transport policy towards the end of the 1990s. This resulted in a legal initiative by the European Commission in 2000, which resulted – albeit only in 2007 – in the adoption of EU Regulation (1370/2007) on public services obligations in passenger transport services by

rail and by road. This legislation clearly favoured the idea of imposing competition by the free market or by competitive tendering, while also allowing direct award to public operators in specific cases (Van de Velde, 2008).

Most of the reforms that appeared during the last few decades have involved a combination of the following three elements: (a) deregulation (reducing the number of rules to which transport operators are subject to on the market in which they operate, resulting in an enhanced behavioural freedom for the transport operators in terms of the determination of their service characteristics and production processes); (b) liberalization (allowing other operators than the incumbent to get access to the market, whatever the degree of behavioural freedom allowed by regulation to operators present on that market); and (c) privatization (transferring the ownership of a company or agency from the public sector, such as the national or a local government, to the private sector). Many of these reforms share one of two common characteristics. The first is the instillation of at least some elements of competitive pressure into the institutional setting of public transport that was previously based on *de jure* public monopolies. The second is the reform of pre-existing competitive arrangements that had evolved into ossified structures with little or no market entry, often dominated by publicly-owned operators (that is, *de facto* public monopolies), a phenomenon which can be the result of regulatory capture (Stigler, 1971).

The lack of adequate data has meant that few studies have attempted to quantify inefficiencies in local public transport. A report written for the European Commission's research program (ISOTOPE Research Consortium, 1997) attempted such a quantification and pointed at the efficiency advantages of competition-based regimes over monopoly-based regimes. Needless to say, there was disagreement about the idea of using competition as part of the institutional fabric of the public transport sector. The main sources of scepticism and opposition were certain political streams, labour unions, and established interests, such as municipal operators. Examples of good performances in terms of ridership and modal share of systems that are devoid of competition in their institutional setting (such as Switzerland or some German cities) have also been put forward, while noting the dramatic increase in public finance needed to support these system improvements. (see, for example, Pucher and Kurth, 1995).

1.2. Competition under market initiative or under authority initiative

The second main controversy, for those who chose to adopt competition, is the shaping of the competition

instrument. At first, two main interchangeable options seem to be present: free market competition and competitive tendering of monopoly rights by a transport authority. From this perspective, free competition on deregulated open markets is associated with the highest possible level of continuous – albeit potentially unruly – competitive pressure, while competitive tendering by an authority is associated with a more moderate, discontinuous but well-managed type of competition. From this same perspective, a simple regulatory reform is then associated with the lowest level of competitive pressure – namely its absence – even though such a regime could also include indirect competition via competitive regulation, such as yardstick competition.

However, such simplistic classification, in the form of a continuum from full via moderate to no competition, cannot fully grasp the essence of these reform options and their potential impact on market dynamics. In addition to this continuum, these reform options also differ fundamentally in the role they give to the autonomous entrepreneur in the institutional setting and, consequently, in the potential dynamic of the sector. To understand this, it is important to realize that free market regimes, whether regulated or not, allow (in principle) any entrepreneur to initiate new passenger transport services where he or she sees a gap in the market and wants to take a competitive risk against other entrepreneurs on the market. On the other hand, regimes based on the award of monopoly rights by an authority, whether through contracted public sector operators or through contractual delegation via competitive tendering of temporary market rights to independent operators, concentrate the essence of the entrepreneurial rights in the hands of the authority as monopolistic initiator of contracted services, even though that authority is not necessarily the producer of the services (Van de Velde, 1999). This is not fundamentally changed by the fact that tendered operators may be given some leeway within contractual boundaries to amend services (see below), as such contractual arrangements never approximate the position of the free entrepreneur on open markets and the continuous market dynamic to which the entrepreneur is potentially submitted.

Consequently, a classification of organizational forms in public transport based on the player(s) to whom the right to initiate and create services is attributed seems more useful than a classification based on the purported level of competitive pressure in terms of understanding potential market developments and related incentives. This introduces a fundamental distinction of organizational forms in public transport between ‘market initiative’ regimes and ‘authority initiative’ regimes (Figure 25).

Regimes based on market initiative can vary from full open entry to more regulated markets with more-or-less strictly regulated authorization regimes (which were historically based on private market initiative but were often dominated by publicly owned companies after the 1960s). Regimes based on authority initiative can vary from pure private concessions to public ownership regimes. The latter can be further subdivided into publicly managed operations and delegated management where the publicly owned assets (vehicles, garages, tunnels, etc.) are made available to an operator to whom the management of the services is delegated after a specific selection and awarding procedure. In principle, all of these modes of organization can make use of a further sub-contracting of (parts of) the operations to third operators selected, for example, by competitive tendering (Van de Velde, 1999).

1.3. Observations on the fundamental choices

The reform that the European Union adopted in 2007 – after a great deal of compromise – has made it clear that competition is here to stay for the foreseeable future. Various forms of competition are allowed, although the EC’s preferred option is clearly the awarding of exclusive rights by competitive tendering. Awarding monopoly rights without competition remains feasible, although it is essentially limited to public operators that, in exchange for this privilege, become confined to the area for which that right is granted.

The fundamental choices discussed above determine the functioning of the sector in the longer run. Changes to such fundamental institutional elements are likely to require legislation, which makes them unlikely to be frequent; only major policy shifts would generate a fundamental institutional re-engineering of the sector. On the other hand, the decisions pertaining to the functioning and fine-tuning of the regimes that are made possible by these fundamental choices (which will be discussed in the next section) are less likely to be anchored in legislation and are therefore more likely to be amendable in the medium to short term.

2. MAIN POLICY OPTIONS FOR REFORMS

The 1986 British deregulation of the local bus sector outside London and the introduction of competitive tendering in London in 1984 marked the choice for competition-based regimes. It also marked the start of a fierce debate (Banister, 1985; Gwilliam et al., 1985a; Beesley and Glaister, 1985a) on the relative merits of deregulation versus competitive tendering in addressing problems in the sector, such as productive and cost inefficiency, modal share decline, and lack of customer focus. Great Britain was the only European country at that

time to choose a pure market initiative regime.²²³ Other countries that engaged in competition-based reforms in the 1980s and 1990s precluded autonomous market initiatives in favour of regimes based on competitively tendered monopoly rights for the provision of integrated and centrally planned public transport systems. With this less extreme and more consensual way of introducing competitive incentives, transport authorities retained – or obtained – the monopoly to initiate the creation of public transport services. Others decided to maintain public monopolies, but to revise their regulations.

Several studies have reviewed the reforms that have taken place since the 1980s (Gwilliam and Van de Velde, 1990; Van de Velde, 2005b; UITP, 2015). By summarizing these developments and attempting to categorize them on the basis of the two dichotomies presented above, we can distinguish four main reform options: market deregulation, introduction of competitive tendering, regulatory reform of monopolistic operators on the basis of indirect competition, and public operator governance reform (see Table 19). The following sections discuss these four main avenues of reform and provide some implementation examples.

2.1. Deregulation

True deregulation usually includes all three of the elements defined above; that is, privatization of the pre-existing companies owned by the authorities, market liberalization by allowing the entry of new operators, and deregulation of market behaviour giving operators more freedom in the determination of their transport services. This is exemplified by the 1986 deregulation of the local bus markets in Great Britain outside London. Operators should first hold an operating licence issued by a regulator (the Traffic Commissioner) to ensure that operators are able to provide safe operations and proper maintenance. Operators then register the details of the services they intend to provide (routes and timetables) with the Traffic Commissioner, which will check whether restrictions should be applied due, for example, to traffic regulations imposed by local authorities (such as in cases of congestion). The Traffic Commissioner can also impose penalties for operating services in an unreliable manner. Barriers to entry are meant to be as low as possible and direct competition on the road between operators is allowed. In other words, there are no exclusive rights and operators are free to determine their own fares.

Deregulated regimes are never completely free of regulation. Apart from the safety and environmental regulations that are present in most cases, deregulated markets can also be submitted to different types of regulations that could perhaps be better termed as the 'rules of the game'. These are behavioural rules for the operators on the market that are meant to enhance the functioning and outcome of the free market. Examples include requirements for integrated ticketing and fares arrangements and compulsory participation in information integration systems. Such rules of the game limit the freedom of the entrepreneur, but do not preclude autonomous market entry; they can even stimulate market entry by reducing the market power of incumbents or by addressing market failures such as network benefits that could not be realized otherwise. The fine tuning of the British bus deregulation, carried out in small re-regulatory steps by legislation introduced in 2000 and 2008, is an example of such measures (see White, 2010), but more options could be designed. Financial incentives are another example of entry stimulation, guiding entrepreneurship to provide socially desirable services that would not otherwise be provided due to a lack of profitability. One example is fare rebates for specific groups of customers, reimbursed by the ordering authority – a mechanism present in Great Britain. Another example is a generic subsidization of an increased supply of service at specific times (peak hours, late evening, etc.) or in specific areas (remote or deprived) by such means as a bus-kilometer-based subsidy (or tax reimbursement, such as a fuel duty rebate), which may be linked to the provision of specific features (such as reasonable fares, accessible information, etc.)

Further rules may also be introduced to reduce entry by imposing entry selection on the basis of a 'desirability' test carried out by a regulator. This was the case in many regulatory regimes in Europe between the 1930s and the 1980s (and was abolished by the deregulation implemented in 1986 in Great Britain). Various types of tests can be devised. While old practices were based on regulatory expertise, new tests have also appeared, based on objective measures of duplication versus complementarity with existing services (as used, for example, in the regulation of the Japanese bus markets) or by measures of balance between revenue generation and revenue subtraction from existing services (as is the case for open access services in the British railway sector).

[223] Albeit complemented by local authorities organising the provision of additional non-commercial services on the basis of competitive tendering. On average, 80 percent of services are provided on a commercial basis, with the remainder provided on the basis of competitive tendering or negotiations in specific smaller cases.

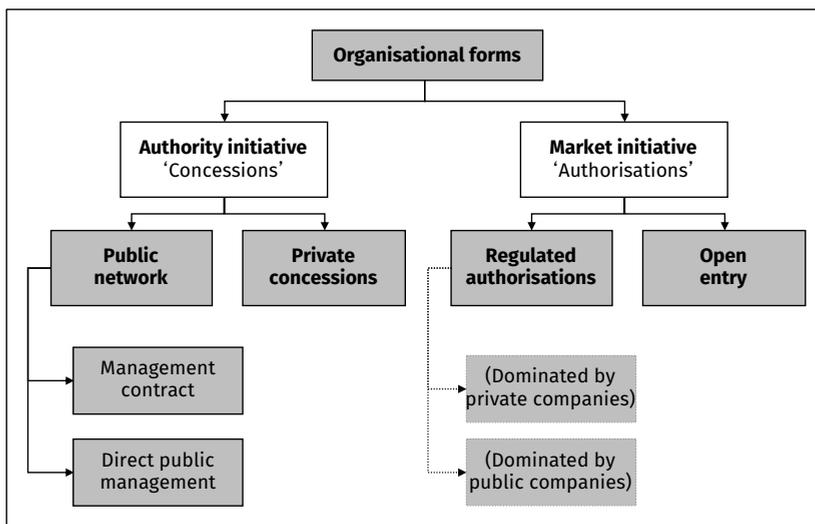


Figure 25 | Organizational forms in local public transport (Source: van de Velde, 1999)

2.2. Competitive tendering

In the competitive tendering option, reforms are often constrained to liberalization, entitling new operators to compete in a formal tendering procedure for public transport contracts. Their competitors may be incumbent operators that are not necessarily privatized. Such contracts can be referred to as 'service contracts', 'concessions' or 'franchises', all of which depend on their characteristics in terms of risk allocation and the legal regime in place. They entitle the operator to a temporary and often exclusive right to operate the services covered by the contract.

The services procured within a competitive tendering regime are typically based upon a transport policy document established by the local or regional transport authority, which embodies the main transport policy aims and a more or less detailed sketch of the expected public transport services. The development of this document is often handled by a specialized authority body or company owned by the political authority that ultimately ratifies the proposed plan. In cases such as London, Copenhagen, and Stockholm, this body emanates from the former public operator that was, with the introduction of the reform, put in charge of gradually sub-contracting its own service operations to independent operators or to its own operational divisions that were eventually privatized within the reform process.

Routes, bundles, or network areas are put out to tender under a list of service obligations. Potential operators submit bids and an evaluation procedure is used to award the contract to the 'best' bidder. Some authorities choose to give operators some leeway in terms of service design,

while others very tightly specify the services (fares, routes and timetables) to be provided, which severely limits the possibility for service design innovation by the operator and restricts its action to efficiency improvements and innovation in service production. For this reason, this type of contracting can usually hardly be classified as 'deregulation'.

Two main tendencies exist. The first came to be known in Europe as the 'Scandinavian model', even though this regime was actually based upon the London bus tendering as introduced in 1984. Cases are most commonly found mainly in London, Denmark, Sweden, Finland, and to a lesser extent in Germany. Contracts tend to be small in size (one or a few bus routes) and are typically short (approximately five years). The operator usually assumes the production cost risk, but not the revenue risk, which is borne by the transport authority (so-called 'gross-cost contracts'). The tendering body determines the services tightly prior to tendering, as routes, frequencies, fares, and vehicle appearance are fixed. Operational quality incentives are often added (such as punctuality incentives). This case clearly illustrates the monopolistic entrepreneurial role of such authorities on the market for passenger transport.

The second tendency, which can be observed on a large scale in France and the Netherlands, for example, is based on larger contracts (whole networks) where the operator is usually given both the cost and revenue risks in so-called net-cost contracts that are typically longer (10 years). The operator is usually asked to suggest innovations and options during both the tendering procedure and contract realization. To this effect, invitations to tender should

describe the services to produce in a more functional way, avoiding stifling details. Incentive regimes are often added in the contracts to increase the incentive for operators to develop and implement innovations that will increase ridership and/or reduce costs. This practice grew in France on the basis of older awarding practices of urban networks to private operators, which had been gradually codified with contracting obligations (1981) and competitive tendering obligations (1994). The Netherlands adopted a similar network tendering approach in 2001, but with the intention of giving operators substantially wider market development freedom using a functional specification; an intention that has not proven to be self-evident to realize in practice (Van de Velde et al., 2008c). The awarding of large franchises in the British railway sector is similar to this type of contract, while rail tenders in Germany are more comparable to the gross-cost contracts presented above. While this type of network contracting gives the operator more freedom than smaller gross-cost contracts, it remains remote from deregulation as the authority, through competitive tendering of a monopoly right, decides on the geographical area and core characteristics of the services provided. This fixes core items of what an entrepreneur would otherwise be free to decide upon in a deregulated market.

The dichotomy between these two contractual tendencies masks a wider variety of options that differ in allocation of planning prerogatives, incentive regimes, and financial risk allocation between an authority (or its planner) and operators. Further elements that need to be considered here are contractual completeness and the building of trust and partnerships, which also relates to the mechanisms used to award contracts. Competitive tendering is the favoured option under EU Regulation 1370/2007, which gives some (tightly regulated) space for choice in awarding procedure between more negotiated tendering procedures and more 'mathematical' awarding procedures.

Importantly, criticism has also been heard about competitive tendering compared to performance-based contracts negotiated with incumbents. According to Hensher and Stanley (2010), for example, competitive tendering has frequently failed to live up to expectations and negotiation is often likely to deliver better value for money.

2.3. Competitive regulation

A less common alternative is competitive regulation of monopolistic operators, such as historic operators (public or private), on the basis of a mutual comparison of their performances. This option uses competition only indirectly. The best example in the economic literature is yardstick competition (Shleifer, 1985), whereby

comparative performance levels between regulatees are calculated by econometric means and used as a regulatory tool. The implementation of this tool requires the existence of comparable observation units. The fact that this is not always available can be one of the reasons why this regime is less widespread.

Yardstick competition, when introduced, is likely to entail a light deregulation or re-regulation of the sector. It can be combined with privatization, but it does not necessarily involve liberalization, other than indirectly, through a piecewise privatization of former public companies.

Yardstick competition is currently uncommon in European public transport, although elements of cost comparisons between operators did play a role in former, negotiated bus contracting regimes such as those managed at the national or regional level until the end of the 1980s in the Netherlands, Belgium, and elsewhere. The clearest example of yardstick competition in public transport is that used in Japan in the regulation of rail passenger transport (Mizutani et al., 2009).

Another example of competitive regulation is the institutionalized use of competitive tendering when the incumbent's performances stray from set benchmark levels and when negotiation does not manage to bring the incumbent's performance back in line with the benchmark levels determined by peer performance levels or competitive tendering outcome in similar conditions or areas. This option is used in the Zürich region of Switzerland.

2.4. Reform of the governance of the public sector

The fourth main direction is that of reforming elements of the governance of publicly owned transport operators without directly questioning the operators' position. Liberalization is not part of this reform as the choice is to keep the public monopoly in place. Neither is privatization, obviously, although the corporatisation of a branch of a public administration is a common element of this type of reform. This type of reform could be qualified as 'light deregulation' when the revision of the existing regulation leads towards a more contractual, functional, less detailed operational guidance of the operator.

This widespread reform option, which has been adopted by many cities, fits with one of the main options given by EU Regulation 1370/2007, which allows authorities to entrust the realization of their public transport services to an internal operator. One of the conditions is to establish a public service contract that determines in advance the public service obligations of the operator and the

Table 19 | Categorization of reforms

	Direct competition between operators: Operators face direct competition from other operators	Indirect or no competition between operators: Operators are not directly threatened by other operators
Regimes based on market initiative: Operators are, in principle, free to take initiatives to provide services	Market deregulation: The possibility for direct and 'daily' competition between operators is introduced	Competitive regulation of monopolistic operators: Historic operators (public or private) are regulated on the basis of a mutual comparison of their performances (such as yardstick competition)
Regimes based upon authority initiative: A transport authority organizes transport services and/or assigns a temporary right to an operator	Competitive tendering of operational rights: Periodic competition between operators for temporary operational rights is introduced	Public operator governance reform: The governance of the publicly owned operator is reformed to instill new performance incentives

compensation payment parameters in a way that prevents overcompensation.

Such reform can be accompanied by the appointment of a new management, which is often selected on the basis of experience in the competitive sector to bring greater efficiency and customer focus to the public sector. It can also be accompanied by a benchmarking exercise ahead of reform to determine efficiency improvement targets. Although indirect competition is usually not part of such approach, it could still be introduced in the context of the contract negotiations via a threat to introduce competitive tendering. Such options were implemented in the Amsterdam case, for example.

2.5. General observations on the main options for reform

The cost efficiency improvements brought about by competitive tendering vary greatly, from a few percent up to 50 percent, all according to a complex set of circumstances (see, for example, Hensher and Wallis, 2005; Alexandersson, 2010; Beck, 2011). Additionally, data availability for international comparisons between regimes remains problematic (Van de Velde, 2015c), the information available in academic literature on the effects of the other reforms remains limited, and proper benchmarking of the available evidence remains scarce or leads to nuanced or inconclusive results in terms of global performances (see also Karlaftis and Tsamboulas, 2012). In his review study, Karlaftis concluded that privatization and competition had led to efficiency improvements and lower operating costs, but also that the question of whether the composite effects of privatization on efficiency, ridership, fare increases, and levels of service had had a

positive effect on welfare remained largely unanswered (Karlaftis, 2008, p. 94). These conclusions point to the complex changes in circumstances and transport policy priorities (fares policy, network coverage policy, social policy, etc.) that have developed during the period under study. The upshot is the absence of a clear consensus regarding the best regime in term of global performance. What is best might depend more on circumstances and the realization of the necessary conditions of the chosen regime than on the regime choice itself.

Real-world cases do not always fit perfectly in the four options presented above. One key component of hybridity is the possibility to reduce the level of exclusivity granted by a contract. This introduces a share of free market in regimes based hitherto on monopoly regulation, including competitive tendering regimes. One example is the 2012 reform of Swedish local public transport, since which tendered public transport contracts no longer grant exclusivity rights to the operator, as commercial competitive entry is now allowed. Another example is the British rail sector, where open-access entrants can infringe upon the exclusive rights of franchised operators, but can only do so after agreement by the railway regulator who developed a test to refuse entry when this would be primarily more abstractive of existing passenger streams rather than creating new passenger movements. Another component of hybridity is the opportunity to combine monopolistic regimes with the threat of tendering, as presented in one of the options above.

3. THE TRANSPORT AUTHORITY AND WIDER POLICY COORDINATION

This chapter has focused on the regulatory regime of local passenger transport, paying particular attention to the role played by competition. It has not yet discussed the institutional setup of transport authorities or their remit in terms of geographical area and policy domains. Nevertheless, these are important, albeit controversial, issues in the context of reform design and implementation as they often entail major impacts on the balance of political and budgetary power between existing authorities. The opportunities for coordination and synergies between policy domains will be largely determined by the choices made in relation to these issues. This, in turn, could be an important determinant for public transport performance within the regional mobility system and, through this, for regional performance in economic and liveability terms.

Several elements should be mentioned briefly here. The first is the institutional setup of the transport authority, as one of the elements determining its clout or leverage. This includes how political control and funding is organized, staff expertise and professionalism, the administrative setup of the authority, etc. These choices codetermine decisional swiftness and quality. One example is whether to locate the professional staff of the authority in a separate company-like structure. Such an arrangement can often be found in larger conurbations, where a choice is made to locate all marketing functions on the authority's side. While this can enhance professionalism, it can also become a contentious issue when – depending on the chosen governance – the political level feels that it is losing control on public money spending (see, for example, the 2012 Swedish transport authority reform).

A second element is the authority's geographic area, as urban sprawl and mobility growth necessitate authority cooperation and policy coordination at higher administrative levels. For example, local cooperation in Germany and Austria started with operators associations (Pucher and Kurth, 1995), many of which later became associations of local authorities. The French case shows how the adoption of a specific local transport tax linked to thresholds in the authority's population created an incentive to generate local authority cooperation (Menerault, 1993).

A third element is the scope of policy coordination. While many authorities are responsible only for public transport, there is also a tendency to develop authorities with a wider remit to facilitate policy coordination across all urban mobility issues. Transport for London is a good example, as it is also responsible for taxi regulation, shared bicycles, river services, and even roads management, including

a congestion charging system. Similar schemes exist in Singapore or Budapest (without congestion charging but including parking). A further integration level involves coordination of transport with land-use planning issues, which is likely to be facilitated when the same political authority is responsible for both fields – a condition that is often not realized.

4. CONCLUSIONS

Substantial developments in the organization of local public transport can be seen over the past few decades in the context of reforms that aimed to address issues of inefficiency, declining market share, and lack of innovation.

The role of contracting and competition has grown. Competitive tendering, in particular, has become dominant in places such as Sweden, Denmark, the Netherlands, London, and France, and has, as relative newcomer, grown the most over the past decades in term of its 'market share' amongst institutional setups. However, not all reforms have moved in the direction of competition and privatization. A large share of public transport services is still organized without competition via the public sector; examples include Germany, Austria, Belgium, Italy, and Ireland. Furthermore, recent examples from France show that some local authorities have decided to re-create publicly owned companies due to earlier disappointments with competitive tendering; this could point at the existence of a regulatory cycle (Gwilliam, 2008a). Reforms based on an increased role for competition have also gained ground outside of Europe, although not necessarily along the same path. Competitive tendering under authority initiative is increasingly used in Australia, New Zealand, the United States, South America, and China, albeit in various configurations. Some countries, such as New Zealand and Japan, have reformed and enhanced the role of market initiative, again in different guises. In many cases, however, traditional *de facto* or *de jure* public monopolies continue to play a major role across the world, as do market-based, more or less unregulated services provided by the so-called 'informal' sector in many (mostly developing) countries. Note also that an internationalization of the sector occurred – paradoxically perhaps – with a growing role for the European state railways.

