

Summary

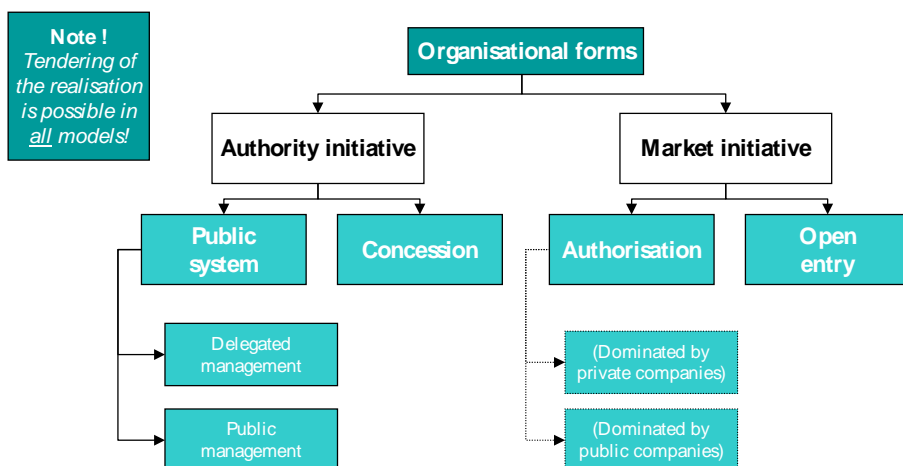
Reference Framework for Analyzing Targeted Competitive Tendering in Public Transport

This report provides the reference framework developed to be used within the project; Targeted Competitive Tendering in public transport (*Målrettet bruk av konkurranseutsetting av persontransport-tjenester*). This framework, originally developed by the author within the EU-projects MARETOPE and ISOTOPE, is here further developed for this TØI-project.

In the first chapter, the report provides a brief introduction to reasons, due to economic theory, for state intervention in the transport sector, in terms of concepts like market failure, externalities and network externalities.

Following Williamson, one can make a distinction between four levels of institutional analysis; i) the level of social embeddedness; ii) the level of institutional environment (“the rules of the game”), in this report further elaborated as a distinction between a legal and a regulatory level; iii) the institutions of governance (“the play of the game”); and iv) the level comprising choices of output and prices and agency theory. The core of this report and hence of the conceptual framework refers to the third level, institutions of governance, in this framework conceptualised as organisational forms.

Figure S.1 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, those authorities which have received the responsibility for transport (further called ‘transport authorities’) have the *legal* monopoly of initiative. This means 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, e.g., the current legal situation in local passenger transport in France outside the Paris region). 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 the current legal situation in local passenger transport in Great Britain – with much freedom – and in Germany and the Netherlands – with less freedom).



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Figure S.1: Organisational forms in public transport

In short, the main distinction is between the organisational forms where the right to initiate the creation of passenger transport services is reserved to the authority, who can then delegate it, and those organisational forms where this right lies “in the market”, for any one to grab.

It should 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 form, but it is not an organisational form in itself.