As a result, the international institutional setup remains varied. The multiplicity of objectives and actors generates issues of sector management and regulation (Gwilliam, 2008b), which adds complexity. The options available are themselves complex – not in principle, but in terms of how to implement them. How much regulation should there be for deregulated markets? What contractual details

should tendered regimes involve? Which incentives should there be within public sector governance? Past choices in legal regime influence and limit options available for the foreseeable future. Regime choices, which vary by country, seem to be (unsurprisingly) linked more to ideological or political preferences than to rational economic performance analysis.

Challenges lay ahead. New types of mobility systems made possible by mobile phone and internet have appeared in the recent past, such as new ways to hail taxis or rent cars and bicycles for short periods of time. More innovations will develop, such as the self-driving car, but also mobility-on-demand services made possible by aggregating in real time individual requests over mobile phone and internet to provide users with combined individual, shared, or collective services delivered by various providers. A characteristic that many of these new systems share is that they are autonomous market initiatives and constitute intermediates between purely individual transport modes (car, bicycle, taxi) on the

free market, and collective services such as traditional public transport that are often organized via monopolies (tendered or not). By challenging this traditional regulatory approach, these trends – together with recent initiatives to deregulate long-distance coach services in several European countries, and the European policy’s policy initiatives to allow competition on the track in the rail sector – could increase the relevance of market-initiated regimes and deregulation for the future setup of collective transport (Van de Velde, 2014).

Ultimately, the main challenge for those managing existing regimes, and those in a position to co-determine the design of new regimes, is to avoid ossification such as to accommodate the needs generated by future socio-economic changes and collective priorities, at the same time as avoiding inefficiency and facilitating innovation.

REFERENCES

[See reference list at the end of the thesis]



15.2 Summary of the research and findings

Part II addressed our first main research question:

- ▶ What main institutional frameworks have arisen in the European public transport sector since the pressure for a wider usage of competition appeared in the 1980s?

This was divided into two sub-questions:

- ▶ What main institutional developments can we observe in the public transport sector since the start of the current era of reform in this sector, what main factors led to these developments and how were these reforms perceived?
- ▶ How to classify institutional frameworks, in order to bring more clarity in the debate on institutional reforms and facilitate presentation and comparison?

Part II

We started by taking stock of the situation at the end of the 1980s (lagging performances, inefficiencies, rise of neo-liberalism and new public management, alternative approaches to the competition concept and growing experience with market-based reforms in a number of countries). We discussed the potential for regulatory change in a paper written with Professor Ken Gwilliam (Gwilliam and Van de Velde, 1990), which gave a first answer to the first sub-question. We reported on the burgeoning debates that took place in the 1990s about competition in public transport and its options. This is a period in which we were ourselves very much involved in this debate. This led to several academic publications (Van de Velde, 1992b; 1995b), one of which written with Professor Leo Sleuwaegen (Van de Velde and Sleuwaegen, 1997), research reports for Dutch ministries (Van de Velde and van Reeve, 1996; van de Velde et al., 1996) and participation in several of the European Commission's research programmes (ISOTOPE Research Consortium, 1997; QUATTRO Research Consortium, 1998; MARETOPE Research Consortium, 2003). Much of our work focussed on collecting information about alternative, competition-based, ways to organise public transport provision. This was done through desk-research and a large number of interviews with transport professionals (authorities and operators), academics and advisors. Participation in European research projects also stimulated discussions with a growing network of international researchers and advisors. The aggregation of this knowledge showed that diversified reform paths had started to appear (deregulation, competitive tendering, governance reform) and that opinions on reform options diverged considerably. Furthermore, the issue of competition in public transport gradually came under the attention of the European Commission (European Commission, 1998).

Our findings thus far led to observing that a substantial level of confusion was present, pointing to a knowledge gap in the sector. A clear overview of reform options was lacking. There was a need for the development of typologies that could help bringing more clarity in the debate on institutional reforms and facilitate presentation and comparison; which also constitutes our second sub-question. To address this issue, we established three typologies. The first two were published in a paper resulting from work that was first presented at the World Conference on Transport Research in Lyon in 1992 (Van de Velde, 1992a; 1999), the case studies conducted during that period contributing to growing insights.

This resulted in one typology focussing on the issue of the ‘appearance’ of passenger transport services (who has the ‘right of initiative’ to create services). With this first typology, we stressed an essential difference between two concepts of competition: autonomous market initiative (regulated or not) versus authority initiative (using competitively selected providers to realise the services ordered or not). The other typology focussed on the layered involvement of various actors in relation to the creation, conception and realisation of services (Strategic-Tactical-Operational – STO – framework). This framework proved useful as it also quickly gained the interest of many other researchers, in particular within the Thredbo conference series. A paper written on the occasion of the 30 years of the conference recently recognised it as its centrepiece in understanding the various roles of stakeholders (Wong and Hensher, 2018). Another contribution of this part of the thesis is a refinement of Williamson’s framework. This four-layers framework of economics of institutions was enriched such as to better grasp some aspects of institutional reforms in the public transport sector that our research had identified as important and we also added a dynamic perspective to his approach. The resulting typologies answered our second sub-question and were then used throughout the thesis.

The debates around competition continued during the 2000s, this is also reported upon in Part II of the thesis. Our case explorations revealed that some dynamics had started to appear in areas where competition had already been introduced. Learning was becoming apparent and feedback to higher level institutions (from L3 to L2) took place, with the process leading to EU Regulation 1370/2007 constituting one main example. Our research and advisory work made that we have been closely involved in the process that ultimately led to the adoption of this new EU Regulation pertaining to the awarding of exclusive rights and financial compensations to public transport operators for the realisation of public service obligations. This included a participation in the main advice to the European Commission on the “Examination of Community Law Relating to the Public Service Obligations and Contracts in the Field of Inland Passenger Transport” (NEA et al., 1998). We summarised the appearance of the resulting EU Regulation in a paper published in 2008, focussing on the history of the proposal and the main evolutions that we have been able to observe in the lengthy adoption process (Van de Velde, 2008). We were commissioned by the European Commission to realise a guidebook (essentially meant for inexperienced authorities) for the implementation of the Regulation and illustrating the wide variety of arrangements that are compatible with the Regulation (Van de Velde et al., 2008a), which was the occasion to update our case studies with latest developments.

We formulated a number of remarks on the resulting EU Regulation in Part II, in which we question, in particular, the adequacy of the Regulation to address issues related to the regulatory needs of institutional frameworks based upon market initiative (‘deregulated’ markets). This introduces a topic that we discuss in Part IV of the thesis. We close this broad process analysis of the path to competition in Europe by summarising the main findings from two recent large follow-up studies on the implementation of the Regulation commissioned by the European Commission (Maczkovics et al., 2010; SDG, 2016). From these reports transpire the complexity of the institutional frameworks for public transport in Europe, the confusion amongst authorities charged with the implementation of the Regulation, the difference there is between the adoption of legal texts and the actual

development of corresponding practices and the continued lack of availability and comparability of data about public transport performances in Europe.

From Part II results that two main families of institutional frameworks based on competition have to be distinguished: one based on authority-initiative and competitive tendering, and one based on market-initiative and the 'free' market. These two main options are analysed in, respectively, Parts III and IV of the thesis, with as main research question:

- ▶ How have these institutional frameworks fared since? In particular, what developments can be observed and what can be said about these developments?

This was divided into three sub-questions:

- ▶ How have these institutional frameworks fared since their introduction?
- ▶ What developments can be observed and what can be said about them?
- ▶ Can recommendations be formulated?

Part III

The introduction of functional tendering in public transport in the Netherlands constituted the main focal point of Part III of the thesis. This was linked to policy choices that wanted to stimulate innovation and customer orientation, which were deemed lacking in the practice of the old framework.

We described in Part III the prior institutional framework in place in the Netherlands before 2000, including some historical considerations. We provided an analysis of the process that led to the adoption of competition and 'functional tendering'. This involved reviewing proposals made by two Committees, experiments held by the Ministry and further debates. Note that we became ourselves involved in the reform process by, on the one hand, participating in academic debates in the Netherlands (Van de Velde, 1992b; 1995b; 1995a; 1995d; 1996b; Van de Velde and Veeneman, 1995) and, on the other hand, contributing to advices to the Dutch ministries involved in the preparation of the policy (Van de Velde and Westeneng, 1993; 1994; Van de Velde and van Reeve, 1996; van de Velde et al., 1996).

The resulting new legal framework meant a major shift from the previous institutional framework, that was based on market-initiative but was essentially 'dead', toward an institutional framework based on authority-initiative but with a compulsory use of competitive tendering. In other words, and surprisingly in view of the former framework, this went through *abolishing* the possibility of autonomous market entry in order to *introduce* competition through competitive tendering. While effectively stripping operators from the legal possibility to exhibit autonomous entrepreneurship, this was presented in the political discourse as 'the introduction of competition'.

A difficult path to realising the legislator's dream of functional tendering followed. We followed closely on these developments through a series of case studies and papers published during the years following implementation (Van de Velde and Leijenaar, 2001; Van de Velde et al., 2005; Van de Velde, 2006; Van de Velde et al., 2006a; Van de Velde et al., 2006b; Veeneman et al., 2006a; Veeneman et al., 2007b; 2007a; Van de Velde et al., 2008c). This led to developing a typology of barriers to change, and crossing it with the levels of institutions, as distinguished in our typology of institutions. This also led to the observation that

realising the legislator's dream was not that easy, many authorities choosing for caution, and it also led us to observe that learning and institutional feedback had started to appear. This led us to dig further into the difficulty of organising 'functional' tendering that was wished for at the national level, while hesitations between functional specifications and simple central planning appeared at the regional level (Van de Velde et al., 2008c). This paper, included in Part III, pointed to a number of issues: the issue of trust and the cultural change imposed by competitive tendering, legal-procedural issues leading to a tendency to over-specify contracts, the difficulty experienced by authorities to fit awarding criteria with policy aims, incentive calibration, a general lack of knowledge and a perceived lack of contract flexibility. This resulted in a call for more relational contracting, avoiding the chimera of complete contracts. The paper also gave a graphical representation of the evolving choices of regional authorities when tendering their concessions, revealing movements that were sometimes in opposite directions. This answered the two first sub-questions for this Part. The continuing debates in the Dutch public transport sector on the perceived lack of flexibility in contracts under the new institutional framework led *Kennisplatform Verkeer en Vervoer* (KpVV-CROW), the knowledge centre in which Dutch transport authorities cooperate, to request a report that would formulate recommendations on how to improve this situation. We summarised the main findings of that report (Van de Velde and Eerdman, 2013) in Part III. This includes an analysis of the reasons that led to contractual over-specification and suggests a series of recommendations.

Our analysis of the Dutch situation closes in Part III by a general assessment of the reform. This illustrates the muddling-through process in which the sector is involved since the shock of the new regime in 2001.

To widen our understanding of the Dutch case in the context of the diversity of arrangements observed in Part II, we explored in Part III how institutional frameworks based on competitive tendering have fared during the last few decades in a few other countries. The case of London and Scandinavia (Denmark, Norway and Sweden) illustrated route-based contracting approaches while the case of France illustrated the network-based contracting approach in complement to the Dutch case discussed earlier. These, and a few other cases, were studied to a lesser level of detail compared to the Dutch case.

We distinguished six main institutional themes to compare and contrast those experiences in a structured way, attempting to discern whether pattern similarities could be observed. This covered the right of initiative to create services, the setup of the transport authority, the governance arrangement of the authority, the division of marketing responsibilities between actors, the type of relationship between authority and operator and the position of the assets with a longer lifespan. A number of parallels and differences were sketched (see Part III), and this led us to a number of concluding observations, differentiated according to two main types of competitive tendering options in public transport, which we summarised under the "doing the thing right" (small gross-cost contracts as in London/Scandinavia, focussing on productive efficiency), versus "doing the right thing" (larger net-cost contracts as in the Netherlands/France, focussing on allocative efficiency). Main skills challenges for the authority were identified, differentiated according to the two main options mentioned above. Main challenges were identified for the "doing the right thing" option, which is also the option that is preferred in the Dutch reform. We pointed to the dangers and problems, leading to frustrations, that we have been able to observe in the

Netherlands, Sweden and France in relation to such a tendering option. We linked this also to the interplay between a number of actors during the period in which the tendering documentation is prepared and in which factors of chance and personality also play a role. With differing behavioural motivations, differing actor expectations, lack of information and lack of awareness and understanding, misunderstandings easily loom at the horizon. We therefore stressed the importance of a conscious and adequate management of this process to avoid the risk of ending up with over-specified contracts instead of the original objective to realise functional tendering under relational contracting. The importance of an adequate contract monitoring was also mentioned, besides internal knowledge transfer issues on the side of both the authority and the operator.

In sum, we observe a multi-faceted reality with feedback, learning, muddling-through, fine-tuning and sometimes strange or unexpected developments. We saw similarities between countries, which points to some extent to elements of path dependency and illustrates the influence of experience on future choices. The details of the steps, their timing or results differ, however, with different additional developments at a later stage. We also see developments 'back-and-forth' in arrangements chosen. We see a tendency towards relational contracting, but the future will have to tell whether this stabilises. And we expect that the development of new technologies (shared mobility systems, autonomous vehicles, internet, etc.) will lead to more needs for change in institutional frameworks and practices in the not too distant future.

Part IV

The main purpose of Part IV was to find out how public transport institutional frameworks that are based on the usage of market initiative have fared since their introduction over the course of the last decades. Two main research strands were conducted.

For the first, the experience of Great Britain constituted the starting point and our main focal point. This Part later also developed to cover other countries due to what we perceived to be a growing relevance of market initiative in current passenger transport markets elsewhere, and its potential further relevance growth in the future. This resulted from the findings of two papers reviewing developments in market initiative regimes. The first paper (Van de Velde and Wallis, 2013), written with Ian Wallis (New Zealand) compared the developments in the institutional frameworks of bus deregulation in Great Britain and New Zealand. Sweden was added to this as it had just implemented a surprising deregulation atop a well-established competitive tendering framework. The second paper (Van de Velde, 2014) updated and expanded the comparison to Germany, passenger coaches and passenger rail.

The developments in Great Britain, New Zealand, Sweden and Germany warranted a deeper analysis, which is provided in Part IV. This showed that the tension between coordination and competition stands at the centre of much of the discussions and institutional feedback in the sector. We observed over the period studied a slow reduction of anti-coordination components in the institutional frameworks, away from dogmatism and towards the development of regulatory toolboxes for coordination, with a feedback to L3.2 and then also to L2. We observed parallel developments in Great Britain and New Zealand. Yet, things eventually moved in radically different directions, showing that the

development of clever ‘light-touch’ regulatory toolboxes are yet no guarantee for adoption and implementation. The British toolbox is now filled with useful tools, but their uptake seems now hampered by lack of budgets and skills at the local level (L4). New Zealand went a different way as various fears and perceptions by vested interests managed to avert the implementation of the toolbox. This, paradoxically, led to restrict operator freedom even more, effectively replacing the market initiative institutional framework by authority initiative. Developments in Sweden came from the other end of the spectrum. A toolbox was thought of here as well, but eventually it did not materialize. Vested interests would ultimately safeguard the core of the existing competitive tendering arrangements, while compromising to a ‘deregulation’ that never took off, as we expected. Operators increasingly seem to have surrendered to the situation (L4). Developments in Germany were rather different as the legislation was already based on market-initiative but had been hybridized over time towards factual authority-initiative and some level of contracting. The new EU Regulation forced some amendments, but much action was directed at maintaining the status quo. New coordination mechanisms appeared in the toolbox (that has the merit of existing in this case), but apparently lead to sluggishness. Surprisingly, market initiative woke up from a moribund state in a few provincial cities and sparked more containment actions than enthusiasm. The country to follow is Finland, where a rather radical market-initiative based legislation was adopted in 2018 in the context of a strong pro-*Mobility-as-a-Service* (MaaS) stance adopted by the Finnish Ministry.

In sum, a rather hybrid world can be observed, with muddling through, feedback and gradual developments spanning several decades. We see actors using lobby power to avert change, or to avert actual market initiative. We see differences between adopted rules and their actual implementation or uptake, drawing the attention on the difference between the ideal and the feasible.

The second strand of research was constituted of a workshop series held between 2009 and 2017 at the International Conference of Competition and Ownership in Land Passenger Transport (better known as Thredbo conferences) held every second year. These workshops reflected on developments in deregulated public transport markets, discussed regulatory issues and attempted to generate or test ideas on regulatory needs. The workshops developed four non-dogmatic suggestions for ideal-typical hybrid ‘models’ based on market initiative. They included different regulatory tools (a guiding transport plan, entry stimulation measures and entry restriction measures). We observed similarities between these suggested models and real-world developments as they unfolded. The workshops also resulted into two other main contributions to the Thredbo conference series that proved useful to discuss various types real world regulatory interventions: a pyramid of regulatory priorities and a hypothetical bell-shaped curve of optimal regulation (Wong and Hensher, 2018).

15.3 Concluding observations

Our main aim with this thesis was to gain a deeper understanding of the variety of institutional frameworks that can exist in the public transport sector and on how these develop. We have explored institutional frameworks of European local public transport over a num-

ber of years and this has allowed us to observe and study various developments. We have contributed to a better understanding of the existing variety of institutional framework and their developments by elaborating a number of typologies, which proved helpful in presenting, comparing, discussing and even designing components of institutional frameworks. A number of papers and reports resulted.

Our journey through the world of the institutional components of public transport led us to observe many phenomena that were often rather remote from the ideal world that some economic theories would expect in a “nirvana-approach”. We observed choices made on the basis of scant information or personal beliefs blatantly disregarding facts. We found incentives included in contracts without proper calibration, contractual incentives corresponding to the need of political discourse but having effectively no real incentivising value, contractual penalties not enforced, etc. At the level of legislation and regulation, we observed nicely designed regulatory tools that effectively never became law, or regulatory tools that were enacted but hardly implemented as local authorities did not have the budget or knowledge required to put them to good use. In other words, our observations illustrate that there can and often is a discrepancy between designed institutional structures and institutional practices.

We sketched four options in the overview of the research. Is there a better option? At the beginning of this research, we thought that competitive tendering was needed to address the substantial inefficiencies observed in the public transport sector at the time. While progressing in this research, and with growing practical experience, we saw that tendering could indeed work, but that its implementation was not always an easy process. In some cases, one could even doubt whether it was the right thing to do. Cultural issues are involved in the sense of tendering requiring switching from an open, cooperative mindset to what some would call a ‘business-like’ culture, others would call it a ‘legalistic’ approach. Much of this is linked to learning to get to terms with a new world that was not necessarily wanted by those submitted to it, and also finding ways to develop cooperation where needed. A related question is whether it is a good idea to impose competitive tendering to authorities that are not prepared to use it or that are opposed to it. The reviews of the implementation of EU Regulation 1370/2007 have so far revealed continued problems in relation to the perceived complexity of the Regulation, with behind this issues of knowledge, skill availability and budget. With respect to cooperation, pleas towards relational contracting were made, in the Netherlands and elsewhere. Such cooperation can work and help, as we see with development teams in the Netherlands, but it requires proper management from the side of the authority; and there can be a difference between designing a mechanism and it being actually implemented. The apparent trend for including such contractual arrangements with repeated contracting experience stresses, though, that we are not in a simple market for which complete contracts could easily be written. We are in the world of hybrids. Some go further and advise abandoning tendering and using negotiated performance-based contracts²²⁴ instead, after a first (successful) tender and under the threat of tendering; this idea, however, would currently not be feasible in the European legal context.

[224] See Hensher (2015a) and the discussion in Part III.

Competitive tendering is not one single mode of organising public transport provision. There are numerous options to organise competitive tendering and numerous aims associated with its usage. The international evidence debate is between “doing the thing right” (small gross-cost contracts) and “doing the right thing” (larger net-cost contracts). We believe that both can work. The first option, however, appears from our observations to be more stable, easier to manage and better at building-up knowledge and learning. The second option requires a very different kind of knowledge and approach from the side of the transport authority. The build-up of knowledge appears more difficult, and the choices less stable. Yet, there is no simple choice between both options. They relate to two completely different levels of service provision: the tactical and operational level, or only the operational level. The actor configuration at the starting point of reform is thus determinant—even though not necessarily fully determinant—for the options available and the choices made.

Is deregulation better? Besides a few remarks, we did not engage in this thesis into the debate about its measured performances in relation to competitive tendering elsewhere as our purpose was to focus on the institutional frameworks and their development. What we observed, though, was that tendering and deregulation were often compared ‘as is’, and in particular ‘deregulation outside London’ compared to ‘tendering in London’. Such comparisons implicitly assume that the way these two institutional frameworks are implemented are the only way to implement them, while this need not be the case. Related to this, we observed that there was relatively little thinking about ways to improve the deregulated model; even though most observers agreed to say that it had been implemented in a rather dogmatic way by Margaret Thatcher. Interestingly, we also observed an absence of champions promoting market initiative, while more promoted competitive tendering. We suggested that this might be related to the promotion of contracting and competitive tendering being a more palatable message to address to actors inclined to be receptive to suggestions that increase authority control, while the promotion of market-initiated regimes would be more difficult to sell in view of the bad reputation that deregulation had got under its dogmatic British implementation (whatever actual performances might have been). This and various international developments were reasons that contributed to our involvement in a series of workshops on market initiative in the Thredbo conference series (see Part IV). As our earlier observations led us to conclude that there is a difference between institutional structures and institutional practice, this meant that we needed to be aware of the dangers of a ‘nirvana approach’, as already mentioned in Part II. We tried with the workshop series, through an intersubjective and cumulative, repeated approach, to generate non-dogmatic and realistic options. We did observe some practices evolving towards some of these models. Yet, few observations exist, and it is questionable whether the recommendations would all be feasible under the EU Regulation²²⁵. Consequently, we can only conclude that future will tell whether the workshops proposals were realistic, end up being truly implementable and, if implemented, deliver better results than a dogmatic approach.

As indicated in our overview paper in this Part, further options exist. Public operators, in particular, for which many—though by far not all—have improved their game since

[225] We concluded earlier that this Regulation might be missing adequate provisions for the regulation of market initiative.

the beginning of the period of reform, and for which the threat of competitive tendering, when well used by the authority, has certainly played a role²²⁶. As indicated, their functioning was out of our scope for this research that focussed on competition, but we mentioned some examples while discussing further cases. This option is already important in urban public transport at the international level and might gain further importance in the future if the choices of some local authorities moving away from tendering towards in-house operation are confirmed.

Our general observation about the various options is, in short, that they all can work if the conditions for their functioning are sufficiently realised. To this, experience tells us, we should add that dedicated persons should also be present and attempt to make things work. While attracting the right persons is partially dependent on the design of the institutional framework, there is probably also an element of chance here. In sum, striving for a perfect realisation of all conditions seems, in view of real-world practice, illusory.

Our exploration has revealed evolving practices and structures, fine-tuning, patching and muddling-through. We have observed at first hand the similarity of questioning, discussions and developments between areas. Yet, we did not observe deterministic, equal evolution paths. Developments sometimes go parallel, on similar paths, sometimes diverge. An interesting question in this respect is whether there is a regulatory cycle (Gwilliam, 2008a). Our observations led us to suggesting this was happening in New Zealand. The move from competitive tendering to in-house production in some areas in France (Le Ruyet, 2017) and in a few other countries (Van de Velde et al., 2019), though limited to few networks so far, is another element that could contribute towards believing in some kind of regulatory cycle. We would, though, from our observations over the last 30 to 50 years not be inclined to believe that there is a deterministic cycle. A pendulum movement (private/public) reaching ever changing configurations of the institutional framework seems more likely. In the same vein comes the question on the existence of a tendency towards a regulatory convergence between authority initiative and market initiative institutional frameworks (Rye and Wretstrand, 2014). We do recognise this tendency, in particular the move 'away' from dogmatism in both institutional frameworks (relational contracting for authority initiative in Sweden and the Netherlands, and toolbox-coordination for market initiative in Britain), but this does not guarantee that a full convergence will be reached.

In view of all of these observations, we believe that the main challenge facing those managing existing public transport institutional frameworks, or in a position of co-determining their design, is to design institutions while abandoning the idea of a perfect design for a hypothetical equilibrium. Things change and will keep changing. What is needed, rather, is designs that will have the flexibility and adaptability to respond to changing socio-economic and technical circumstances. This is likely to require combining various modes of organising the provision of passenger transport services into new institutional configurations.

[226] See Mouwen and van Ommeren (2016); Schaaffkamp (2018)

16 Outlook: Future regulation

We have discussed the issue of competition at length in this thesis, but further challenges lay ahead in a complex relationship between technical progress and the potential need for a reform of the economic regulation of the sector. In other words, things do not stand still.

“The state, *or* tendered contracts, *or* the free market?”²²⁷ For the last 30 years, this question has dominated debates on the relationship between actors in the European public transport markets. For the future, we will have to answer the following question: ‘how to combine the free market *and* tendered contracts *and* the state?’”

Public monopolies, privatisation, direct award, route tendering, network tendering, specified or functional contracts, the free market: lengthy discussions preceded the adoption of EU Regulation 1370/2007 on Public Service Obligations. Ultimately, the regulation accommodated most wishes, essentially stating that almost anything goes. Two main competitive regimes have emerged in the tendering practice besides public monopoly: gross cost tendering of pre-determined routes and net cost tendering of flexible networks. Both are more demanding for the authority’s skills than what the unwary observer would expect. Both can lead to efficiency improvement and innovation when properly implemented, but this calls for skilled authorities and requires them to shed old practices and political processes to cease defending the status quo.

The next challenge will come from acknowledging the potential lying in the free market. This often tends to be neglected and considered by many to be an exclusively British eccentricity in public transport even though we have observed that it is present in the legislation of several other countries²²⁸. We believe that free market initiative may play an even more revolutionary role in the future of collective transport than competitive tendering has played over the past decades. However, fulfilling this role calls for the acknowledgement of a number of trends and a more flexible approach to how public transport is organised.

Looking at several passenger transport sectors, a first trend that we can observe is that much deregulation took place over the last decades. We have seen this in taxi and airlines. After Britain, Scandinavia and most Eastern European countries, Germany and more recently even France have opened up their long-distance coach markets to free competition. The uptake was overwhelming. Similar developments, though less extreme, are taking

[227] This section has been developed on the basis of a plenary speech “The public transport market: Challenges in the future governance of public transport” for the conference “The Way Forward” for Sweden’s national centre for research and education on public transport (Van de Velde, 2016a), a column written for the UITP (Van de Velde, 2017), as well as an earlier publication and conference presentation (Van de Velde, 2006; 2012b).

[228] As we have seen, for example, in one of the workshop papers (see Part IV) with the recent unexpected commercial provision of local public transport in some regional German cities

place in the rail sector and are visible in Italy, Austria, Czechia and Sweden. This generates a new pool of competitors which may well instil a new entrepreneurial spirit in the sector. If that is the case, this will, sooner or later, trickle down through the rest of the sector. These deregulations are very much at odds with what happened in local public transport in many European countries. There, operators have usually not been granted the freedom to autonomously create services and compete; Great-Britain forming a notable exception²²⁹.

The next trend is the development of a growing number of shared mobility systems over the course of the last decade or two. The transport world was much simpler and clearer when this research was initiated. Transport modes were clearly defined (individual, rented, collective) and service types clearly differentiated (taxi, public transport or tourist coaches). They fell under different regulations. Issues of public transport integration were limited to providing a unified ticket and multi-modal passenger information. Electronic means of information and planning were only at the start of their development. Since then, very gradual but ultimately major changes have taken place. The shared bike system *OV-fiets* appeared in the Netherlands in 2003, *Vélib'* was launched in Paris in 2007. Shared car systems have appeared on the streets of many European cities. Shared taxis and 'Uber'-taxis have developed. More recently shared scooters and kick-scooters made their appearance on the sidewalks. The ubiquity of the internet and smartphones have allowed for an easier market penetration of such new products. The combination of GPS and instant reservation systems made shared vehicle usage a reality. It is likely that this will grow further and that new 'intermediate modes' presenting the characteristics of several of the old categories will appear at the borderline between private and collective means of transport. We are also seeing that car manufacturers started investing in sharing systems, including bicycles. Sooner or later driverless vehicles will become a reality at a larger scale than the current experiments. This may revolutionise the taxi markets, but also parts of public transport by enabling a cheaper provision of services in thin markets (while electric bikes will already have satisfied part of the current demand). More innovations in mobility-on-demand services develop, made possible by real time aggregation of individual requests over mobile phones. Mobility-as-a-Service (MaaS) providers will want to integrate individual, shared, or collective services delivered by various providers into one easy information and payment channel, providing individual trips or monthly mobility packages. A common characteristic of these innovations is that they result from a multitude of commercial initiatives. They do not follow from a centralised command-and-control approach by transport authorities through contracting and tendering.

The developments mentioned above mean that autonomous market initiative is playing a growing role both 'above' local public transport market (in air, coach and rail) and 'below' (with small-scale initiatives, demand-responsive and shared systems, etc.) This increasingly leaves public transport institutional frameworks based on authority-initiative as a shrinking island in a growing sea of market initiative. These developments also mean that markets that for decades had remained well-compartmented have now become more fluid.

[229] See the fundamental distinction between deregulation (market initiative) and competitive tendering (authority initiative) that we introduced in Part II. See also Part IV.

From this follows the question of the congruence of the various institutional frameworks in place in passenger transport, as the challenge for transport authorities will be to ensure that these various transport systems flourish in synergy. The challenge to authorities and their skills thus also constitutes a challenge to existing legal and regulatory regimes. It will probably require stepping down from the principle of the all-mighty transport authority and the single line of command central to many existing legislations, including EU Regulation 1370/2007. Regulatory instruments other than contracts and monopolies will be needed to encourage creativity and complementarities by removing barriers, introducing incentivising subsidisation and appropriate ‘rules of the game’ to realise and protect the network benefits that would not result from the uncontrolled autonomous interaction of market players. Transport authorities will have to prevent developments that would lead to an unbridled growth in autonomous/electric/shared cars and other new means of transport at the expense of more efficient modes of mass transport (trams, metros, trains) and urban liveability. Yet, an intelligent development of new intermediate modes on commercial grounds could also free up financial means now spent inefficiently on some low-density public transport services. This would then lead to a higher cost-coverage for the remaining public transport services and, in turn, open up new opportunities for more commercial public transport provision.

For this to flourish, and if all technical advances prove realistic, will require transport authorities to develop different approaches. They will need to stimulate alternative combinations rather than centralising all control in a command-and-control approach. They will need to become facilitators or integrators of various initiatives where needed²³⁰. They will need to stimulate further market opportunities where possible and combining them with traditional modes of transports that should continue to play important roles, in particular for high-density streams. But they will also need to be wary of appealing initiatives that might ultimately alienate the transport authority from the possibility to control transport flows and manage the urban area. Such developments would, obviously, radically change the role of transport authorities.

[230] One of the workshops of Part IV has alluded to the possible gradual replacement of the ‘old’ public transport integration dogma with the possible development of new paradigms and related new regulatory needs (Van de Velde and Karl, 2018).

References

- Aarhaug, J. and N. Fearnley (2016), "Deregulation of the Norwegian long distance express coach market", *Transport Policy*, 46, 1-6.
- Aarhaug, J., N. Fearnley, F.A. Gregersen and R.B. Norseng (2018), "20 years of competitive tendering in the Norwegian bus industry – An analysis of bidders and winning bids", *Research in Transportation Economics*.
- Alexander, J. and V. Maguire (2013), "Transitioning to a new partnership approach - New Zealand regulator perspective", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 5-20.
- Alexandersson, G. (2010), *The accidental deregulation - Essays on reforms in the Swedish bus and railway industries 1979-2009*, EFI, Economic Research Institute, Stockholm School of Economics, Stockholm.
- Alexandersson, G. (2013), "Next stop for Swedish rail reforms? New Government Committee reviewing the organisation of the sector", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 21-28.
- Alexandersson, G., S. Hultén and S. Følster (1998), "The Effects of Competition in Swedish Local Bus Services", *Journal of Transport Economics and Policy*, 32, 203-219.
- Alexandersson, G. and R. Pyddoke (2003), "Bus Deregulation in Sweden Revisited: Experiences from 15 Years of Competitive Tendering", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio do Janeiro, Brazil, 14-18 September 2003.
- Anthony, R.N. (1988), *The Management Control Function*, Harvard Business School Press, Boston, MA.
- Appelman, F.A., D. Hendriks, M.B. Kort, R.C. van der Mark and J.H. Snel (2003), "Beoordeling en conclusies uit de tussenrapportage 'Evaluatie Aanbesteding OV Concessies'", Berenschot, Utrecht, 11 pp.
- Appelman, F.A., D. Hendriks, M.B. Kort, R.C. van der Mark and J.H. Snel (2004), "Evaluatie Aanbesteding OV Concessies", Berenschot, Utrecht, 95 pp.
- Arntzen, C. (2016), "Passenger entries based incentives in PT contracts", Presentation on 4 April 2016 for the K2 International Advisory Group, SLL, Stockholm.
- Ashmore, D.P. and A.D. Mellor (2009), "The 2008 New Zealand Public Transport Management Act: rationale, key provisions, and parallels with the United Kingdom", *Proceedings of the 11th International Conference on Competition and Ownership in Land Passenger Transport*, (Eds.: van de Velde, D.M., A. Beck and W.W. Veeneman), Delft (The Netherlands), 20-25 September 2009, Vol. 3, p. 49-76, Next Generation Infrastructures Foundation, Delft.
- Augustin, K., R. Gerike, M.J.M. Sanchez and C. Ayala (2013), "Analysis of intercity bus markets on long distances in an established and a young market: The example of the U.S. and Germany", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 29-44.
- Avanzata, T. (2011), "Study on the implementation of the European regulation (EC) n°1370/2007 on the public passenger transport services by rail and by road of 23 October 2007", Study for the European Metropolitan Transport Authorities, EMTA, Paris, 93 pp.
- Bakker, B.P.A. and D.M. Van de Velde (2009), "Superincentive public transport contracting in the greater Amsterdam area", *Proceedings of the 11th International Conference on Competition and Ownership in Land Passenger Transport*, (Eds.: Stanley, J., F. Longva, W.W. Veeneman and D.M. van de Velde), Delft (The Netherlands), 20-25 September 2009, Vol. 2, p. 151-160, Next Generation Infrastructures Foundation, Delft.
- Banister, D. (1985), "Deregulating the bus industry in Britain - (A) The proposals", *Transport reviews*, 5, 99-103.
- Baumol, W.J. (1982), "Contestable Markets - an Uprising in the Theory of Industry Structure", *American Economic Review*, 72, 1-15.
- Baumol, W.J. and J.G. Sidak (1994), *Toward Competition in Local Telephony*, MIT Press, Cambridge MA.
- Beck, A. (2010), "Commercial public bus transport services in Germany: How a market in motion struggles with its regulatory framework", *Research in Transportation Economics*, 29, 183-194.
- Beck, A. (2011), "Experiences with Competitive Tendering of Bus Services in Germany", *Transport reviews*, 31, 313-339.
- Beck, A. (2012a), *Competition for Public Transport Services: Institutional Framework and Empirical Evidence of Bus Services in Germany*, Physica-Verlag, Springer-Verlag, Berlin.
- Beck, A. (2012b), "The distinction between commercial and non-commercial bus services in Germany: Given by nature?", *Transport Policy*, 19, 26-35.
- Beesley, M.E. (1991), "Bus deregulation: lessons from the U.K.", *Transportation Planning and Technology*, 15, 95-106.
- Beesley, M.E. and S. Glaister (1985a), "Deregulating the bus industry in Britain - (C) A response", *Transport reviews*, 5, 133-142.
- Beesley, M.E. and S. Glaister (1985b), "Deregulating the bus industry in Britain : a reply", *Transport reviews*, 5, 223-224.
- Berge, D.M., S. Bräthen, O. Hauge and F. Ohr (2003), "Experiences with quality contracts in public transport in Norway", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio do Janeiro, Brazil, 14-18 September 2003.
- Birch, N. and G. Whelan (2011), "Modelling Bus Subsidy in

- English Metropolitan Areas”, Report for PTEG, MVA consultancy, London.
- Bly, P.H., F.V. Webster and S. Pounds (1980), “Effects of Subsidies on Urban Public Transport”, *Transportation*, 9, 311-331.
- Bösch, S., A. Clark and L. Smidfelt-Rosqvist (2013), “How will the deregulation affect ambitions for increase public transport use?”, *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 45-56.
- Bouf, D. and B. Faivre d'Arcier (2015), “The looming crisis in French public transit”, *Transport Policy*, 42, 34-41.
- Braeutigam, R.R. (1989), “Optimal policies for natural monopolies”, In: *Handbook of Industrial Organization* (Eds.: Schmalensee, R. and R.D. Willig), Vol. II, Chap. 23, Elsevier, Amsterdam.
- Brouwer, P. and G. van Kesteren (2008), *Berigt aan de heeren reizigers - 400 jaar openbaar vervoer in Nederland*, SDU, Den Haag.
- Button, K.J. (1984), “Subsidies and the Provision of Urban Public Transport”, *International Journal of Transport Economics*, 11, 177-188.
- Caillaud, B. and E. Quinet (1993), “Analyse du caractère incitatif des contrats de transport urbain”, CEPREMAP Working Papers, CEPREMAP, Paris.
- Camén, C., P. Gottfridsson and B. Rundh (2011), “To trust or not to trust?: Formal contracts and the building of long-term relationships”, *Management Decision*, 49, 365-383.
- Camén, C. and H. Lidestam (2016), “Dominating factors contributing to the high(er) costs for public bus transports in Sweden”, *Research in Transportation Economics*, 59, 292-296.
- Carr, J.D. (1997), “Light Touch Regulation for the Privatised Bus Industry”, *Proceedings of the 5th International Conference on Competition and Ownership in Land Passenger Transport*, (Ed.: Preston, J.), Leeds (UK), May 1997.
- CETUR (1990), “Transport publics urbains en France, Organisation Institutionnelle”, DTT-CETUR, Bagneux.
- CMA (2015), “Competition in passenger rail services in Great Britain - A discussion document for consultation”, Competition & Markets Authority, London.
- Colson, B. (1996), “U.K. bus deregulation: a qualified success with much still to offer customers and society at large”, *Transport Reviews*, 16, 301-311.
- Commissie Brox Openbaar Vervoer (1993), “Ontvlechting en verzakelijking in het Openbaar Vervoer”, Commissie Brox Openbaar Vervoer, Utrecht.
- Commissie Brox Openbaar Vervoer (1994), “Achtergrondstudie Marktwerking in het Openbaar Vervoer: Raadpleging van experts op het gebied van Marktordening en Mededinging”, Projectteam Openbaar Vervoer, Utrecht, 84 pp.
- Commissie Brox Openbaar Vervoer (1995), “Marktwerking in het openbaar vervoer”, Projectteam Openbaar Vervoer, Utrecht.
- Commissie Houben (1990), “Openbaar vervoer: naar een geïntegreerde regionale opzet. Advies aan de Minister van Verkeer & Waterstaat”, Commissie Houben, Den Haag, 14 pp.
- Competition Commission (2011), “Local bus services market investigation”, Competition Commission, London, 526 pp.
- Council of the European Union (2006), “Council Common Position adopted by the Council with a view to the adoption of a Regulation of the European Parliament and of the Council on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70”, 13736/1/2006, Council of the European Union, Brussels.
- Cowie, J. (2013), “Performance, profit and consumer sovereignty in the English deregulated bus market”, *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 57-73.
- Cowie, J. (2014), “Performance, profit and consumer sovereignty in the English deregulated bus market”, *Research in Transportation Economics*.
- Cox, W. and D.M. Van de Velde (1998), “Franchising and tendering: Workshop 3”, *Transport reviews*, 18.
- Crain, W.M. and R.B. Ekelund, Jr. (1976), “Chadwick and Demsetz on competition and regulation”, *Journal of Law and Economics*, 19, 149-162.
- Cripps, M. and N. Ireland (1994), “The Design of Auctions and Tenders with Quality Thresholds: The Symmetric Case”, *The Economic Journal*, 104, 316-326.
- CVOV (2000a), “Aanbesteding in Zweden: een lichtend voorbeeld”, *CVOV-Bericht*, 11, Centrum Vernieuwing Openbaar Vervoer, Rotterdam.
- CVOV (2000b), “Evaluatie aanbestedingen in Limburg en Zeeland”, *CVOV-Bericht*, Centrum Vernieuwing Openbaar Vervoer, Rotterdam.
- CVOV (2001), “Beter openbaar vervoer door aanbestedingen”, *CVOV-Bericht*, 59, Centrum Vernieuwing Openbaar Vervoer, Rotterdam.
- Danielson, H., H. Andersson and A. Wretstrand (2016), “Superincentive contracts - A study of the VBP contract models in Stockholm - draft version”, K2 Working Papers 2016:5, K2, Lund.
- Davison, L.J. and R.D. Knowles (2006), “Bus quality partnerships, modal shift and traffic decongestion”, *Journal of Transport Geography*, 14, 177-194.
- Demsetz, H. (1968), “Why regulate utilities?”, *Journal of Law and Economics*, 11, 55-65.
- Demsetz, H. (1969), “Information and Efficiency - Another Viewpoint”, *Journal of Law & Economics*, 12, 1-22.
- DfT (1983), “White Paper - Public Transport in London”, Command 9004, Secretary of State for Transport, London.
- DfT (2001), “Tendered bus services: government response to Select Committee report”, Department for Transport, London.
- DfT (2003), “Transport Statistics Great Britain”, 29th edition, Department for Transport, London.
- DfT (2006), “Putting passengers first”, Department for Transport, London, 56 pp.
- Domenach, O. (1987), “Métamorphose des rapports contractuels dans les transports publics urbains”, *Transports*, 112-120.
- DoT (2002), “Statement on public transport reform by S. Brennan, Minister of Transport”, 7 November 2002, Department of Transport, Dublin, Ireland.
- Douglas, N.J. (1987), *A welfare assessment of transport*

- deregulation : the case of the express coach market in 1980*, Gower, Aldershot.
- DPE (2000), "A new institutional and regulatory framework for public transport", Department of Public Enterprise, The Stationary Office, Dublin, 28 pp.
- Eerdmans, D., W. Mol and D.M. van de Velde (2017), "Pforzheim laat zien: ov kan zonder subsidie", *OV Magazine*, 26 december 2017.
- Eerdmans, D., S.C.E. van Kooij, D.M. Van de Velde and H. Westerink (2010), "Are we doing it wrong or do we expect too much? Forces that push authorities to become public transport designers", *Research in Transportation Economics*, 29, 133-139.
- Ekelund, R.B., Jr. and R.F. Hebert (1981), "The Proto-History of Franchise Bidding", *Southern Economic Journal*, 48, 464-474.
- Emerson, D., C. Mulley and M.C.J. Bliemer (2015a), "A case study of an individual route ownership business regime for public transport service delivery", *14th International Conference on Competition and Ownership in Land Passenger Transport*, Santiago, Chile, 30 August - 3 September 2015.
- Emerson, D., C. Mulley and M.C.J. Bliemer (2015b), "A theoretical analysis of business models for urban public transport systems, with comparative reference to the case of the Individual Line Ownership regime", *14th International Conference on Competition and Ownership in Land Passenger Transport*, Santiago, Chile, 30 August - 3 September 2015.
- Engelsman, J.C., J.M. Groenendijk and V. Timmermans (2010), "Efficiencygegevens regionaal stad- en streekvervoer", Twijnstra Gudde, Amersfoort, 28 pp.
- Estache, A. and A. Gómez-Lobo (2005), "Limits to competition in urban bus services in developing countries", *Transport reviews*, 25, 139-158.
- European Commission (1996a), "The citizen's network - Fulfilling the potential of public passenger transport in Europe", Directorate-General VII Transport, Brussels.
- European Commission (1996b), "The citizen's network—fulfilling the potential of public passenger transport in Europe", Green Paper, Directorate-General VII Transport, Brussels.
- European Commission (1998), "Developing the Citizen's Network", Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the Economic and Social Committee, COM(1998)431, Directorate-General VII Transport, Brussels.
- European Commission (2000), "Proposal for a regulation by the European Parliament and the Council on the action by member states concerning public service requirements and the award of public service contracts in passenger transport by rail, road and inland waterway", COM(2000) 7 def, 2000/0212 (COD), European Commission, Brussels.
- European Commission (2001), *White paper: European transport policy for 2010: time to decide*, Office for Official Publications of the European Communities, Luxembourg.
- European Commission (2002), "Amended proposal for a regulation by the European Parliament and the Council on the action by member states concerning public service requirements and the award of public service contracts in passenger transport by rail, road and inland waterway", COM(2002) 107 final, 2000/0212 (COD), European Commission, Brussels.
- European Commission (2005), "Proposal for a regulation by the European Parliament and the Council on public passenger transport services by rail and by road", COM(2005) 319 final, 2000/0212 (COD), European Commission, Brussels.
- European Commission (2014), "Communication from the Commission on interpretative guidelines concerning Regulation (EC) No 1370/2007 on public passenger transport services by rail and by road", *Official Journal of the European Union*, 2014/C 92/01, 29 March 2014, European Union, Brussels.
- European Parliament (2001), "Draft report on the proposal for a regulation by the European Parliament and the Council on action by member states concerning public service requirements and the award of public service contracts in passenger transport by rail, road and inland waterway", 2000/0212 (COD) prov, European Parliament, Brussels.
- European Parliament (2007), "European Parliament legislative resolution of 10 May 2007 on the Council common position for adopting a regulation of the European Parliament and of the Council on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70", 13736/1/2006 - C6-0042/2007 - 2000/0212(COD), European Parliament, Brussels.
- Evans, A.E. (1988), "Hereford: A Case-Study of Bus Deregulation", *Journal of Transport Economics and Policy*, 22, 283-306.
- Fairhead, R. and R. Balcombe (1984), "Deregulation of bus services in the trial areas 1981-84", *TRRL Laboratory Report*.
- Faivre d'Arcier, B. (2010), "La situation financière des transports publics urbains est-elle « durable » ?", *Cahiers Scientifiques du Transport*, 58, 3-28.
- Faivre d'Arcier, B. (2014), "Measuring the performance of urban public transport in relation to public policy objectives", *Research in Transportation Economics*, 48, 67-76.
- Farquharson, M. (2000), "Essential Facilities and Transport Infrastructure", In: *Integrated Transport Policy: implications for regulation and competition* (Eds.: Preston, J., H. Lawton Smith and D.N.M. Starkie), Ashgate, Aldershot.
- Filippini, M., M. Koller and G. Masiero (2015), "Competitive tendering versus performance-based negotiation in Swiss public transport", *Transportation Research Part A: Policy and Practice*, 82, 158-168.
- Finn, B. (2003a), "Administrative Structures Report", In: *Advancing urban passenger transport reform in the Europe and Central Asia region*, Urban Bus Toolkit, World Bank Group & PPIAF.
- Finn, B. (2003b), "Case Studies", In: *Advancing urban passenger transport reform in the Europe and Central Asia region*, Urban Bus Toolkit, World Bank Group & PPIAF.
- Foster, C. and J. Golay (1986), "Some Curious Old Practices and Their Relevance to Equilibrium in Bus Competition", *Journal of Transport Economics and Policy*, 20, 191-216.
- Foster, C.D. (1963), *The transport problem*, Blackie & Son, London.
- Gargett, A. and I. Wallis (1995), "Quasi-commercial bus service contracts in South Australia", *Paper presented at the 4th*

- international conference on competition and ownership in land passenger transport (Thredbo 4)*, Rotorua, New Zealand.
- Girnau, G. (1993), "Der regionalisierte Verkehrsmarkt", *Der Nahverkehr*, 7-8, 2-11.
- Glaister, S. and M. Beesley (1991), "Bidding for tendered bus routes in London", *Transportation Planning and Technology*, 15, 349-366.
- Glaister, S. and C. Mulley (1983), *Public control of the British bus industry*, Gower, Aldershot.
- Gleijm, A. (2003), "Introducing market forces in public services in transport in an enlarged Europe", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 14-18 September 2003, Keynote paper.
- Gleijm, A. (2005), "Juridisch-technische toetsing van de Wet personenvervoer 2000", RebelGroup Advisory, Rotterdam, 39 pp.
- Godfrey, J. and J. Taylor (2018), "The role of bus partnerships in Great Britain", *Research in Transportation Economics*.
- Gómez-Lobo, A. and J. Briones (2013), "Incentive structure in transit concession contracts: the case of Santiago, Chile and London, England", Clean Air Institute, Washington, 70 pp.
- Goodhart, C. (1981), "Problems of Monetary Management: The UK Experience". In: *Inflation, Depression, and Economic Policy in the West* (Ed.: Courakis, A.S.), Rowman & Littlefield, Lanham, Maryland.
- Groenendijk, J.M., J.M. de Heer, H.J. Meurs, R.I. Pieper and E. Rosbergen (2005), "Evaluatie Wp2000, Eindrapport functionele en doelmatigheidstoets", Rapport voor het Ministerie van Verkeer en Waterstaat, Twijnstra & Gudde, MuConsult, Den Haag.
- Groenewegen, J.P.M. (2006), "Marktwerking (ten geleide)", *ESB Dossier*, 4500S, 1.
- Guba, E.G. and Y.S. Lincoln (1994), "Competing paradigms in qualitative research", In: *Handbook of qualitative research* (Eds.: Denzin, N.K. and Y.S. Lincoln), Vol. 2, 105-117, Sage, Thousand Oaks, CA.
- Gwilliam, K.M. (1992), "Deregulation van de bussector in het Verenigd Koninkrijk: Lessen voor Nederland", *Tijdschrift Vervoerswetenschap*, 28, 319-335.
- Gwilliam, K.M. (2008a), "Bus transport: Is there a regulatory cycle?", *Transportation Research Part A: Policy and Practice*, 42, 1183-1194.
- Gwilliam, K.M. (2008b), "A review of issues in transit economics", *Research in Transportation Economics*, 23, 4-22.
- Gwilliam, K.M., C.A. Nash and P.J. Mackie (1985a), "Deregulating the bus industry in Britain - (B) The case Against", *Transport reviews*, 5, 105-132.
- Gwilliam, K.M., C.A. Nash and P.J. Mackie (1985b), "Deregulating the bus industry in Britain: a rejoinder", *Transport reviews*, 5, 215-222.
- Gwilliam, K.M. and D.M. Van de Velde (1990), "The Potential for Regulatory Change in European Bus Markets", *Journal of Transport Economics and Policy*, 24, 333-350.
- Hagen, T. (2003), "Lowest bid wins: Effects of increasing competition on public transport staff", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 14-18 September 2003.
- Hansson, L. (2013), "Hybrid steering cultures in the governance of public transport: A successful way to meet demands?", *Research in Transportation Economics*, 39, 175-184.
- Haugsbø, M.S., T. Eriksson and B. Norheim (2014), "Organisering av innkjøp av kollektivtransport i Telemark", Notat 66/2014, Urbanet Analyse, Oslo, 56 pp.
- Hellriegel, D. and J.W. Slocum (1992), *Management*, Addison-Wesley, Reading, MA.
- Hensher, D. (2006), *History of the Thredbo series*, <https://thredbo-conference-series.org/history/>, 1-11-2018.
- Hensher, D. (2015a), "Cost Efficiency under Negotiated Performance-based Contracts and Benchmarking. Are There Gains Through Competitive Tendering in the Absence of an Incumbent Public Monopolist?", *Journal of Transport Economics & Policy*, 49, 133-148.
- Hensher, D.A. (1988), "Some Thoughts on Competitive Tendering in Local Bus Operations", *Transport Reviews*, 8, 363-372.
- Hensher, D.A. (2015b), "Big Themes and Big Challenges - Plenary address", *14th International Conference on Competition and Ownership in Land Passenger Transport*, Santiago, Chile, 30 August - 3 September 2015, 13 slides.
- Hensher, D.A., H.C. Battellino and M.E. Beesley (1991), "Competition and ownership of public transit services: introduction", *Transportation Planning and Technology*, 15, 85-93.
- Hensher, D.A., C. Ho and L. Knowles (2016), "Efficient contracting and incentive agreements between regulators and bus operators: The influence of risk preferences of contracting agents on contract choice", *Transportation Research Part A: Policy and Practice*, 87, 22-40.
- Hensher, D.A. and E. Houghton (2004), "Performance-based quality contracts for the bus sector: delivering social and commercial value for money", *Transportation Research Part B-Methodological*, 38, 123-146.
- Hensher, D.A. and E. Houghton (2005), "Performance based contracts: Theme A.", In: *Competition and ownership in land passenger transport: Selected refereed papers from the 8th international conference (Thredbo 8)*, Rio de Janeiro, September 2003 (Ed.: Hensher, D.A.), 29-53, Elsevier.
- Hensher, D.A., C. Mulley and N. Smith (2013), "Towards a simplified performance-linked value for money model as a reference point for bus contract payments", *Research in Transportation Economics*, 39, 232-238.
- Hensher, D.A. and J. Stanley (2003), "Performance-based quality contracts in bus service provision", *Transportation Research Part a-Policy and Practice*, 37, 519-538.
- Hensher, D.A. and J. Stanley (2010), "Contracting regimes for bus services: What have we learnt after 20 years?", *Research in Transportation Economics*, 29, 140-144.
- Hensher, D.A. and I.P. Wallis (2005), "Competitive Tendering as a Contracting Mechanism for Subsidising Transport: The Bus Experience", *Journal of Transport Economics and Policy*, 39, 295-321.
- Hermans, G. and A. Stoelinga (2003), "Competition in Dutch Public Transport", *8th International Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, 14-18 September 2003.
- Heseltine, P.M. and D.T. Silcock (1990), "The Effects of Bus Deregulation on Costs", *Journal of Transport Economics and Policy*, 24, 239-254.
- Hewitt, R. and R. Drew (2013), "Implementing New Zealand's

- new public transport operating model: a description of the challenges and progress to date”, *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013.
- Hibbs, J. (1985), *Regulation: an international study of bus and coach licensing*, Transport Publishing Projects, London.
- Hibbs, J. (1986), “International Comparisons of Bus Licensing”, *Transport Reviews*, 6, 259-272.
- Hidalgo, D. and R. King (2014), “Public transport integration in Bogotá and Cali, Colombia – Facing transition from semi-deregulated services to full regulation citywide”, *Research in Transportation Economics*, 48, 166-175.
- Higginson, M.P. (1991), “Deregulate: who dares?—the London experience”, *Transportation Planning and Technology*, 15, 185-201.
- Hilferink, P.B.A. and R. Poppeliers (2010), “Financiering van het stedelijk en regionaal openbaar vervoer”, NEA, Rijswijk.
- Holmgren, J. (2013), “The efficiency of public transport operations – An evaluation using stochastic frontier analysis”, *Research in Transportation Economics*, 39, 50-57.
- Hood, C. (1995), “The “new public management” in the 1980s: Variations on a theme”, *Accounting, Organizations and Society*, 20, 93-109.
- House of Commons (1995), “The Consequences of Bus Deregulation”, First Report of the Transport Committee, HMSO, London.
- Hrelja, R., J. Monios, T. Rye, K. Isaksson and C. Scholten (2017), “The interplay of formal and informal institutions between local and regional authorities when creating well-functioning public transport systems”, *International Journal of Sustainable Transportation*, 00-00.
- Hrelja, R., T. Rye and C. Mullen (2018), “Partnerships between operators and public transport authorities. Working practices in relational contracting and collaborative partnerships”, *Transportation Research Part A: Policy and Practice*, 116, 327-338.
- ISOTOPE Research Consortium (1997), “Improved Structure and Organization for Urban Transport Operations of Passenger in Europe”, Office for Official Publications of the European Communities, Luxembourg, 177 pp.
- Jaffer, S. and D. Thompson (1986), “Deregulating Express Coaches: A Re-assessment”, *Fiscal Studies*, 7, 45-68.
- Janssen, M.C.W. (2006), “Marktwerving (column)”, *ESB Dossier*, 4500S, 80.
- Jansson, K. (1993), “Swedish competitive tendering in local and regional public transport”, *Proceedings of the 3rd International Conference on Surface Passenger Transportation, September 23-26, 1993*, Mississauga (Ontario - Canada), 243-262.
- Jansson, K. (2013), “Commercial bus operations in Stockholm – will it work? A simulation analysis”, *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 73-89.
- Jansson, K. and B. Wallin (1991), “Deregulation of Public Transport in Sweden”, *Journal of Transport Economics and Policy*, 25, 97-107.
- Karl, A. (2013), “Legal and organisational developments in the German land passenger transport”, *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 89-104.
- Karl, A. (2018), “Commercial services in German local public transport”, *Research in Transportation Economics*, 69, 319-325.
- Karlafis, M.G. (2008), “Privatisation, Regulation and Competition: A Thirty-year Retrospective on Transit Efficiency”, In: *Privatisation and Regulation of Urban Transit Systems* (Ed.: OECD International Transport Forum), 67-108, OECD Publishing, Paris.
- Karlafis, M.G. and D. Tsamboulas (2012), “Efficiency measurement in public transport: Are findings specification sensitive?”, *Transportation Research Part A: Policy and Practice*, 46, 392-402.
- Kennedy, D. (1995a), “London bus tendering: An overview”, *Transport Reviews*, 15, 253-264.
- Kennedy, D. (1995b), “London Bus Tendering: The Impact on Costs”, *International Review of Applied Economics*, 9, 305-317.
- Kennedy, D. (1996), “London bus tendering: a welfare balance”, *Transport Policy*, 2, 243-249.
- KiM (2012), “Mobiliteitsbalans 2012”, Kennisinstituut voor Mobiliteitsbeleid, Den Haag, 187 pp.
- KiM (2015), “Mobiliteitsbeeld 2015”, Kennisinstituut voor Mobiliteitsbeleid (KiM), ministerie van Infrastructuur en Milieu, Den Haag.
- KOLLframåt (2007), “KOLL framåt Huvudrapport”, VV publikation 2008:33, Vägverket/Banverket, 74 pp.
- Koopmans, C., K. van Buiren and B. Hof (2013), “De kosten van regionaal openbaar vervoer”, SEO Discussion Paper 72, SEO, Amsterdam.
- KPMG (2016), “Local Bus Market Study”, Report to the Department of Transport, KPMG, London, 109 pp.
- KPVV (2007a), “Klantenmonitor”, Kennisplatform Verkeer en Vervoer, Rotterdam, 67 pp.
- KPVV (2007b), “Ontwikkeling van het aanbod en gebruik van OV-diensten vanaf 2000 tot 2006”, Kennisplatform Verkeer en Vervoer, Rotterdam, 31 pp.
- KpVV (2011), “Ontwikkeling openbaar vervoer 2000 - 2009”, Report by NEA (N. in 't Veld), Kennisplatform Verkeer en Vervoer (KpVV), Utrecht, 68 pp.
- KpVV (2019), “Staat van het regionaal openbaar vervoer 2017”, CROW-KpVV, Ede, 54 pp.
- KPVV and inno-V (2007), “Verslag expertbijeenkomst Beter Bestek”, Kennisplatform Verkeer en Vervoer, Rotterdam, 12 pp.
- Krogstad, J.R. and M.D. Leiren (2016), “Gradual change towards re-integration: Insights from local public transport in Norway”, *Public Policy and Administration*.
- Kuiler, H.C. (1949), *Verkeer en vervoer in Nederland schets eener ontwikkeling sinds 1815*, Oosthoek, Utrecht.
- Kumar, A. and O.P. Agarwal (2013), “Institutional Labyrinth: Designing a way out for improving urban transport services: lessons from current practice”, International Bank for Reconstruction and Development/The World Bank Group, Washington, DC, 68 pp.
- Kurosaki, F. and H. Oyauchi (2013), “Deregulation of local bus services in Japan”, *13th International Conference on Competition and Ownership in Land Passenger Transport*,

- Oxford, 15-19 September 2013, Workshop 4, 105-119.
- Laffont, J.J. (1994), "The New Economics of Regulation Ten Years After", *Econometrica*, 62, 507-537.
- Le Ruyet, A. (2017), "La société publique locale, un nouveau mode de gestion des transports publics pour allier maîtrise et simplicité et une nouvelle structure possible pour la gouvernance des transports", *Les défis du développement pour les villes et les régions dans une Europe en mutation*, Athènes, Grèce, 5-7- juillet 2017, European Regional Science Association, Greek section & Association de Science Régionale de Langue Française.
- Lehmann, C. (2000), *Effiziente Koordination von Verkehrsleistungen im Öffentlichen Personennahverkehr: Eine mikroökonomische Analyse*, Beiträge aus dem Institut für Verkehrswissenschaft an der Universität Münster, 150, Vandenhoeck & Ruprecht, Göttingen.
- Leiren, M.D. (2014a), "Reintegration Failure and Outsourcing Upside: Organisation of Public Transport in Norway", *Local Government Studies*, 1-20.
- Leiren, M.D. (2014b), "Scope of Negative Integration: A Comparative Analysis of Post, Public Transport and Port Services", *JCMS: Journal of Common Market Studies*, 1-18.
- Lidestam, H., C. Camen and B. Lidestam (2018), "Evaluation of cost drivers within public bus transports in Sweden", *Research in Transportation Economics*, 69, 157-164.
- Lidestam, H., A. Johansson and R. Pyddoke (2016), "Kontraktformer och deras inverkan på svensk kollektivtrafik, En kunskapsöversikt", K2 Outreach 2016:3, K2, Lund.
- Ljungberg, A. (2013), "The Swedish experiment - results so far and implications for the future", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 119-136.
- Lleras, E.G.C. (2005), "TransMilenio and the traditional transport, an uncertain relationship", *Revista de Ingeniería [online]*, 21, 84-93.
- Longva, F. and O. Osland (2007), "Organising Trust. On the Institutional Underpinning and Erosion of Trust in Different Organisational Forms in Public Transport", In: *Competition and Ownership in Land Passenger Transport, Selected papers from the 9th International Conference (Thredbo 9), Lisbon, September 2005* (Eds.: Macario, R., J. Viegas and D.A. Hensher), 489-500, Elsevier Science, Amsterdam.
- Longva, F. and O. Osland (2010), "Regulating the regulator: The impact of professional procuring bodies on local public transport policy and its effectiveness", *Research in Transportation Economics*, 29, 118-123.
- Longva, F., O. Osland, J.I. Lian, C.H. Sørensen and D.M. Van de Velde (2005), "Måltrettet bruk av konkurranseutsetting av persontransportjenester innen lokal kollektivtransport, jernbane og luftfart", TØI rapport 787/2005 (Synteserapport), Transportøkonomisk Institutt, Oslo, 96 pp.
- Lumpkin, G.T. and G.G. Dess (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academy of Management Review*, 21, 135-172.
- Lutje Schipholt, L., O. Pruis, D. Eerdman, W. Veeneman, M. Woolthuis and H. Nanninga (2006 [unpublished]), "Handreiking besteks- en concessievoorwaarden", Kennisplatform Verkeer en Vervoer, Rotterdam, 66 pp.
- Maasing, U. (2002), "Nettoavtaler i Helsingborg: Flipp, flopp eller både och?", *Trafik Forum*, 5.
- Mackie, P.J. and J.M. Preston (1996), *The Local Bus Market: A Case Study of Regulatory Change*, Avebury, Aldershot.
- Mackie, P.J., J.M. Preston and C.A. Nash (1995), "Bus Deregulation: Ten Years On", *Transport Reviews*, 15, 229-251.
- Maczkovics, C., G. Van Calster and B. Martens (2010), "Study on the implementation of regulation (EC) No. 1370/2007 on public passenger transport services by rail and by road", DLA Piper, Brussels, 184 pp.
- Marcucci, E. (2003), "Local Public Transport Reform in Italy: the case of the city of Rome", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 14-18 September 2003, Keynote paper.
- MARETOPE Research Consortium (2003), "MARETOPE (Managing and Assessing Regulatory Evolution in local public Transport Operations in Europe) Final Report", *Transport Research Fifth Framework Programme Urban Transport*, Brussels, European Commission.
- Mbara, T., S. Dumba and T. Mukwashi (2013), "Convergence or divergence perspective: multi-stakeholder dialogue on formal and informal forms of public transport in Harare, Zimbabwe", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 137-150.
- McKinsey & Co (1990), "Openbaar Vervoer: Naar een Geïntegreerde Regionale Opzet: Samenvatting, Conclusies en Aanbevelingen (Commissie Houben)", McKinsey & Company, Amsterdam, 104 pp.
- Menerault, P. (1993), "Les effets territoriaux d'un outil de financement des transports publics : le versement-transport", *Transports Urbains*, 78, 21-24.
- Ministerie van Verkeer en Waterstaat (1988), "Tweede Structuurschema Verkeer & Vervoer, deel a: beleidsvoornemen", Ministerie van Verkeer & Waterstaat, Den Haag.
- Ministerie van Verkeer en Waterstaat (1991), "Tweede Structuurschema Verkeer & Vervoer, deel e: na parlementaire behandeling vastgestelde pkb", Ministerie van Verkeer & Waterstaat, Den Haag.
- Ministerie van Verkeer en Waterstaat (1996), "Marktwerking in het regionaal openbaar vervoer: implementatienota", Vergaderjaar 1996-1997, 25 088, 2, Tweede Kamer der Staten-Generaal, Den Haag, 255 pp.
- Ministerie van Verkeer en Waterstaat (2004), "Kabinetsstandpunt aanbestedingen stads- en streekvervoer", Ministerie van Verkeer en Waterstaat, Den Haag, 75 pp.
- Mizutani, F., H. Kozumi and N. Matsushima (2009), "Does yardstick regulation really work? Empirical evidence from Japan's rail industry", *Journal of Regulatory Economics*, 36, 308-323.
- Monopolies and Mergers Commission (1982), "Bristol Omnibus Company Ltd., Cheltenham District Traction Company, City of Cardiff District Council, Trent Motor Traction Company Ltd. and West Midlands Passenger Transport Executive - A Report on State Carriage Services

- Supplied by the Undertakings”, HC 442, HMSO, London.
- Mouwen, A. and P. Rietveld (2013), “Does competitive tendering improve customer satisfaction with public transport? A case study for the Netherlands”, *Transportation Research Part A: Policy and Practice*, 51, 29-45.
- Mouwen, A. and J. van Ommeren (2016), “The effect of contract renewal and competitive tendering on public transport costs, subsidies and ridership”, *Transportation Research Part A: Policy and Practice*, 87, 78-89.
- Mouwen, A.M.T. (2016), *The Impact of Public Transport Reform: an Assessment of Deregulation Policies*, PhD, Faculteit der Economische Wetenschappen en Bedrijfskunde, Vrije Universiteit Amsterdam, Amsterdam, 174 pp.
- MuConsult (1999), “Aanbesteding interlokaal openbaar vervoer over de weg - Syntheserapport”, MuConsult, Amersfoort, 46 pp.
- MuConsult (2004a), “Decentralisatie van regionaal spoorvervoer en marktwerking in het regionale spoor-, stads- en streekvervoer”, Rapport voor het Ministerie van Verkeer en Waterstaat, MuConsult, Amersfoort, 77 pp.
- MuConsult (2004b), “Ontwikkeling kostenniveau bij OV-concessies”, MuConsult, Amersfoort.
- Mulley, C. (1983), “The background to bus regulation in the 1930 Road Traffic Act: Economic, political and personal influences in the 1920s”, *Journal of Transport History*, 4, 1-19.
- Nash, C. and M. Wolański (2010), “Workshop report – Benchmarking the outcome of competitive tendering”, *Research in Transportation Economics*, 29, 6-10.
- Nash, C.A. (2003), “Rail regulation and control in Britain - where next?”, *8th International Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, 14-18 September 2003.
- NEA, Erasmus University, TIS and OGM (1998), “Examination of Community Law Relating to the Public Service Obligations and Contracts in the Field of Inland Passenger Transport”, NEA, Rijswijk (NL), 179 (annexes 194) pp.
- NEA, OGM, University Of Oxford, Erasmus University, TIS, PT and ISIS (2003), “Integration and regulatory structures in public transport”, Consulting report to the European Commission (DG-TREN), Final Report, NEA, Rijswijk, 159 pp.
- New Zealand Government (2006), “Public Transport Procurement Legislation Review - Auckland sustainable cities programme”, Consultation Document - May 2006, Auckland, 62 pp.
- Niaounakis, T.K., J.L.T. Blank and W. Veeneman (2016), “Doelmatig aanbesteden. Een empirisch onderzoek naar de relatie tussen aanbestedingskenmerken en de kostendoelmatigheid van concessies in het regionaal openbaar vervoer”, IPSE Studies Research Reeks, Centrum voor Innovaties en Publieke Sector Efficiëntie Studies (IPSE Studies | CAOP, TU Delft en EUR), Den Haag / Delft.
- Nijssink, G. (2002), *Aandacht aanbesteden: Succes- en faalfactoren van aanbesteden in het stads- en streekvervoer*, Afstudeerrapport, NHTV, Breda/Den Haag.
- Norheim, B., K.N. Kjørstad and D.M. Van de Velde (2009), “Incentivbaserte kontrakter og konkurranseutsetting - Strategiske valg for Ruter AS - Dokumentasjonsrapport”, 15b/2009, Urbanet Analyse, Oslo, 136 pp.
- Norheim, B. and F. Longva (2005), “Quality tendering and contracting service design - Comparing the Dutch and Norwegian initiatives”, *9th International Conference on Competition and Ownership in Land Passenger Transport*, Lisbon, 5-9 September 2005.
- Odeck, J., Ø. Sunde and O. Hauge (2003), “Incentives for efficiency in the provision of bus services: comparing subsidy regimes in the small county of Møre and Romsdal”, *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 14-18 September 2003, Keynote paper.
- Office of the Rail Regulator (1998), “New Service Opportunities for Passengers”, ORR, London.
- Official Journal of the European Union (2007), “Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing council regulations (EEC) Nos 1191/69 and 1107/70”, L315/1-13, European Union, Brussels.
- Parker, D. (2009), *The Official History of Privatisation Vol. 1: The formative years 1970–1987*, Routledge, Abingdon.
- Parkhurst, G. and G. Dudley (2004), “Bussing between hegemonies: the dominant ‘frame’ in Oxford’s transport policies”, *Transport Policy*, 11, 1-16.
- Partnersamverkan för en fördubblad kollektivtrafik (2009), “Affärsmodell för fördubblad kollektivtrafik”, Branschgemensam expertgrupp inom Partnersamverkan för Fördubblad kollektivtrafik, Stockholm.
- Partnersamverkan för en fördubblad kollektivtrafik (2011), “Öppet marknadstillträde för kommersiell linjetrafik med tåg, buss och taxi”, Branschgemensam expertgrupp inom Partnersamverkan för en fördubblad kollektivtrafik, Stockholm, 20 pp.
- Petersen, T. (2013), “Subsidised and non-subsidised public transport side by side – a socio-economic analysis of the Arlanda case”, *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013.
- Preston, J. (1991), “Explaining competitive practices in the bus industry: the British experience”, *Transportation Planning and Technology*, 15, 277-294.
- Preston, J. (2003), “The Road to Rio: a brief history of the International Conferences on Competition and Ownership in Land Passenger Transport”, *8th International Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 15-18 September 2003.
- Preston, J. (2008), “Competition in transit markets”, *Research in Transportation Economics*, 23, 75-84.
- Preston, J. (2010), “What’s so funny about peace, love and transport integration?”, *Research in Transportation Economics*, 29, 329-338.
- Preston, J. (2015), “Public transport Demand”, In: *Handbook of Research Methods and Applications in Transport Economics and Policy* (Ed.: Nash, C.), Edward Elgar, Cheltenham.
- Preston, J. and T. Almutairi (2013a), “Evaluating the long term impacts of transport policy: An initial assessment of bus deregulation”, *Research in Transportation Economics*, 39, 208-214.

- Preston, J. and T. Almutairi (2013b), "Evaluating the long term impacts of transport policy: The case of bus deregulation revisited", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 163-177.
- Preston, J. and T. Almutairi (2014), "Evaluating the long term impacts of transport policy: The case of bus deregulation revisited", *Research in Transportation Economics*, 48, 263-269.
- Preston, J. and D.M. Van de Velde (2016), "Workshop 7 report: Market initiative: Regulatory design, implementation and performance", *Research in Transportation Economics*, 59, 343-348.
- Preston, J.M. and D.M. Van de Velde (2002), "Competitive tendering of public transport: Theme A", *Transport reviews*, 22, 336-345.
- Provincie Noord-Brabant (2007), "Onderzoek aanbestedingen Openbaar Vervoer in Noord-Brabant", Onderzoekscommissie Aanbestedingen concessies Stads- en Streekvervoer, Provincie Noord-Brabant, Den Bosch, 58 pp.
- PTEG (2012), "Consultation response on the Competition Commission's report on the local bus services market", PTEG, Leeds, 6 pp.
- PTPF (2003), "Interim Report from July 2002 - June 2003", Public Transport Partnership Forum, Dublin, 13 pp.
- Pucher, J. and S. Kurth (1995), "Verkehrsverbund: the success of regional public transport in Germany, Austria and Switzerland", *Transport Policy*, 2, 279-291.
- Pucher, J., A. Markstedt and I. Hirschman (1983), "Impacts of Subsidies on the Costs of Urban Public Transport", *Journal of Transport Economics and Policy*, 17, 155-176.
- Pyddoke, R. and H. Lindgren (2018), "Outcomes from new contracts with "strong" incentives for increasing ridership in bus transport in Stockholm", *Research in Transportation Economics*.
- QUATTRO Research Consortium (1998), "Quality Approach in Tendering/contracting Urban Public Transport Operations", Office for Official Publications of the European Communities, Luxembourg, 229 pp.
- Raad voor de Leefomgeving en Infrastructuur (2015), "Ruimte voor de regio in Europees beleid", Advies van de Raad, Raad voor de Leefomgeving en Infrastructuur, Den Haag, 135 pp.
- Radbone, I. (1997), "The Competitive Tendering of Public Transport in Adelaide", *Proceedings of the 5th International Conference on Competition and Ownership in Land Passenger Transport*, (Ed.: Preston, J.), Leeds (UK), 27-30 May 1997.
- Reiter, O. (2002), "Utvärdering av nettokostnadsavtal för busstrafik i Helsingborg", Report for Skånetrafiken, Helsingborgs Stad and Swebus samt Storstockholms Lokaltrafik (SL), by Mediator AB Helsingborgs Stad, Helsingborg.
- Rye, T. and A. Wretstrand (2013), "Converging structures? Recent regulatory change in bus-based local public transport in Sweden and England", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013.
- Rye, T. and A. Wretstrand (2014), "Converging structures? Recent regulatory change in bus-based local public transport in Sweden and England", *Research in Transportation Economics*, 48, 24-32.
- Ryus, P., K. Coffel, J. Parks, V. Perk, L. Cherrington, J. Arndt, Y. Nakanishi and A. Gan (2010), "A Methodology for Performance Measurement and Peer Comparison in the Public Transportation Industry", The National Academies Press, Washington, D.C., 110 pp.
- Sakai, H., K. Shoji and Y. Takahashi (2013), "Estimating welfare change from local bus deregulation in Japan", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 177-186.
- Sakai, H. and Y. Takahashi (2013), "Ten years after bus deregulation in Japan: An analysis of institutional changes and cost efficiency", *Research in Transportation Economics*, 39, 215-225.
- SAMOVE (1989), "Kiezen voor Openbaar Vervoer: "OV Maal Twee"", McKinsey & Company, Amsterdam.
- Savage, I.P. (1984), "Unnecessary and Wasteful" Competition in Bus Transport", *Journal of Transport Economics and Policy*, 18, 303-309.
- Schaaffkamp, C. (2018), "Do direct awards lead to better public transport?", *Research in Transportation Economics*, 69, 218-226.
- Schiefelbusch, M. (2013), "Past and Future Regulation of Interurban Coach Services in Germany", *Journal of Transport Economics & Policy*, 47, 299-305.
- SDG (2002), "Regulation of bus services outside the Greater Dublin Area", Report prepared for the Department of Transport (Ireland) by Steer Davies Gleave in association with Fitzpatrick Associates, London.
- SDG (2016), "Study on economic and financial effects of the implementation of regulation 1370/2007 on public passenger transport services", Steer Davies Gleave / European Commission, London / Brussels, 444 pp.
- Sergejew, A. (2007), "Review of regulation of commercial urban bus and ferry services in New Zealand", *10th International Conference on Competition and Ownership in Land Passenger Transport*, Hamilton Island, August 2007, Workshop B.
- SFS (2010), "Lag om kollektivtrafik", SFS 2010:1065, Svensk författningssamling, Stockholm, 7 pp.
- Shleifer, A. (1985), "A Theory of Yardstick Competition", *Rand Journal of Economics*, 16, 319-327.
- Simpson, B.J. (1996), "Deregulation and privatization: the British local bus industry following the transport act 1985", *Transport Reviews*, 16, 213-223.
- SLTF (2002), "Public transport in Sweden – co-ordination and competition", Svenska Lokaltrafik Föreningen, Stockholm, 38 pp.
- Sollí, H., M.B. Resell and M.S. Haugsbø (2015), "Sammenhengen mellom strategiske mål og organisering av kollektivtrafikken - En litteraturstudie", Rapport 68/2015, Urbanet Analyse, Oslo, 66 pp.
- SOU (2009), "En ny kollektivtrafiklag - Delbetänkande av Utredningen om en ny kollektivtrafiklag", SOU 2009:39, Statens Offentliga Utredningar, Stockholm.
- Stålnér, B. and H. Leufstadius (2015), "Processutvärdering av arbete med det öppna marknadsstillträdet i kollektivtrafiken i Västra Götaland", Rapport för Trafikanalys, Sweco, 28 pp.
- Stanley, J. (2007), "Workshop B report: Creating and maintaining trusting partnerships", In: *Competition and Ownership in Land Passenger Transport, Selected papers*

- from the 9th International Conference (Thredbo 9), Lisbon, September 2005 (Eds.: Macario, R., J. Viegas and D.A. Hensher), 423-436, Elsevier Science, Amsterdam.
- Stanley, J., J. Betts and S. Lucas (2007), "Tactical Level Partnerships; a Context of Trust for Successful Operation", In: *Competition and Ownership in Land Passenger Transport, Selected papers from the 9th International Conference (Thredbo 9), Lisbon, September 2005* (Eds.: Macario, R., J. Viegas and D.A. Hensher), 189-212 Elsevier Science, Amsterdam.
- Stanley, J. and D.A. Hensher (2008), "Delivering trusting partnerships for route bus services: A Melbourne case study", *Transportation Research Part A: Policy and Practice*, 42, 1295-1301.
- Stanley, J. and D.M. Van de Velde (2008), "Risk and reward in public transport contracting", *Research in Transportation Economics*, 22, 20-25.
- Stigler, G.J. (1971), "Theory of Economic Regulation", *Bell Journal of Economics and Management Science*, 2, 3-21.
- Stoelinga, A. and G. Hermans (2005), "Encouraging results of tendering in Dutch public transport", *9th International Conference on Competition and Ownership in Land Passenger Transport*, Lisbon, 5-9 September 2005.
- Teeuwen, R.J.H. (1989), "Een jaar wet personenvervoer", *Tijdschrift Vervoerswetenschap*, 25, 18-30.
- TfL (2003), "Central London Congestion Charging Scheme - Three Months On", Transport for London, Congestion Charging Division, London.
- TfL (2015), "London's Bus Contracting and Tendering Process", Transport for London, London, 25 pp.
- Thompson, D. and A. Whitfield (1995), "Express Coaching: Privatization, Incumbent Advantage, and the Competitive Process", In: *The regulatory challenge* (Eds.: Bishop, M., J. Kay and C.-P.e. Mayer), 18-42, Oxford University Press, Oxford and New York.
- Tomes, Z.k., M. Kvizda, T.s. Nigrin and D. Seidenglanz (2013), "Competition in the railway passenger market in the Czech Republic", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 187-198.
- Toner, J., A. Smith, S. Shen and P. Wheat (2010), "Review of Bus Profitability in England - Econometric Evidence on Bus Costs: Final Report", Institute for Transport Studies, University of Leeds, Leeds, 34 pp.
- Trafikanalys (2012), "Utvärdering av marknadsöppningar i kollektivtrafiken - rapport 2012", Rapport 2012:13, Trafikanalys, Stockholm.
- Trafikanalys (2013a), "De första regionala trafikförsörjningsprogrammen – en granskning med fokus på möjligheter för kommersiell kollektivtrafik", PM 2013:6, Trafikanalys, Stockholm.
- Trafikanalys (2013b), *Ny kommersiell trafik under första kvartalet 2013*, <http://www.trafa.se/sv/Projekt/Regeringsuppdrag/Marknadsoppningar-i-kollektivtrafiken/Ny-kommersiell-trafik-under-forsta-kvartalet-2013/>, 14-05-2013.
- Trafikanalys (2014), "En förbättrad kollektivtrafik? Utvärdering av två reformer", Rapport 2014:13, Trafikanalys, Stockholm.
- Tweede Kamer (1994), "Kabinettsstandpunt 'Een nieuw bestuurlijk perspectief voor een marktgericht regionaal openbaar vervoer' bij de adviezen van de Commissie Brox Openbaar Vervoer", 23 645 - 1, Sdu Uitgeverij, Den Haag.
- Tweede Kamer (1995), "Kabinettsstandpunt bij het advies 'Marktwerking in het openbaar vervoer' van de Commissie Brox Openbaar Vervoer", Sdu Uitgeverij, Den Haag.
- Tweede Kamer (1996), "Marktwerking in het regionaal openbaar vervoer", Vergaderjaar 1996-1997, 25 088, 2, Tweede Kamer der Staten-Generaal, Den Haag.
- Tweede Kamer (1999), "Nieuwe regels omtrent het openbaar vervoer en besloten busvervoer (Wet personenvervoer 2000)", Memorie van toelichting", Vergaderjaar 1998-1999, 26 456, 3, Tweede Kamer der Staten-Generaal, Den Haag.
- Tweede Kamer (2004), "Kabinettsstandpunt Aanbestedingen Stads- en Streekvervoer", 23 645, nr. 82, bijl. 2, Tweede Kamer, Den Haag.
- Tweede Kamer (2006), "Kabinettsstandpunt Evaluatie Wet Personenvervoer 2000", Vergaderjaar 2005-2006, 30 421, nr. 1, Tweede Kamer der Staten-Generaal, Den Haag.
- Tweede Kamer (2007), "Brief van de Minister van Verkeer en Waterstaat, Evaluatie Wet Personenvervoer 2000", Vergaderjaar 2006-2007, 30 421, nr. 9, Tweede Kamer der Staten-Generaal, Den Haag.
- Tye, W.B. (1987), "Competitive Access: A Comparative Industry Approach to the Essential Facility Doctrine.", *Energy law Journal*, 8, 337-379.
- UITP (2011), "A Vision for Integrated Urban Mobility: Setting up your Transport Authority", UITP, Brussels, 13 pp.
- UITP (2015), "Organisation and major players of short distance public transport", UITP, Brussels, 160 pp.
- Utsunomiya, K. (2013), "Local bus services in Japan: price elasticity and public transport policy", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 199-210.
- van Buiren, K., M. Gerritsen, L. van Leussink and J. van der Voort (2012), "Het effect van aanbesteden op de kwaliteit van het openbaar vervoer", *TPEdigitaal*, 6, 63-74.
- Van de Velde, D. and F. Savelberg (2016), "Competitive Tendering in Local and Regional Public Transport in the Netherlands", Discussion Paper No. 2016-12, International Transport Forum, OECD, Paris, 20 pp.
- Van de Velde, D., K. Thoresson, A. Wretstrand and A. Paulsson (2019), "Public public transport: Why some cities choose to move away from competitive tendering of public transport", *Paper presented at the 16th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo 16)*, Singapore, 25-30 August 2019.
- Van de Velde, D.M. (1992a), "Classifying regulatory structures of public transport", *Paper presented at the 6th World Conference on Transport Research*, Lyon, June 29 - July 3, 1992.
- Van de Velde, D.M. (1992b), "Naar een betere organisatie van het openbaar vervoer in Nederland: wat kunnen we leren van het buitenland?", *Tijdschrift Vervoerswetenschap*, 28, 296-318.
- Van de Velde, D.M. (1995a), "Aanbesteding in het Openbaar Vervoer", *Economisch Statistische Berichten*, November 1995, 1054-1057.
- Van de Velde, D.M. (1995b), "De zoektocht naar optimale aanbestedingen en contracten in het openbaar busvervoer", *Tijdschrift Vervoerswetenschap*, 31, 371-380.

- Van de Velde, D.M. (1995c), "The experience of the Netherlands: Towards competition", *Proceedings of the 4th International Conference on Competition and Ownership in Land Passenger Transport*, Rotorua (NZ), July 1995.
- Van de Velde, D.M. (1995d), "'Het Rotterdamse openbaar vervoer over 10 jaar': visie van een econoom", *TRAIL Colloquium*, Delft, 25 april 1995, 12 pp.
- Van de Velde, D.M. (1996a), "Aanbestedingen in het openbaar vervoer in Zweden", *Conferentie B&A/Goudappel Coffeng*, Utrecht, 6 november 1996, 14 pp.
- Van de Velde, D.M. (1996b), "York versus Den Bosch: Welk OV-systeem biedt het meeste waar voor zijn geld?", *Proceedings of the Colloquium Vervoersplanologisch Speurwerk*, (Eds.: Mouwen, A.M.T., N. Kalfs and B. Govers), Rotterdam, 28-29 November 1996, 1139-1156.
- Van de Velde, D.M. (1997a), "Entrepreneurship and Tendering in local public transport services", *Proceedings of the 5th International Conference on Competition and Ownership in Land Passenger Transport*, (Ed.: Preston, J.), Leeds (UK), May 1997.
- Van de Velde, D.M. (1997b), "The future of public transport in the Netherlands: Stimulating entrepreneurship?", *Paper presented at the conference "Institutions, Markets and (Economic) Performance: deregulation and its consequences"*, Utrecht, 11-12 December 1997, University of Utrecht.
- Van de Velde, D.M. (1997c), "ISOTOPE - WP4 City Reports - Aims and instructions for the interviews", Isotope Research Consortium/Erasmus University, Brussels/Rotterdam, 16 pp.
- Van de Velde, D.M. (1997d), "ISOTOPE - WP4 City Reports - Final report", Isotope Research Consortium/Erasmus University, Brussels/Rotterdam, 207 pp.
- Van de Velde, D.M. (1997e), "Public Transport in Copenhagen", Isotope Research Consortium/Erasmus University Rotterdam, Brussels/Rotterdam.
- Van de Velde, D.M. (1997f), "Public Transport in the Malmöhus Region", Isotope Research Consortium/Erasmus University Rotterdam, Brussels/Rotterdam.
- Van de Velde, D.M. (1998), "Demand revelation and social function in the concessioning of passenger transport services", *Paper presented at the 8th World Conference on Transport Research*, Antwerp (Belgium), 12-17 July.
- Van de Velde, D.M. (1999), "Organisational forms and entrepreneurship in public transport (Part 1: classifying organisational forms)", *Transport Policy*, 6, 147-157.
- Van de Velde, D.M. (2000), "MARETOPE - D1 - Reference Framework and Harmonisation of Concepts", Maretope Research Consortium/Erasmus University, Lisbon/Rotterdam, 46 pp.
- Van de Velde, D.M. (2001), "The evolution of organisational forms in European public transport", *7th Conference on Competition and Ownership in Land Passenger Transport*, Molde (Norway), 25-28 June 2001.
- Van de Velde, D.M. (2003), "Regulation and competition in the European land passenger industry: some recent evolutions", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 14-18 September 2003, Keynote paper.
- Van de Velde, D.M. (2004), "Reference framework for analysing targeted competitive tendering in public transport", TØI Report 730/2004, Transportøkonomisk institutt, Oslo.
- Van de Velde, D.M. (2005a), "Coordination, integration, and transport sector regulation", In: *Handbook of Transport Strategy, Policy & Institutions* (Eds.: Hensher, D.A. and K. Button), Handbooks in Transport, Vol. 6, 115-134, Elsevier, Amsterdam.
- Van de Velde, D.M. (2005b), "The Evolution of organisational forms in European public transport during the last 15 years", In: *Competition and Ownership in Land Passenger Transport, Selected Papers from the 8th International Conference (Thredbo 8)*, Rio De Janeiro, September 2003 (Ed.: Hensher, D.A.), 481-513, Elsevier, Amsterdam.
- Van de Velde, D.M. (2005c), "Regulation and competition in the European land transport industry: recent evolutions (keynote paper)", *9th International Conference on Competition and Ownership in Land Passenger Transport*, (Ed.: Hensher, D.A.), Lisbon (Portugal), 4-9 September 2005.
- Van de Velde, D.M. (2006), "Geprivatiseerde centrale planning in het OV", *ESB Dossier*, 4500S, 30-34.
- Van de Velde, D.M. (2007), "Regulation and competition in the European land transport industry: recent evolutions", In: *Competition and Ownership in Land Passenger Transport, Selected papers from the 9th International Conference (Thredbo 9)*, Lisbon, September 2005 (Eds.: Macario, R., J. Viegas and D.A. Hensher), 81-94, Elsevier Science, Amsterdam.
- Van de Velde, D.M. (2008), "A new regulation for the European public transport", *Research in Transportation Economics*, 22, 78-84.
- Van de Velde, D.M. (2010), "Long-distance bus services in Europe: concessions or free market?", In: *The Future for Interurban Passenger Transport - Bringing citizens closer together*, 263-286, OECD/ITF, Paris.
- Van de Velde, D.M. (2011), "Ontwerp van drie kansrijke scenario's voor de Zuidvleugel van de Randstad", Rapport voor de RET, inno-V, Amsterdam.
- Van de Velde, D.M. (2012a), "Competitive tendering of urban public transport: a disappointing success?", *2nd European Urban Transport Regulation Forum Role, Function and Status of Transport Authorities*, (Ed.: Finger, M.), European University Institute, Florence School of Regulation, 21 May 2012.
- van de Velde, D.M. (2012b), "Intermodality, innovation, entrepreneurship and new modes", *1st European Intermodal Transport Regulation Forum*, Florence, 7 December 2012, Florence School of Regulation.
- Van de Velde, D.M. (2013a), "Deregulation of local transport: how to make it work?", *60th UITP World Congress*, Geneva (Switzerland), 27-30 May 2013, 11 pages.
- Van de Velde, D.M. (2013b), "Long-distance coach services in Europe", In: *Regulating transport in Europe* (Eds.: Finger, M. and T. Holvad), Chap. 5, 115-139, Edward Elgar.
- Van de Velde, D.M. (2014), "Market initiative regimes in public transport in Europe: Recent developments", *Research in Transportation Economics*, 48, 33-40.
- Van de Velde, D.M. (2015a), "Contracting, quality and performance", *Expert workshop on Regulation 1370/2007: economic and financial focus, best practices and lessons learned*, (Ed.: Steer Davies Gleave), Brussels, 13 May 2015, European

- Commission.
- Van de Velde, D.M. (2015b), "European Railway Reforms: Unbundling and the Need for Coordination", In: *Rail economics, policy and regulation in Europe* (Eds.: Finger, M., T. Holvad and P. Messulam), 52-88, Edward Elgar.
- Van de Velde, D.M. (2015c), "Local and regional public transport", In: *Handbook Of Research Methods And Applications In Transport Economics And Policy* (Ed.: Nash, C.), Handbooks of Research Methods and Applications series, 345-358, Edward Elgar, Cheltenham.
- Van de Velde, D.M. (2016a), "Keynote address: The public transport market: Challenges in the future governance of public transport", *K2 Conference: The Way Forward*, Stockholm, Sweden, 5-6 October 2016, 15, Sweden's national centre for research and education on public transport (K2).
- Van de Velde, D.M. (2016b), "Local public transport", In: *The Routledge Companion to Network Industries* (Eds.: Finger, M. and C. Jaag), Chap. 18, 241-253, Routledge, Oxford.
- Van de Velde, D.M. (2016c), "Mise en concurrence des services réguliers sous-traités. Etude de cas : Movia - Copenhague (Danemark)", Note interne pour la SRWT (Namur), inno-V (Amsterdam) & KCW (Berlin), 28 pp.
- Van de Velde, D.M. (2017), "European markets and relationships between actors: time for a paradigm change", In: *Public Transport Trends* (Ed.: UITP), p. 65, International Public Transport Association (UITP), Brussels.
- Van de Velde, D.M. and K. Augustin (2014), "Workshop 4 Report: Governance, ownership and competition in deregulated public transport markets", *Research in Transportation Economics*, 48, 237-244.
- Van de Velde, D.M. and A. Beck (2010), "Workshop report - Beyond competitive tendering", *Research in Transportation Economics*, 29, 145-151.
- Van de Velde, D.M., A. Beck, J.-C. Van Elburg and K.-H. Terschüren (2008a), "Contracting in urban public transport", Report for the European Commission - DG TREN, realised by inno-V, KCW, RebelGroup, NEA, TØI, SDG, TIS.PT, Brussels, 123 pp.
- Van de Velde, D.M., A. Beck, J.-C. Van Elburg and K.-H. Terschüren (2008b), "Contracting in urban public transport (Appendix: contract tables)", Report for the European Commission - DG TREN, realised by inno-V, KCW, RebelGroup, NEA, TØI, SDG, TIS.PT, Brussels, 96 pp.
- Van de Velde, D.M. and D. Eerdmans (2016), "Devolution, integration and franchising - Local public transport in the Netherlands", Report for the Urban Transport Group (Leeds, Great Britain), inno-V, Amsterdam, 46 pp.
- Van de Velde, D.M. and D.A. Eerdmans (2013), "Modelbestek van de toekomst, op weg naar meer flexibiliteit en innovatie in de contractvormen in het openbaar vervoer", Kennisplatform Verkeer en Vervoer (KpVV), Utrecht, 56 pp.
- Van de Velde, D.M., D.A. Eerdmans and W.W. Veeneman (2013), "The Emergence of Hybrid Service Design Regimes in Dutch Public Transport—Is Co-Operation between Authority and Operator the Holy Grail?", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, 15, University of Oxford / University of Sydney.
- Van de Velde, D.M., P.B.A. Hilferink and L. Lutje Schipholt (2005), "The evolution of tactical tendering in the Netherlands", *9th International Conference on Competition and Ownership in Land Passenger Transport*, (Ed.: Hensher, D.A.), Lisbon (Portugal), 4-9 September 2005.
- Van de Velde, D.M. and A. Karl (2018), "Workshop 3 report: Market initiative regimes in bus, coach and rail: Recent developments, threats, developing paradigms and regulatory needs", *Research in Transportation Economics*, 69, 254-259.
- Van de Velde, D.M. and R. Leijenaar (2001), "Towards innovation in public transport tendering in the Netherlands", *7th Conference on Competition and Ownership in Land Passenger Transport*, Molde (Norway), 25-28 June 2001.
- Van de Velde, D.M., L. Lutje Schipholt and W.W. Veeneman (2006a), "The evolution of tactical tendering in the Netherlands", *Colloquium Vervoerplanologisch Speurwerk*, Amsterdam, 23-24 November 2006.
- Van de Velde, D.M., L.R. Lutje Schipholt and W.W. Veeneman (2007), "Aanbestedingen in nederland: centrale planning of functionele specificaties?", *Colloquium Vervoerplanologisch Speurwerk*, Antwerpen, 22-23 November 2007, 1607-1624.
- Van de Velde, D.M., C. Nash, A. Smith, F. Mizutani, S. Uranishi, M. Lijesen and F. Zschoche (2012), "EVES-Rail - Economic effects of Vertical Separation in the railway sector", Report for CER - Community of European Railway and Infrastructure Companies, by inno-V (Amsterdam) in cooperation with University of Leeds - ITS, Kobe University, VU Amsterdam University and civity management consultants, Amsterdam/Brussels, 188 pp.
- Van de Velde, D.M. and J. Preston (2013), "Workshop 3B: Governance, ownership and competition issues in deregulated (free market) public transport: Lessons that can be learnt from developed and developing economies", *Research in Transportation Economics*, 39, 202-207.
- Van de Velde, D.M. and E.A.M. Puijmbloom (2003), "First experiences with tendering at the tactical level (service design) in Dutch public transport", *8th Conference on Competition and Ownership in Land Passenger Transport*, Rio de Janeiro, Brazil, 14-18 September 2003.
- Van de Velde, D.M. and E.A.M. Puijmbloom (2005), "First experiences with tendering at the tactical level (service design) in Dutch public transport", In: *Competition and Ownership in Land Passenger Transport* (Ed.: Hensher, D.A.), 213-237, Elsevier, Amsterdam.
- Van de Velde, D.M., E. Röntgen and S.C.E. van Kooij (2011), "Inventarisatie Gunning OV in de EU", inno-V, Amsterdam, 59 pp.
- Van de Velde, D.M. and L.I.E. Sleuwaegen (1995), "Public Transport Service Contracts: Looking for the Optimum", *World Conference on Transport Research*, Sydney, July 1995.
- Van de Velde, D.M. and L.I.E. Sleuwaegen (1997), "Public Transport Service Contracts: Searching for the Optimum", *International Journal of Transport Economics*, 24, 53-74.
- Van de Velde, D.M. and P.A. van Reeve (1996), "Perspectief op aanbesteding in het openbaar vervoer", Research report for the Dutch Ministry of Transport and Water Management, Erasmus Universiteit Rotterdam, Rotterdam, 146 pp.
- van de Velde, D.M., P.A. van Reeve and L.I.E. Sleuwaegen (1996), "Marktwerking in het openbaar vervoer. Een

- verkenning”, Onderzoekscentrum Financieel Economisch Beleid (OCFEB), Ministerie van Economische Zaken, Den Haag, 114 pp.
- Van de Velde, D.M. and W.W. Veeneman (1995), “Beste Burgemeester, waar gaat deze lijn heen?”, *Proceedings of the Colloquium Vervoersplanologisch Speurwerk*, (Eds.: Meurs, H.J. and E.J. Verroen), Rotterdam, 23-24 November, 283-332.
- Van de Velde, D.M. and W.W. Veeneman (2010), “Reforming Public Transport throughout the World: Editorial: Thredbo 11 workshops”, *Research in Transportation Economics*, 29, 2-5.
- Van de Velde, D.M., W.W. Veeneman and L. Lutje Schipholt (2006b), “Service design in competitive tendering in the Netherlands: shifts between authorities and operators”, *European Transport Conference*, Strasbourg, 18-20 September 2006.
- Van de Velde, D.M., W.W. Veeneman and L.R. Lutje Schipholt (2008c), “Competitive tendering in The Netherlands: Central planning vs. functional specifications”, *Transportation Research Part A: Policy and Practice*, 42, 1152-1162.
- Van de Velde, D.M. and I. Wallis (2013), “‘Regulated deregulation’ of local bus services—An appraisal of international developments”, *Research in Transportation Economics*, 39, 21-33.
- Van de Velde, D.M., M. Wessel and D. Eerdmans (2009), “Mot en framgångsrik avreglering (Towards a successful deregulation)”, In: *En ny kollektivtrafiklag - Delbetänkande av Utredningen om en ny kollektivtrafiklag (A new public transport law - Interim report of the investigation on a new public transport law)*, Vol. 2, p. 201-267, Statens Offentliga Utredningar, Stockholm.
- Van de Velde, D.M. and J.D.M. Westeneng (1993), “Japan, Hong Kong, Singapore: Regulering van het openbaar vervoer: Adequat?”, Erasmus Universiteit Rotterdam, Rotterdam, 126 pp.
- Van de Velde, D.M. and J.D.M. Westeneng (1994), “Aanbestedingen en Marktstructuren in het openbaar vervoer in het buitenland”, Achtergrondstudies, Commissie Brox Openbaar Vervoer, Utrecht, 197 pp.
- van Delden, A.T. (1992), “Tussen plan en markt”, *Tijdschrift Vervoerswetenschap*, 28, 271-283.
- Van der Loop, H., P. Bakker, F. Savelberg, M. Kouwenhoven and E. Helder (2019), “Verklaring van de ontwikkeling van het ov-gebruik in Nederland over 2005-2016”, Kennisinstituut voor mobiliteitsbeleid, Ministerie van Infrastructuur en Waterstaat, Den Haag, 54 pp.
- van Dijk, H.P. (1995), “Aanbestedingen in het openbaar vervoer in Nederland: De eerste ervaringen”, *Paper presented at the post-academic course on Entrepreneurship in public transport*, (Ed.: Van de Velde, D.), Delft, 7-8 June 1995, University of Delft.
- van Kesteren, G. (2016), “Factsheet vervoeromvang regionaal ov 2014 en 2015”, K-D038, CROW-KpVV, Ede.
- van Kooij, S.C.E., D. Eerdmans and M. Sloot (2009), “Toolbox Beter Bestek”, KpVV, Utrecht, 214 pp.
- Veeneman, W. (2010), “Changing public transport governance in Dutch metropolises: To tender or not to tender”, *Research in Transportation Economics*, 29, 195-203.
- Veeneman, W. (2016), “Public transport governance in the Netherlands: More recent developments”, *Research in Transportation Economics*, 59, 116-122.
- Veeneman, W. (2018), “Developments in public transport governance in the Netherlands; the maturing of tendering”, *Research in Transportation Economics*.
- Veeneman, W. and A. Smith (2014), “Workshop 1 Report: Developing an effective performance regime”, *Research in Transportation Economics*, 48, 62-66.
- Veeneman, W. and D.M. Van de Velde (2014), “Developments in public transport governance in the Netherlands: A brief history and recent developments”, *Research in Transportation Economics*, 48, 41-47.
- Veeneman, W., J. Wilschut, T. Urlings, J. Blank and D.M. Van de Velde (2014), “Efficient frontier analysis of Dutch public transport tendering: A first analysis”, *Research in Transportation Economics*, 48, 101-108.
- Veeneman, W.W., L. Lutje Schipholt and D.M. Van de Velde (2006a), “De ademende concessie: van goed aanbesteden naar goed beheren van concessies in het openbaar vervoer”, *Colloquium Vervoersplanologisch Speurwerk*, Amsterdam, 23-24 November 2006.
- Veeneman, W.W., D.M. Van de Velde and L. Lutje Schipholt (2006b), “The value of bus and train: public values in public transport”, *European Transport Conference*, Strasbourg, 18-20 September 2006.
- Veeneman, W.W., D.M. Van de Velde and L. Lutje Schipholt (2007a), “Competitive tendering in the Netherlands: 6 lessons from 6 years of tendering”, *European Transport Conference 2007*, Noordwijkerhout, 17-19 October 2007.
- Veeneman, W.W., D.M. Van de Velde and L. Lutje Schipholt (2007b), “Scheiden van de markt? Een analyse van de effecten van aanbesteding op het Nederlandse openbaar vervoer”, *Colloquium Vervoersplanologisch Speurwerk*, Antwerpen, 22-23 November 2007, 1497-1508.
- Viennet, R. (2013), *Les autocars longue distance ont trouvé leur clientèle*, www.mobilicites.com, 15 juillet 2013.
- Vigren, A. (2016), “Cost efficiency in Swedish public transport”, *Research in Transportation Economics*, 59, 123-132.
- Vigren, A. (2017), “Competition in Public Transport: Essays on competitive tendering and open-access competition in Sweden”, PhD Thesis, KTH Royal Institute of Technology, Stockholm.
- Vigren, A. and R. Pyddoke (2019), “The impact on bus ridership of passenger incentive contracts in Swedish public transport”, K2 Working paper 2019:3, K2 - The Swedish Knowledge Centre for Public Transport, Lund.
- Wallis, I. (2019), “Value for Money in Procurement of Urban Bus Services - Competitive Tendering versus Negotiated Contracts: Recent New Zealand Experience”, *Paper presented at the 16th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo 16)*, Singapore, 25-30 August 2019.
- Wallis, I.P. (2016), “Demand and service impacts of competition for the market – Australian urban bus case studies”, *Research in Transportation Economics*, 59, 330-342.
- Wallis, I.P. and D.J. Bray (2014), “The contracting of urban bus services – Recent Australian developments”, *Research in Transportation Economics*, 48, 48-61.
- Walters, J. (2013), “Thredbo 12 workshops”, *Research in*

- Transportation Economics*, 39, 3-7.
- Wang, H. and D. Zhu (2013), "Public Owner with Business Delivery Mode: The Choice for Reversing Privatization (国有民营模式: 公共服务“逆市场化”的选择 (王欢明) (诸大建)", *Journal of Northeastern University (Social Science)* (东北大学学报 (社会科学版)), 15, 68-74.
- Wang, H., D. Zhu and J. Koppenjan (2014), "A research on relations between governance modes and efficiency in China's urban bus transport service", *Review of Managerial Science*.
- Warburton, S. (2015), "The PTEs 1975-1985 - An Analysis of Performance", TAS, Long Preston, 112 pp.
- Wegelin, P. (2018), "Is the mere threat enough? An empirical analysis about competitive tendering as a threat and cost efficiency in public bus transportation", *Research in Transportation Economics*.
- Weiß, H.-J. (1998), "Koordinationsprobleme im ÖPNV: Die Rolle der Verkehrsverbände im Wettbewerb", In: *Die zukünftige Rolle der Kommunen bei Verkehrs- und Versorgungsnetzen*, Schriftenreihe der Deutschen Verkehrswissenschaftlichen Gesellschaft e. V., Vol. B 213, 150-172, Bergisch Gladbach.
- Werner, J. (1998), *Nach der Regionalisierung - der Nahverkehr im Wettbewerb: rechtlicher Rahmen, Verantwortlichkeiten, Gestaltungsoptionen*, Verkehr Spezial - Band 4 (Dissertation, 1997, Universität Bayreuth, Rechts- und Wirtschaftswissenschaftliche Fakultät), Dortmunder Vertrieb für Bau- und Planungsliteratur, Dortmund.
- Westin, P. (2009), "Review of public transport in Sweden: Implementation of the passenger rail market and plans for the local public transport market", *Proceedings of the 11th International Conference on Competition and Ownership in Land Passenger Transport*, (Eds.: van de Velde, D.M. and W.W. Veeneman), Delft (The Netherlands), 20-25 September 2009, Plenary paper, Next Generation Infrastructures Foundation, Delft.
- White, P. (2013a), "As assessment of the competition commission report and subsequent outcomes", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, 211-227.
- White, P. (2013b), "An assessment of the Competition Commission report and subsequent outcomes", *13th International Conference on Competition and Ownership in Land Passenger Transport*, Oxford, 15-19 September 2013, Workshop 4, 211-226.
- White, P. (2014), "An assessment of the Competition Commission report and subsequent outcomes", *Research in Transportation Economics*, 48, 277-285.
- White, P. (2018), "Prospects in Britain in the light of the Bus Services Act 2017", *Research in Transportation Economics*.
- White, P. and D. Robbins (2012), "Long-term development of express coach services in Britain", *Research in Transportation Economics*, 36, 30-38.
- White, P. and S. Tough (1995), "Alternative Tendering Systems and Deregulation in Britain", *Journal of Transport Economics and Policy*, 29, 275-289.
- White, P.R. (1990), "Bus Deregulation: A Welfare Balance Sheet", *Journal of Transport Economics and Policy*, 24, 311-332.
- White, P.R. (1997), "What conclusions can be drawn about bus deregulation in Britain?", *Transport Reviews*, 17, 1-16.
- White, P.R. (2010), "The conflict between competition policy and the wider role of the local bus industry in Britain", *Research in Transportation Economics*, 29, 152-158.
- Wilber, C.K. and R.S. Harrison (1978), "The Methodological Basis of Institutional Economics: Pattern Model, Storytelling, and Holism", *Journal of Economic Issues*, 12, 61-89.
- Williamson, O.E. (1991), "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives", *Administrative Science Quarterly*, 36, 269-296.
- Williamson, O.E. (1998), "Transaction cost economics: how it works; where it is headed", *De Economist*, 146, 23-58.
- Williamson, O.E. (2000), "The New Institutional Economics: Taking Stock, Looking Ahead", *Journal of Economic Literature*, 38, 595-613.
- Wolf, C. (1993), *Markets or Governments: Choosing between Imperfect Alternatives*, The MIT Press, Cambridge, MA.
- Wong, Y.Z. and D.A. Hensher (2018), "The Thredbo story: A journey of competition and ownership in land passenger transport", *Research in Transportation Economics*, 69, 9-22.
- World Bank (2014), "Third Report on the metropolitan transport authority's operational procedures, staffing plan, code of conduct", Advisory Services, Assistance to the Ministry of Transport to Strengthen Strategic Planning in the Transport Sector, World Bank Group, Washington, 55 pp.
- Yvrande-Billon, A. (2006), "The attribution process of delegation contracts in the French urban public transport sector: Why competitive tendering is a myth", *Annals of Public and Cooperative Economics*, 77, 453-478.
- Yvrande-Billon, A. (2009), "Appels d'offres concurrentiels et avantage au sortant, une étude empirique du secteur du transport public urbain en France", *Revue d'économie industrielle*, 127, 113-130.

Summary

This thesis finds its origins in the debates that developed in the 1980s in Western Europe as to the role competition and private entrepreneurship should play in the provision of public transport services. At the time, our observation of the debates showed there was widespread misunderstanding about the institutional changes put in place and the results obtained. Against that background, our research in the years leading up to this thesis centred around gaining a deeper understanding of the variety of institutional frameworks that can exist in the public transport sector and on how these develop, with as main focus the growing and evolving role of ‘competition’ as an institutional feature that can take many guises. This thesis focusses on the following three main research questions:

- ▶ What are the main institutional frameworks that have arisen in the European public transport sector since the pressure for a wider usage of ‘competition’ appeared in the 1980s?
- ▶ How have these institutional frameworks fared since? In particular, what developments can be observed and what can be said about them?
- ▶ What are the main resulting policy challenges and options?

In short, our research has looked at a many-sided interactive picture of institutions and actors that shape competition in local and regional transport services. It aimed to explore and understand a complex dynamic phenomenon, i.e. the variety of competition-based arrangements in context specific situations of local and regional transport in Europe. Whether competition, as an institutional feature that can be used for the provision of public transport, is to be preferred above a regime where competition would be absent is a question that is not directly addressed in this thesis. Rather, the focus of this research has been on inventorying, classifying and understanding institutional frameworks that feature competition in one of its guises, on describing and analysing its introduction and functioning, and on bringing more clarity and understanding in the complex set of changes that can be observed in these institutional setups and their functioning over the period studied.

Our research is located in the field of institutional economics and we have adopted Williamson’s four-layered theoretical framework of economics of institutions (Williamson, 1998; 2000) to cover and distinguish between the wide range of issues that are relevant to our research. Williamson’s approach, however, is of a comparative static nature, whereas we take the view that the institutional framework is not fully exogenous, that institutions evolve, and that the context and experience of the actors involved are determinant for subsequent institutional developments. Our main focus is on the processes that lead to the introduction and further evolution of institutions once implemented. The theory that fits such a process perspective is embedded into Original Institutional Economics, where the economy is seen as an evolving system, in which actors of a different nature (political, eco-

conomic, social) operate with different interests and capabilities and with different degrees of power (Wilber and Harrison, 1978). This means that our perspective on the nature of economic reality is one of change and the central research aim, as said, is about understanding this change. Our perspective can be characterised as explorative, aiming at understanding and not at explaining and predicting, which also implies that our research is not based on *ceteris paribus* analyses with quantifications and testing of theoretical hypotheses based on large numbers of observations. As our research is interested in understanding the dynamics of institutional frameworks, we instead aim at providing an accurate description of institutional frameworks in specific contexts and how these develop over time. We also aim at categorizing, at creating typologies that allow us to move up in an inductive way from the level of case descriptions to a more general level, and that can guide researchers and policy makers. Such research requires conducting process analyses within which numerous factors of a varied nature can potentially be taken into account. Our method is mainly that of case study analyses based on a smaller number of observations. The main sources of empirical information on institutional facts and perceptions relating to the cases studied result from desk-research and semi-structured interviews conducted since 1990, including many field trips around Europe. Through this, we start from real-life observations of phenomena and, while collecting information as participating observer, we look for 'themes', typologies and patterns. Being aware of possible biases we have communicated and discussed our findings over the years with a broad and varied audience: many discussions with practitioners, policy makers and colleagues from academia took place and created, changed and sharpened our thinking about competition in the transport sector. So, many of the findings in this thesis should not be considered as purely objective, neither as purely subjective, but rather as intersubjective.

The Path to Competition

In Part II of the thesis, we start by taking stock of the situation at the end of the 1980s and discuss the potential for regulatory change in a paper (included in Part II) written with Professor Ken Gwilliam. In this paper we found that, by 1990, competition still played a relatively minor role, which was surprising in view of the liberal spirit of the age, but which we explained by differences in perceptions of problems and linked to scant information about the real nature of the reforms undertaken in Britain.

Following this, we report on the burgeoning debates that took place in the 1990s about competition in public transport and its options. We were ourselves very much involved in this debate during this period. This led to several papers and reports and much of our research work focussed on collecting information about alternative competition-based ways to organise public transport provision. The aggregation of this knowledge showed that diversified reform paths had started to appear (deregulation, competitive tendering, governance reform) and that opinions on options for reform diverged considerably. Furthermore, the issue of competition in public transport gradually came to the attention of the European Commission.

Our findings led to the observation that substantial confusion was present, pointing to a knowledge gap in the sector. A clear overview of reform options was lacking. There was a need for the development of typologies that could help bring more clarity to the debates

on institutional reforms and facilitate presentation and comparison. To address this issue, we established several typologies (the first two are included in a paper included in Part II). The first typology focussed on the issue of the 'appearance' of passenger transport services (who has the 'right of initiative' to create services). With this, we stressed an essential difference between two concepts of competition: autonomous market initiative (regulated or not) versus authority initiative (using or not competitively selected providers to realise the services ordered). The second typology focussed on the layered involvement of various actors in relation to the creation, conception and realisation of services (the Strategic-Tactical-Operational – STO – framework). This framework proved useful and quickly gained the interest of other researchers, in particular within the Thredbo conference series. A third contribution was a refinement of Williamson's framework, enriching his four-layers framework such as to better grasp some aspects of institutional reforms in the public transport sector that our research had identified as important. The resulting typologies are used throughout the thesis.

The debates around competition continued during the 2000s. Our case explorations revealed that some dynamics had started to appear in areas where competition had already been introduced. Learning was becoming apparent and feedback to higher level institutions was taking place, with the process leading to EU Regulation 1370/2007 constituting one main example. Our research and advisory work made that we were closely involved in the process that ultimately led to the adoption of this new EU Regulation. We summarised the appearance of the resulting EU Regulation in a paper published in 2008 (included in Part II), focussing on the history of the proposal and the main evolutions that we have been able to observe in the lengthy adoption process. We formulated further a number of remarks on the resulting EU Regulation, questioning, in particular, the adequacy of the Regulation to address issues related to the regulatory needs of institutional frameworks based upon market initiative ('deregulated' markets). This relates to a topic discussed in Part IV. From recent implementation follow-up studies published by the European Commission, we see a confirmation of our observations about the complexity of the institutional frameworks, but also the confusion it generates amongst local authorities, as well as the differences there are between the adoption of legal texts on the one hand and the actual development of corresponding practices on the other, and the continued lack of availability and comparability of data about public transport performances in Europe.

It results from Part II that two main families of institutional frameworks based on competition have to be distinguished: one based on authority initiative and competitive tendering, and one based on market initiative and the 'free' market. We analyse these in more detail in Parts III and IV where we address the following main research question: how have these institutional frameworks fared since? In particular, what developments can be observed, what can be said about these developments, and can recommendations be formulated?

Competitive Tendering

The introduction of functional tendering in public transport in the Netherlands constitutes the main focal point of Part III of the thesis. This was linked to policy choices that aimed at stimulating innovation and customer orientation, which were deemed lacking in the practice of the previous institutional framework. We describe in Part III the prior insti-

tutional framework in place in the Netherlands before 2000 and provide an analysis of the process that led to the adoption of competition and 'functional tendering'. We became ourselves involved in the reform process by, on the one hand, participating in academic debates in the Netherlands and, on the other hand, contributing to advisory studies to the Dutch ministries involved in the preparation of the policy. The resulting new Dutch institutional framework meant a major shift from the previous institutional framework that was based on market-initiative but was essentially 'dead', toward an institutional framework based on authority-initiative but with compulsory use of competitive tendering. A difficult path to realising the legislator's dream of functional tendering followed. We closely monitored on these developments and published a series of case studies and papers during the years following implementation. This led to developing a typology of barriers to change, and to crossing this typology with the levels of institutions, as distinguished in our typology of institutions. With many authorities choosing for caution, we observed that realising the legislator's dream was not that easy. We also observed that learning and institutional feedback had started to appear. From this we dug further into the difficulty of organising functional tendering that was wished for at the national level, while hesitations between functional specifications and simple central planning appeared at the regional level. The findings, published in the paper included in Part III, pointed to a number of issues: the issue of trust and the cultural change imposed by competitive tendering, legal-procedural issues leading to a tendency to over-specify contracts, the difficulty experienced by authorities to fit award criteria with policy aims, incentive calibration, a general lack of knowledge, and a perceived lack of contract flexibility. This resulted in a call for more relational contracting, avoiding the chimera of complete contracts. The paper also gave a graphical representation of the evolving choices of regional authorities when tendering out their concessions, revealing movements that were sometimes in opposite directions. The continuing debates in the Dutch public transport sector on the perceived lack of flexibility in contracts led to the formulation of recommendations on how to improve this situation, which started with an analysis of the reasons that lead to contractual over-specification (summarised in Part III). We include in Part III a general assessment of the Dutch reform, illustrating the muddling-through process in which the sector has been involved since the 2001 reform.

To widen our understanding of the Dutch case in the context of the diversity of arrangements observed in Part II, we explore in Part III how institutional frameworks based on competitive tendering have fared during the last few decades in several other countries. The cases of London and Scandinavia (Denmark, Norway and Sweden) illustrate route-based contracting approaches while the case of France illustrates the network-based contracting approach in complement to the Dutch case discussed earlier. We distinguish six main institutional themes to compare and contrast those experiences in a structured way, in an attempt to discern pattern similarities. This covers the right of initiative to create services, the setup of the transport authority, the governance arrangement of the authority, the division of marketing responsibilities between actors, the type of relationship between authority and operator, and the position of assets with a longer lifespan. A number of parallels and differences are sketched, and this leads us to a number of concluding observations, differentiated according to two main types of competitive tendering options in public transport, which we summarise under "doing the thing right" (small gross-cost contracts as in London/Scandinavia, focussing on productive efficiency), versus "doing the right thing" (larger net-cost contracts as in the Netherlands/France, focussing on allocative efficiency).

Main skill-related challenges for the authority are identified and differentiated according to the two main options mentioned above. Main challenges are identified for the “doing the right thing” option, which is also the option that is preferred in the Dutch reform. We point to the similarities in dangers and problems, leading to frustrations, that we have been able to observe in the Netherlands, Sweden and France in relation to such a tendering option. We also link this to the interplay between a number of actors during the period in which the tendering documentation is prepared and in which factors of chance and personality play a role as well. With differing behavioural motivations, differing actor expectations, lack of information and lack of awareness and understanding, misunderstandings easily loom on the horizon. We stress the importance of a conscious and adequate management of this process to avoid the risk of ending up with over-specified contracts instead of the original objective of realising functional tendering under relational contracting. The importance of adequate contract monitoring is also mentioned, in addition to internal knowledge transfer issues on the side of both the authority and the operator.

In sum, we observe a multi-faceted reality with feedback, learning, muddling-through, fine-tuning, and sometimes strange or unexpected developments. We see similarities between countries, which to some extent point to elements of path dependency and illustrate the influence of experience on future choices. The details of the steps, their timing or results differ, however, with different additional developments at a later stage. We also notice developments ‘back-and-forth’ in arrangements chosen. Currently, we see a tendency towards relational contracting, but the future will have to tell whether this stabilises, while we expect that the development of new technologies (shared mobility systems, autonomous vehicles, internet, etc.) will lead to a greater need for change in institutional frameworks and practices in the not too distant future.

Deregulated Markets

The main purpose of Part IV is to find out how public transport institutional frameworks that are based on the usage of market initiative have fared since their introduction over the course of the last decades. Two main research strands were conducted.

For the first strand of research, the experience of Great Britain constituted both the starting point and our main focal point. This was later developed to cover other countries as well due to what we perceived to be a growing relevance of market initiative in current passenger transport markets elsewhere, both at the time and in the future. This resulted from the findings of two papers (included in Part IV) reviewing developments in market initiative regimes in Great Britain, New Zealand, Sweden and Germany. A deeper analysis showed that the tension between coordination and competition stood at the centre of much of the discussions and institutional feedback in the sector. We observed over the period studied a slow reduction of anti-coordination components in the institutional frameworks, away from dogmatism and towards the development of regulatory toolboxes for coordination. This included some institutional feedback. We first observed parallel developments in Great Britain and New Zealand, but things eventually moved in radically different directions, showing that the development of clever ‘light-touch’ regulatory toolboxes are yet no guarantee for adoption and implementation. The British toolbox is now filled with useful tools, but their uptake seems currently hampered by lack of budgets and

skills at the local level. New Zealand went a different way as various fears and perceptions by vested interests managed to avert the implementation of the toolbox. This eventually led to restricting operator freedom even more, effectively replacing the market initiative institutional framework by authority initiative. Developments in Sweden came from the other end of the spectrum. A toolbox was thought of here as well, but eventually it did not materialise. Vested interests would ultimately safeguard the core of the existing competitive tendering arrangements, while compromising to a 'deregulation' that never took off, as we expected. Operators increasingly seem to have surrendered to the situation. Developments in Germany were rather different as the legislation was already based on market-initiative but had been hybridised over time towards factual authority-initiative and some level of contracting. The new EU Regulation forced some amendments, but much action was directed at maintaining the status quo. New coordination mechanisms appeared in the toolbox, but apparently lead to sluggishness. Surprisingly, market initiative woke up from a moribund state in a few provincial cities and sparked more containment actions than enthusiasm. The country to follow is Finland, where a rather radical market initiative based legislation was adopted in 2018 in the context of a strong pro-Mobility-as-a-Service (MaaS) stance adopted by the Finnish ministry. In sum, a rather hybrid world can now be observed in Europe, resulting from a process of muddling through, feedback and gradual developments spanning several decades, where power was used to avert change, and where existing or adopted regulatory tools are not necessarily used, merely drawing attention to the difference between the ideal and the feasible.

The second strand of research was constituted of a workshop series held between 2009 and 2017 at the International Conference on Competition and Ownership in Land Passenger Transport (better known as Thredbo conferences) held every second year. The developments in European public transport that we had observed had led us to believe that deregulated regimes could come to play a growing role in public transport. This led us to start a series of workshops devoted to the functioning and regulatory needs of deregulated markets during the Thredbo conferences held in 2009, 2011, 2013, 2015 and 2017. In line with the Thredbo conference formula, the workshop series was set up such as to lead to cumulative and intersubjective findings, based on the results of successive workshops as published in five workshop report papers, each ending with policy recommendations and research recommendations for the next conference. These workshops reflected on developments in deregulated public transport markets, discussed regulatory issues and attempted to generate or test ideas on regulatory needs. The workshops developed four non-dogmatic suggestions for ideal-typical hybrid 'models' based on market initiative. They included different regulatory tools (a guiding transport plan, entry stimulation measures and entry restriction measures). We observed similarities between these suggested models and real-world developments as they unfolded. Yet, few observations exist, and it is questionable whether the recommendations would all be feasible under the current EU Regulation. Consequently, we can only conclude that time will tell whether the workshop proposals were realistic, end up being truly implementable and, if implemented, will deliver better results than a dogmatic approach. The workshops also resulted into two other main contributions to the Thredbo conference series that proved useful to discuss various types of real-world regulatory interventions: a pyramid of regulatory priorities and a hypothetical bell-shaped curve of optimal regulation.

Conclusions

To conclude, we have explored institutional frameworks of European local public transport over a number of years and this has allowed us to observe and study various developments. The real-world implementations and experiences with competition-based reforms, the research activities that developed and the ensuing debate in the professional sector revealed that the introduction of ‘competition’ in this sector was not a simple dichotomy between having competition and having none. The issue proved much more complex. Several major institutional choices are involved, and various constraints can be present (existing markets, public management traditions, wider institutional context and history, local power, location of knowledge, etc.). We summarised a number of options for reform in a paper included in Part V.

With this research we have contributed to a better understanding of the existing variety of institutional frameworks and their developments by elaborating a number of typologies, which, in turn, proved helpful in presenting, comparing, discussing and even designing components of institutional frameworks. A number of papers and reports resulted. Our journey through the world of the institutional components of public transport led us to observe many phenomena that were often rather remote from the ideal world that some economic theories would expect in a “nirvana-approach”. In other words, our observations illustrate that there can be and often is a discrepancy between designed institutional structures and institutional practices. Our exploration has revealed evolving practices and structures, fine-tuning, patching and muddling through. We have observed at first hand the similarity of questioning, discussions and developments between areas. Yet, we did not observe deterministic, equal evolution paths.

Is competitive tendering better? At the beginning of this research, we thought that competitive tendering was needed to address the substantial inefficiencies observed in the public transport sector at the time. While progressing in this research, and with growing practical experience, we saw that tendering could indeed work, but that its implementation was not always an easy process. In some cases, one could even doubt whether it was the right thing to do. Cultural issues are involved, but much is also linked to learning to get to terms with a new world. Furthermore, there are numerous options to organise competitive tendering and numerous aims associated with its usage. The international evidence debate is between “doing the thing right” (small gross-cost contracts) and “doing the right thing” (larger net-cost contracts). We believe that both can work. The first option, however, appears from our observations to be more stable, easier to manage and better at building up knowledge and learning. The second option requires a very different kind of knowledge and approach from the side of the transport authority. The build-up of knowledge appears more difficult, and the choices less stable. Yet, there is no simple choice between both options. They relate to two completely different levels of service provision: only the operational level or both the tactical and operational level. The actor configuration at the starting point of reform is thus determinant—even though not necessarily fully determinant—for the options available and the choices made. With respect to cooperation, pleas towards relational contracting were made, in the Netherlands and elsewhere. Such cooperation can work and help, as we see with ‘development teams’ in the Netherlands, but it requires proper management

from the side of the authority; and there can be a difference between designing a mechanism and it being actually implemented.

Is deregulation better? Besides a few remarks, we did not engage in this thesis into the debate about its measured performance in relation to competitive tendering elsewhere as our purpose was to focus on the institutional frameworks and their development. What we observe, though, is that tendering and deregulation are often compared 'as is', and in particular 'deregulation outside London' compared to 'tendering in London'. Such comparisons implicitly assume that the way these two institutional frameworks are implemented are the only way to implement them, while this need not be the case. Related to this, we observe that relatively little thinking has gone into finding ways to improve the deregulated model; even though most observers agree to say that it has been implemented in a rather dogmatic way by Margaret Thatcher's government. Interestingly, we also observe an absence of champions promoting market initiative, while more promote competitive tendering. We suggest that this might be related to the promotion of contracting and competitive tendering being a more palatable message to address to actors inclined to be receptive to suggestions that increase authority control, while the promotion of market-initiated regimes would be more difficult to sell in view of the bad reputation that deregulation had got under its dogmatic British implementation (whatever the actual performance might have been). And here too, our observations lead us to conclude that there is often a difference between institutional structures and institutional practice. We have attempted to further develop the thinking about the regulation of deregulated markets in a Thredbo workshop series.

Further options exist besides tendering and deregulation. Many public operators, in particular—though by far not all—have improved their game since the beginning of the period of reform, and in this the threat of competitive tendering, when used well by the authority, has certainly played a role. As indicated, their functioning was out of our scope for this research that instead focused on competition, but we have mentioned some examples while discussing further cases. This option is already important in urban public transport at the international level and might gain further importance in the future if the choices of some local authorities to move away from tendering towards in-house operation are confirmed.

Challenges lay ahead. New types of mobility systems enabled by mobile phone and internet have appeared in the recent past, such as new ways to hail taxis or rent cars and bicycles for short periods of time. More innovations will surface, such as the self-driving car, but also mobility-on-demand services made possible by aggregating in real time individual requests over mobile phone and internet to provide users with combined individual, shared, or collective services delivered by various providers. A characteristic shared by many of these new systems is that they are autonomous market initiatives and constitute intermediates between purely individual transport modes (car, bicycle, taxi) on the free market, and collective services such as traditional public transport that are often organised via monopolies (tendered or not). By nibbling away at the traditional markets of authority-initiated systems, these trends—together with recent deregulation trends in long-distance coach and rail—pose new challenges for local transport authorities and could increase the relevance of market-initiated regimes in the future.

Our general observation about the various options is, in short, that they all can work if the conditions for their functioning are sufficiently realised, but that striving for a perfect realisation of all conditions seems, in view of real-world practice, illusory. The main challenge facing those managing existing public transport institutional frameworks, or those in a position of co-determining their design, is to design institutions while abandoning the idea of a perfect design for a hypothetical equilibrium. Things change and will keep changing. What is needed, rather, is designs that will have the flexibility and adaptability to respond to changing socio-economic and technical circumstances. This is likely to require combining various modes of organising the provision of passenger transport services into new institutional configurations.

Samenvatting

Dit proefschrift vindt zijn oorsprong in de discussies die zich in de jaren tachtig in West-Europa ontwikkelden over de rol die concurrentie en privaat ondernemerschap zouden moeten spelen bij het aanbieden van openbaarvervoerdiensten. Destijds bleek uit onze observatie van de discussies dat er wijdverbreid misverstanden bestonden over de institutionele veranderingen die werden doorgevoerd en over de verkregen resultaten. Tegen die achtergrond is ons onderzoek gericht geweest op het verkrijgen van een dieper inzicht in de verscheidenheid aan institutionele raamwerken die kunnen bestaan in de openbaar vervoersector en op hoe deze zich ontwikkelen, met als belangrijkste focus de groeiende en evoluerende rol van 'concurrentie' als een institutioneel element dat vele gedaanten kan aannemen. Dit proefschrift richt zich op de volgende drie hoofdonderzoeksvragen:

- ▶ Wat zijn de belangrijkste institutionele raamwerken die zijn ontstaan in de Europese openbaarvervoersector sinds de druk voor een breder gebruik van 'concurrentie' in de jaren tachtig ontstond?
- ▶ Hoe is het deze institutionele raamwerken sindsdien vergaan? In het bijzonder, welke ontwikkelingen kunnen worden waargenomen en wat kan daarover worden gezegd?
- ▶ Wat zijn de belangrijkste resulterende beleidsuitdagingen en -opties?

Kortom, ons onderzoek heeft gekeken naar een veelzijdig interactief beeld van instituties en actoren die vorm geven aan de concurrentie in lokale en regionale vervoerdiensten. Het heeft zich tot doel gesteld een complex dynamisch fenomeen te verkennen en te begrijpen, dat wil zeggen de verscheidenheid aan op concurrentie gebaseerde arrangementen in contextspecifieke situaties van lokaal en regionaal openbaar vervoer in Europa. De vraag of concurrentie, als institutioneel element dat kan worden gebruikt voor het aanbieden van openbaar vervoer, de voorkeur verdient boven een regime waarin concurrentie ontbreekt, wordt niet rechtstreeks in dit proefschrift behandeld. Veeleer lag de focus van dit onderzoek op het inventariseren, classificeren en begrijpen van institutionele raamwerken waarin concurrentie in één van zijn gedaanten een rol speelt, op het beschrijven en analyseren van de invoering en werking ervan, en op het brengen van meer duidelijkheid en begrip in de complexe set van veranderingen die kunnen worden waargenomen in deze institutionele opstellingen en hun functioneren gedurende de bestudeerde periode.

Ons onderzoek bevindt zich op het gebied van de institutionele economie en we hebben Williamsons vierlagige theoretische raamwerk van de economie van instituties overgenomen (Williamson, 1998; 2000) om het brede scala aan relevante vraagstukken voor ons onderzoek te beslaan en te onderscheiden. Williamsons benadering is echter van vergelijkende statische aard, terwijl wij ons op het standpunt stellen dat het institutionele raamwerk niet volledig exogeen is, dat instituties evolueren en dat de context en ervaring van de betrokken actoren bepalend zijn voor verdere institutionele ontwikkelingen. Onze be-

langrijkste focus ligt op de processen die leiden tot de invoering en verdere evolutie van instituties nadat deze zijn geïmplementeerd. De theorie die past bij een dergelijk procesperspectief is ingebed in de Originale Institutionele Economie. Hier wordt de economie gezien als een evoluerend systeem waarin actoren van verschillende aard (politiek, economisch, sociaal) met verschillende belangen en capaciteiten en met verschillende graden van macht actief zijn (Wilber en Harrison, 1978). Dit betekent dat ons perspectief op de aard van de economische realiteit er één is van verandering en het centrale onderzoeksdoel, zoals gezegd, gaat over het begrijpen van deze verandering. Ons perspectief kan worden gekarakteriseerd als verkennend, gericht op begrip en niet op verklaren en voorspellen, wat ook impliceert dat ons onderzoek niet gebaseerd is op ceteris paribus-analyses met kwantificeringen en testen van theoretische hypothesen op basis van grote aantallen waarnemingen. Omdat ons onderzoek geïnteresseerd is in het begrijpen van de dynamiek van institutionele raamwerken, proberen we in plaats daarvan een nauwkeurige beschrijving te geven van institutionele raamwerken in specifieke contexten, en hoe deze zich in de tijd ontwikkelen. We stellen ons ook tot doel te categoriseren en typologieën te creëren die ons in staat stellen op een inductieve manier van het niveau van casebeschrijvingen naar een meer algemeen niveau te gaan, wat onderzoekers en beleidsmakers ook richting kan geven. Dergelijk onderzoek vereist het uitvoeren van procesanalyses waarbinnen tal van factoren van uiteenlopende aard in aanmerking kunnen worden genomen. Onze methode is voornamelijk die van case study-analyses geweest, op basis van een kleiner aantal observaties. De belangrijkste bronnen van empirische informatie over institutionele feiten en percepties met betrekking tot de bestudeerde gevallen zijn het resultaat van desk-research en semi-gestructureerde interviews die sinds 1990 zijn afgenomen, waaronder veel ter plekke in Europa. Op deze manier begonnen we met waarnemingen van fenomenen uit de praktijk en, terwijl we informatie verzamelden als deelnemende waarnemer, zochten we naar 'thema's', typologieën en patronen. Omdat we ons bewust waren van mogelijke vertekeningen, hebben we onze bevindingen in de loop der jaren gecommuniceerd en besproken met een breed en gevarieerd publiek: veel discussies met mensen uit de praktijk, beleidsmakers en collega's uit de academische wereld hebben plaatsgevonden en dit heeft onze gedachten over concurrentie in de ov-sector gevormd, veranderd en aangescherpt. Veel van de bevindingen in dit proefschrift moeten derhalve niet worden beschouwd als puur objectief, noch als puur subjectief, maar eerder als intersubjectief.

De weg naar marktwerking

In deel II van het proefschrift beginnen we met het inventariseren van de situatie aan het einde van de jaren tachtig en bespreken we het potentieel voor verandering van de regulering in een paper (opgenomen in deel II) geschreven met professor Ken Gwilliam. In dit paper hebben we geconstateerd dat concurrentie in 1990 nog steeds een relatief ondergeschikte rol speelde, wat gelet op de liberale tijdsgeest verrassend was, maar die we verklaarden door verschillen in perceptie van problemen en koppelden aan de geringe informatie over de echte aard van de hervormingen die in Groot-Brittannië waren doorgevoerd.

Vervolgens doen we verslag van de opkomende discussies die in de jaren negentig plaatsvonden over concurrentie in het openbaar vervoer en de bijbehorende opties. In deze periode waren we zelf zeer betrokken bij deze discussie. Dit leidde tot verschillende papers en

rapporten en veel van ons onderzoek was gericht op het verzamelen van informatie over alternatieve, op concurrentie gebaseerde wijzen om het openbaar vervoer te organiseren. De samenvoeging van deze kennis toonde aan dat een diversiteit aan hervormingspaden begon te verschijnen (dereguleren, aanbesteden, hervormen van de governance) en dat de meningen over hervormingsopties aanzienlijk uiteenliepen. Bovendien kwam het vraagstuk van concurrentie in het openbaar vervoer langzaam onder de aandacht van de Europese Commissie.

Onze bevindingen leidden tot de constatering dat er aanzienlijke verwarring was, wijzend op een kenniskloof in de sector. Een duidelijk overzicht van hervormingsopties ontbrak. Er was behoefte aan de ontwikkeling van typologieën die konden helpen de discussies over institutionele hervormingen meer duidelijkheid te geven en de weergave en vergelijking ervan te vergemakkelijken. Om dit probleem aan te pakken, hebben we verschillende typologieën opgesteld (de eerste twee zijn opgenomen in een paper in deel II). De eerste typologie richt zich op het vraagstuk van het 'ontstaan' van personenvervoerdiensten (wie heeft het 'recht van initiatief' om diensten op te richten). Hiermee benadrukken we een essentieel verschil tussen twee concepten van concurrentie: autonoom marktinitiatief (gereguleerd of niet) versus overheidsinitiatief (al dan niet met behulp van in concurrentie geselecteerde vervoerders om de bestelde diensten te realiseren). De tweede typologie richt zich op de gelaagde betrokkenheid van verschillende actoren met betrekking tot de oprichting, het ontwerp en de realisatie van diensten (het Strategisch-Tactisch-Operationeel - STO - raamwerk). Dit raamwerk bleek nuttig en wekte snel de belangstelling van andere onderzoekers, met name binnen de Thredbo-conferentiereeks. Een derde bijdrage is een verfijning van het raamwerk van Williamson, waardoor zijn raamwerk in vier lagen werd verrijkt om zo aspecten van institutionele hervormingen in de openbaarvervoersector die ons onderzoek als belangrijk had aangemerkt, beter te bevatten. De resulterende typologieën worden door dit het hele proefschrift heen gebruikt.

De discussies over concurrentie gingen door in de jaren 2000. Uit onze case-verkenningen bleek dat er dynamiek was ontstaan in gebieden waar al concurrentie was geïntroduceerd. Er was sprake van leereffecten en van feedback naar hogergelegen instituties, met het proces dat leidde tot EU-Verordening 1370/2007 als belangrijk voorbeeld. Onze onderzoeken en advieswerkzaamheden hebben ervoor gezorgd dat we nauw betrokken zijn geweest bij het proces dat uiteindelijk heeft geleid tot deze nieuwe EU-verordening. We hebben het ontstaan van de resulterende EU-verordening samengevat in een in 2008 gepubliceerd paper (opgenomen in deel II), waarin we ons concentreren op de geschiedenis van het voorstel en de belangrijkste evoluties die we hebben kunnen waarnemen tijdens het langdurige wetgevingsproces dat eraan vooraf ging. We hebben verder een aantal opmerkingen geplaatst over de resulterende EU-verordening, waarbij we in het bijzonder de vraag hebben gesteld of de verordening wel geschikt is om de reguleringsbehoeften van institutionele raamwerken die op marktinitiatief ('gedereguleerde' markten) gebaseerd zijn, te dekken. Dit is gerelateerd aan een onderwerp dat in deel IV wordt besproken. Uit recente implementatiestudies gepubliceerd door de Europese Commissie, zien we een bevestiging van onze observaties over de complexiteit van de institutionele raamwerken, maar ook van de verwarring die het genereert onder lokale overheden. Ook zijn hier de verschillen tussen het aannemen van juridische teksten enerzijds en de daadwerkelijke ontwikkeling van overeenkomstige praktijken anderzijds herkenbaar, naast het nog steeds bestaande gebrek

aan beschikbaarheid en vergelijkbaarheid van gegevens over openbaarvervoersprestaties in Europa.

Uit deel II blijkt dat er twee hoofdfamilies van institutionele raamwerken, die op concurrentie gebaseerd zijn, moeten worden onderscheiden: één op basis van overheidsinitiatief en aanbesteden, en één op basis van marktinitiatief en de ‘vrije’ markt. We analyseren deze in meer detail in delen III en IV, waar we de volgende hoofdonderzoeksvraag behandelen: hoe is het deze institutionele raamwerken sindsdien vergaan? In het bijzonder, welke ontwikkelingen kunnen worden waargenomen, wat kan over deze ontwikkelingen worden gezegd en kunnen aanbevelingen worden geformuleerd?

Aanbestedingen

De invoering van functioneel aanbesteden in het openbaar vervoer in Nederland vormt het belangrijkste aandachtspunt van deel III van het proefschrift. Dit was gekoppeld aan beleidskeuzes die gericht waren op het stimuleren van innovatie en klantgerichtheid, die in de praktijk van het vorige institutionele raamwerk als ontoereikend werden beschouwd. In deel III beschrijven we het institutionele raamwerk dat vóór 2000 in Nederland van kracht was en geven we een analyse van het proces dat heeft geleid tot de invoering van concurrentie en ‘functioneel aanbesteden’. We zijn zelf betrokken geraakt bij dit hervormingsproces, enerzijds door deel te nemen aan academische discussies in Nederland en anderzijds door bij te dragen aan adviesstudies aan de Nederlandse ministeries die betrokken waren bij de voorbereiding van het beleid. Het resulterende nieuwe Nederlandse institutionele raamwerk betekende vergeleken met het vorige institutionele raamwerk dat gebaseerd was op marktinitiatief maar in wezen ‘dood’ was, een grote verschuiving in de richting van een institutioneel raamwerk gebaseerd op overheidsinitiatief maar dan met verplicht gebruik van aanbestedingen. Er volgde een moeilijk pad om de droom van de wetgever om functioneel aan te besteden te realiseren. We hebben deze ontwikkelingen nauwlettend gevolgd en hebben in de jaren na de implementatie een reeks casestudies en papers gepubliceerd. Dit leidde tot het ontwikkelen van een typologie van barrières voor verandering, en tot het kruisen van deze typologie met de niveaus van instituties, zoals onderscheiden in onze typologie van instituties. Omdat veel overheden voor voorzichtigheid kozen, merkten we op dat het realiseren van de droom van de wetgever niet zo eenvoudig was. We hebben ook geconstateerd dat leren en institutionele feedback hun intrede deden. Van hieruit zijn we dieper ingegaan op de moeilijkheid van het organiseren van ‘functionele’ aanbestedingen zoals die op nationaal niveau gewenst waren, terwijl aarzelingen tussen functionele specificaties en eenvoudige centrale planning op regionaal niveau ontstonden. De bevindingen, gepubliceerd in het paper dat in deel III is opgenomen, wezen op een aantal vraagstukken: het vraagstuk van vertrouwen en de culturele verandering die door het aanbesteden werd opgelegd, juridisch-procedurele kwesties die leiden tot de neiging om contracten te over-specificeren, de moeilijkheid die overheden ervaren om gunningscriteria te koppelen aan beleidsdoelstellingen, het kalibreren van prikkels, een algemeen gebrek aan kennis en een perceptie van gebrek aan contractflexibiliteit. Dit resulteerde in de roep om meer relationele contracten, waarbij de illusie van complete contracten werd verlaten. Het paper gaf ook een grafische weergave van de zich ontwikkelende keuzes van regionale overheden bij het aanbesteden van hun concessies, waarbij soms bewegingen in tegengestelde richting

zichtbaar werden. De aanhoudende discussies in de Nederlandse openbaar-vervoerssector over het waargenomen gebrek aan flexibiliteit in contracten hebben geleid tot het formuleren van aanbevelingen om deze situatie te verbeteren, dit na het maken van een analyse van de redenen die tot contractuele over-specificatie hebben geleid (samengevat in deel III). Deel III bevat ook een algemene beoordeling van de Nederlandse hervormingen, die het proces van doormodderen illustreert waar de sector sinds de hervorming van 2001 in terecht is gekomen.

Om ons begrip van de Nederlandse casus te verbreden in de context van de diversiteit aan arrangementen die in deel II zijn waargenomen, onderzoeken we in deel III hoe institutionele raamwerken gebaseerd op aanbestedingen het de afgelopen decennia in verschillende andere landen hebben gedaan. De casussen van Londen en Scandinavië (Denemarken, Noorwegen en Zweden) illustreren benaderingen die op lijncontracten zijn gebaseerd, terwijl het geval van Frankrijk de netwerkgebaseerde contractbenadering illustreert in aanvulling op de eerder besproken Nederlandse casus. We onderscheiden zes institutionele hoofdthema's om deze ervaringen op een gestructureerde manier te vergelijken en te contrasteren, in een poging om patroonovereenkomsten te onderscheiden. Dit omvat het recht van initiatief om diensten op te richten, de opzet van de vervoersoverheid, de governance van de vervoersoverheid, de verdeling van marketingverantwoordelijkheden tussen actoren, het type relatie tussen overheid en vervoerder en de positie van activa met een langere levensduur. Een aantal parallellen en verschillen worden geschetst, wat ons leidt tot een aantal concluderende observaties, verbijzonderd naar twee hoofdtypen van aanbestedingsopties in het openbaar vervoer die we samenvatten onder "doing the thing right" (kleine bruto contracten zoals in Londen / Scandinavië, gericht op productieve efficiëntie), versus "doing the right thing" (grotere nettokostencontracten zoals in Nederland / Frankrijk, gericht op allocatieve efficiëntie). De belangrijkste vaardighedengerelateerde uitdagingen voor de overheid worden aangegeven, verbijzonderd naar de twee hierboven genoemde hoofdopties. De belangrijkste uitdagingen worden geïdentificeerd voor de optie "doing the right thing", die ook de voorkeur geniet bij de Nederlandse hervorming. We wijzen op de overeenkomsten in gevaren en problemen, die tot frustraties leiden, die we in Nederland, Zweden en Frankrijk hebben kunnen vaststellen met betrekking tot deze optie. We koppelen dit ook aan het samenspel tussen een aantal actoren in de periode waarin de aanbestedingsdocumenten wordt opgesteld en waarin ook factoren als toeval en persoonlijkheid een rol spelen. Met verschillende motivaties voor hun gedrag, verschillende verwachtingen onder de actoren, een gebrek aan informatie en een gebrek aan bewustzijn en begrip, doemen misverstanden gemakkelijk op aan de horizon. We benadrukken het belang van een bewust en adequaat beheer van dit proces om het risico te vermijden te eindigen met te gespecificeerde contracten in plaats van de oorspronkelijke doelstelling om functioneel aanbesteden te realiseren onder relationele contractvormen. Het belang van adequate contractmonitoring wordt ook genoemd, naast vraagstukken van interne kennisoverdracht aan de zijde van zowel de overheid als de vervoerder.

Kortom, we zien een veelzijdige realiteit met feedback, leren, doormodderen, fine-tuning en soms vreemde of onverwachte ontwikkelingen. We zien overeenkomsten tussen landen, die tot op zekere hoogte wijzen op elementen van padafhankelijkheid en de invloed van ervaringen op toekomstige keuzes illustreren. De details van de stappen, hun timing of resultaten verschillen echter, met verschillende aanvullende ontwikkelingen in een later

stadium. We zien ook ontwikkelingen ‘heen en weer’ tussen gekozen arrangementen. Momenteel zien we een neiging tot relationele contractering, maar de toekomst zal moeten uitwijzen of dit stabiliseert, terwijl we verwachten dat de ontwikkeling van nieuwe technologieën (gedeelde mobiliteitssystemen, autonome voertuigen, internet, enz.) zal leiden tot een grotere behoefte aan verandering in institutionele raamwerken en praktijken in de niet al te verre toekomst.

Deregulering

Het belangrijkste doel van deel IV is om erachter te komen hoe het de institutionele raamwerken voor openbaar vervoer die gebaseerd zijn op het gebruik van marktinitiatief sinds hun invoering over de loop van de laatste decennia is vergaan. Twee belangrijke onderzoekdelen werden uitgevoerd.

Voor het eerste deel van het onderzoek vormde de ervaring van Groot-Brittannië zowel het startpunt als ons belangrijkste aandachtspunt. Dit werd later verder ontwikkeld om ook andere landen te bestrijken. De reden was wat wij als een groeiende relevantie van marktinitiatief voor huidige reizigersvervoermarkten elders beschouwden, zowel toentertijd als voor de toekomst. Dit was het resultaat van de bevindingen van twee papers (opgenomen in deel IV) waarin de ontwikkelingen in regimes voor marktinitiatieven in Groot-Brittannië, Nieuw-Zeeland, Zweden en Duitsland werden besproken. Een diepere analyse toonde aan dat de spanning tussen coördinatie en concurrentie centraal stond in veel van de discussies en institutionele feedback in de sector. We hebben gedurende de bestudeerde periode een langzame vermindering van anti-coördinatiecomponenten in de institutionele raamwerken waargenomen, weg van dogmatisme en in de richting van de ontwikkeling van reguleringstoolboxen ten behoeve van coördinatie. Dit omvatte ook enige institutionele feedback. We hebben eerst parallelle ontwikkelingen waargenomen in Groot-Brittannië en Nieuw-Zeeland, maar deze ontwikkelingen hebben uiteindelijk een radicaal andere wending genomen, waaruit blijkt dat de ontwikkeling van slimme ‘light-touch’ toolboxen voor regulering nog geen garantie is voor gebruik en implementatie. De Britse toolbox is nu gevuld met handige instrumenten, maar hun ingebruikname lijkt momenteel te worden belemmerd door een gebrek aan budgetten en vaardigheden op lokaal niveau. Nieuw-Zeeland ging een andere weg, omdat verschillende angsten en percepties van gevestigde belanghebbenden de implementatie van de toolbox wisten te voorkomen. Dit heeft er uiteindelijk toe geleid dat de vrijheid van de vervoerder daar nog meer werd beperkt, waardoor het institutionele raamwerk van het marktinitiatief in feite werd vervangen door overheidsinitiatief. De ontwikkelingen in Zweden kwamen van de andere kant van het spectrum. Hier is ook aan een toolbox gedacht, maar dit kwam uiteindelijk niet van de grond. Gevestigde belangen hebben er uiteindelijk de kern van de bestaande aanbestedingsarrangementen veilig weten te stellen, terwijl een compromis werd gesloten voor een ‘deregulering’ die nooit van start ging, zoals we hadden verwacht. Vervoerders lijken zich steeds meer aan deze situatie te hebben overgegeven. De ontwikkelingen in Duitsland waren nogal afwijkend, aangezien de wetgeving al op marktinitiatief was gebaseerd, maar in de loop van de tijd was gehybridiseerd in de richting van feitelijk overheidsinitiatief en een zekere mate van contractering. De nieuwe EU-verordening dwong enkele wijzigingen af, maar veel actie was gericht op het handhaven van de status quo. Nieuwe coördinatie-

mechanismen zijn in de toolbox verschenen, maar lijken in de praktijk tot traagheid te leiden. Verrassend genoeg ontwaakte marktinitiatief in enkele provinciale steden vanuit deze zieltogende staat, maar het leidde eerder tot inperkende maatregelen dan enthousiasme. Het te volgen land is Finland, waar in 2018 een vrij radicale wetgeving op basis van marktinitiatieven werd aangenomen in de context van een sterk pro-Mobility-as-a-Service (MaaS) standpunt van het Finse ministerie. Kortom, we zien in Europa nu een vrij hybride wereld, als resultaat van een proces van doormodderen, feedback en geleidelijke ontwikkelingen over meerdere decennia, waar macht werd gebruikt om verandering af te wenden, en waar bestaande of aangenomen reguleringsinstrumenten niet noodzakelijkerwijs worden gebruikt, wat de aandacht vestigt op het verschil tussen het ideale en het haalbare.

Het tweede onderzoeksdeel bestond uit een workshopreeks die tussen 2009 en 2017 werd gehouden op de International Conference on Competition and Ownership in Land Passenger Transport (beter bekend als Thredbo-conferenties) die om de twee jaar wordt gehouden. De ontwikkelingen die we in het Europese openbaar vervoer hadden waargenomen, hadden ons doen geloven dat gedereguleerde regimes een grotere rol zouden kunnen gaan spelen in het openbaar vervoer. Dit leidde ertoe dat we tijdens de Thredbo-conferenties in 2009, 2011, 2013, 2015 en 2017 een reeks workshops begonnen die gewijd waren aan de werking en de reguleringsbehoeften van gedereguleerde markten. In lijn met de Thredbo-conferentieformule werd de workshopreeks op zodanige wijze opgezet dat het zou leiden tot cumulatieve en intersubjectieve bevindingen, gebaseerd op de resultaten van opeenvolgende workshops zoals gepubliceerd in vijf workshoprapporten die elk eindigen met beleids- en onderzoeksaanbevelingen voor de volgende conferentie. Deze workshops reflecteerden over ontwikkelingen in gedereguleerde openbaarvervoermarkten, bespraken reguleringsvraagstukken en probeerden ideeën over reguleringsbehoeften te genereren of te testen. De workshops ontwikkelden vier niet-dogmatische suggesties voor ideaal-typische hybride ‘modellen’ gebaseerd op marktinitiatief. Ze omvatten verschillende reguleringsinstrumenten (een richtinggevend transportplan, stimuleringsmaatregelen voor markttoetreding en inperkende maatregelen voor markttoetreding). We konden overeenkomsten waarnemen tussen deze voorgestelde modellen en real-world ontwikkelingen die zich daarna voordeden, al zijn er weinig observaties beschikbaar. Daarnaast is het de vraag of de aanbevelingen allemaal uitvoerbaar zouden zijn onder de huidige EU-verordening. Bijgevolg kunnen we alleen concluderen dat de tijd zal uitwijzen of de workshopvoorstellen realistisch waren, uiteindelijk echt uitvoerbaar zijn en, indien geïmplementeerd, betere resultaten zullen opleveren dan een dogmatische aanpak. De workshops hebben ook geresulteerd in twee andere belangrijke bijdragen aan de Thredbo-conferentiereeks die nuttig bleken om verschillende soorten reguleringsinterventies in de praktijk te bespreken: een piramide van reguleringsprioriteiten en een hypothetische klokvormige curve van optimale regulering.

Conclusies

Concluderend hebben we de institutionele raamwerken van het Europese lokale openbaar vervoer gedurende een aantal jaren onderzocht en dit heeft ons in staat gesteld om verschillende ontwikkelingen te observeren en te bestuderen. De implementaties in de praktijk en ervaringen met op concurrentie gebaseerde hervormingen, het onderzoek dat

zich ontplooidde en de daaropvolgende discussie in de professionele sector toonden aan dat de invoering van ‘concurrentie’ in deze sector niet kon worden gezien als een eenvoudige tweedeling tussen concurrentie hebben en geen concurrentie hebben. Het probleem bleek veel complexer. Verschillende majeure institutionele keuzes zijn erbij betrokken en er kunnen verschillende beperkingen aanwezig zijn (bestaande markten, tradities van openbaar bestuur, de bredere institutionele context en diens geschiedenis, lokale macht, waar zich de kennis bevindt, enz.). We hebben een aantal opties voor hervorming samengevat in een paper dat is opgenomen in deel V.

Met dit onderzoek hebben we bijgedragen aan een beter begrip van de bestaande verscheidenheid aan institutionele raamwerken en hun ontwikkelingen door een aantal typologieën uit te werken, die op hun beurt nuttig bleken bij het weergeven, vergelijken, bespreken en zelfs het ontwerpen van componenten van institutionele raamwerken. Een aantal papers en rapporten resulteerde uit dit werk. Onze reis door de wereld van de institutionele componenten van het openbaar vervoer heeft ertoe geleid dat we veel fenomenen hebben waargenomen die vaak tamelijk ver verwijderd waren van de ideale wereld die sommige economische theorieën zouden verwachten in een “nirvana-benadering”. Met andere woorden, onze waarnemingen illustreren dat er een discrepantie kan zijn en dat deze vaak bestaat tussen ontworpen institutionele structuren en institutionele praktijken. Onze verkenning heeft zich ontwikkelende praktijken en structuren, finetuning, patching en doormodderen onthuld. We hebben uit eerste hand de gelijkenis van vragen, discussies en ontwikkelingen tussen gebieden waargenomen. Toch hebben we geen deterministische, gelijke paden van evolutie waargenomen.

Is aanbesteden beter? Aan het begin van dit onderzoek dachten we dat aanbesteden nodig was om de toendertijd aanzienlijke inefficiënties in de sector openbaar vervoer aan te pakken. Terwijl dit onderzoek vorderde en er in de praktijk meer ervaring mee werd opgedaan, zagen we dat aanbesteden inderdaad kon werken, maar dat de invoering ervan niet altijd een gemakkelijk proces was. In sommige gevallen kon men zelfs twijfelen of het het juiste was om te doen. Culturele vraagstukken spelen een rol, maar veel is ook gerelateerd aan het leren omgaan met een nieuwe wereld. Bovendien zijn er tal van opties om aanbestedingen te organiseren en zijn er tal van doelen verbonden aan het gebruik ervan. Het internationale bewijsdebat gaat tussen “doing the thing right” (kleine bruto-kostencontracten) en “doing the right thing” (grotere netto-kostencontracten). We geloven dat beide kunnen werken. Onze observaties doen echter vermoeden dat de eerste optie stabiel is, gemakkelijker te beheren en beter in het opbouwen van kennis en qua leervermogen. De tweede optie vereist een heel ander soort kennis en aanpak van de kant van de vervoersoverheid. De opbouw van kennis lijkt moeilijker en de keuzes minder stabiel. Toch is er geen eenvoudige keuze tussen beide opties. Ze hebben betrekking op twee totaal verschillende niveaus van dienstverlening: alleen het operationele niveau of zowel het tactische als operationele niveau. De configuratie van actoren bij het beginpunt van de hervorming is dus bepalend - hoewel niet noodzakelijkerwijs volledig bepalend - voor de beschikbare opties en de gemaakte keuzes. Met betrekking tot samenwerking is gepleit voor relationeel contracteren, zowel in Nederland als elders. Dergelijke samenwerking kan werken en helpen, zoals we zien bij ‘ontwikkelingsteams’ in Nederland, maar het vereist goed beheer van de kant van de overheid; en er kan een verschil zijn tussen het ontwerpen van een mechanisme en het daadwerkelijk implementeren ervan.

Is dereguleren beter? Afgezien van enkele opmerkingen, zijn we met dit proefschrift niet de discussie aangegaan over de gemeten prestaties van dereguleren ten opzichte van aanbesteden, aangezien ons doel was ons te concentreren op de institutionele raamwerken en hun ontwikkeling. Wat we echter waarnemen, is dat aanbesteden en dereguleren vaak 'as is' worden vergeleken, en in het bijzonder 'dereguleren buiten Londen' vergeleken met 'aangebesteden in Londen'. Dergelijke vergelijkingen veronderstellen impliciet dat de wijze waarop deze twee institutionele raamwerken zijn geïmplementeerd de enige manier is om ze te implementeren, terwijl dit niet het geval hoeft te zijn. Ook zien we dat er relatief weinig is nagedacht over manieren om het gedereguleerde model te verbeteren; ook al zijn de meeste waarnemers het erover eens dat gesteld kan worden dat het op een nogal dogmatische manier is geïmplementeerd door de regering van Margaret Thatcher. Interessant is dat we ook constateren dat er geen voortrekkers zijn die marktinitiatieven promoten, terwijl meerderen aanbesteden aanprijzen. We suggereren dat dit verband zou kunnen houden met het feit dat het promoten van contracteren en aanbesteden een aangename boodschap is voor actoren die geneigd zijn open te staan voor suggesties die ertoe leiden de controle door overheden te vergroten. Het promoten van door de markt geïnitieerde regimes zou moeilijker te verkopen zijn gezien de slechte reputatie die dereguleren heeft gekregen onder de dogmatische Britse implementatie ervan (ongeacht de daar behaalde daadwerkelijke prestaties). En ook hier leiden onze observaties tot de conclusie dat er vaak een verschil is tussen institutionele structuren en de institutionele praktijk. We hebben getracht het denken over de regulering van gedereguleerde markten verder te ontwikkelen in een Thredbo-workshopserie.

Naast aanbesteden en dereguleren bestaan nog andere opties. Veel overheidsbedrijven - hoewel lang niet allemaal - hebben hun zaken beter op orde gekregen sinds het begin van de hervormingsperiode, en hierin heeft de dreiging van aanbesteden, mits goed gebruikt door de overheid, zeker een rol gespeeld. Zoals aangegeven viel dit buiten onze scope voor dit onderzoek dat zich in plaats daarvan richtte op concurrentie, maar we hebben enkele voorbeelden genoemd bij het bespreken van enkele gevallen. Deze optie is al belangrijk geworden in het stedelijk openbaar vervoer op internationaal niveau en kan in de toekomst nog in belang toenemen als de keuzes van sommige lokale overheden om af te stappen van aanbesteden in de richting van interne vervoerders worden bevestigd.

Uitdagingen liggen in het verschiet. In het recente verleden zijn er nieuwe typen mobiliteitssystemen ontstaan, mogelijk gemaakt door de mobiele telefoon en internet, zoals nieuwe manieren om taxi's aan te houden of auto's en fietsen voor korte periodes te huren. Er zullen meer innovaties boven komen drijven, zoals de zelfrijdende auto, maar ook diensten van mobiliteit-op-aanvraag die mogelijk worden gemaakt door in real-time individuele verzoeken via mobiele telefoon en internet samen te voegen om gebruikers gecombineerde individuele, gedeelde of collectieve diensten te bieden die worden geleverd door verschillende providers. Een kenmerk dat door veel van deze nieuwe systemen wordt gedeeld, is dat het autonome marktinitiatieven zijn die een tussenvorm zijn tussen puur individuele vervoerswijzen (auto, fiets, taxi) op de vrije markt, en collectieve diensten zoals traditioneel openbaar vervoer die vaak worden georganiseerd via monopolies (aangebested of niet). Door af te knabbelen van de traditionele markten van door overheden geïnitieerde systemen, vormen deze trends - samen met recente dereguleringstrends in het lange afstand

bus- en treinvervoer - nieuwe uitdagingen voor lokale vervoersoverheden en zouden ze de relevantie van door de markt geïnitieerde regimes in de toekomst kunnen vergroten.

Onze algemene observatie over de verschillende opties is, kort gezegd, dat ze allemaal kunnen werken mits de voorwaarden voor hun functioneren in voldoende mate worden gerealiseerd, maar dat het streven naar een perfecte realisatie van alle voorwaarden, gelet op de waargenomen praktijk, illusoir lijkt. De belangrijkste uitdaging voor diegenen die bestaande institutionele raamwerken van het openbaar vervoer beheren, of diegenen die zich in een positie bevinden om hun ontwerp mede te bepalen, is om instituties te ontwerpen en daarbij af te zien van het idee van een perfect ontwerp voor een hypothetisch evenwicht. Dingen veranderen en zullen blijven veranderen. Wat nodig is, zijn ontwerpen die de flexibiliteit en het aanpassingsvermogen hebben om te reageren op veranderende sociaal-economische en technische omstandigheden. Dit vereist waarschijnlijk dat verschillende organisatiewijzen om in personenvervoerdiensten te voorzien, worden gecombineerd in nieuwe institutionele configuraties.

Curriculum Vitae

Didier van de Velde was born in Brussels (Belgium) on August 7, 1964. He graduated from the Université Catholique de Louvain (Louvain-la-Neuve, Belgium) in June 1986. He worked as researcher and lecturer in Transport Economics at the Department of Regional, Port and Transport Economics of Erasmus University Rotterdam until 2005. He switched to Delft University of Technology in 2005 and is currently part-time researcher at the Section Organisation & Governance of the Faculty of Technology, Policy and Management of Delft University of Technology. He is involved in teaching public transport governance (local and regional public transport and the railway sector) for academic teaching programmes in the Netherlands and in France, and for professional audiences via the UITP (International Association of Public Transport).

His academic research focuses on institutional reforms and competition in the public transport and railway sectors. He specialised in understanding and comparing the institutional frameworks of these sectors and their developments over the past decades. He published numerous papers and chapters on these topics.

Didier is consultant at inno-V (Amsterdam) since 2006 and he is director and owner of this consultancy bureau since 2011. He is nationally and internationally active as expert and advisor on governance and institutional reforms in the public transport and railway sectors, with activities ranging from strategic policy advice to the actual implementation of contracting and competitive tendering procedures in the public transport sector

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Didier van de Velde is involved in teaching and research at Delft University of Technology. He is active as international expert and advisor on governance and institutional reforms in the public transport and railway sectors.

The central research aim of this thesis is to gain a deeper understanding of the variety of institutional frameworks that can exist in the public transport sector and on how these develop. The main focus of this dissertation is located on the growing and evolving role of 'competition' as an institutional feature that can take many guises.

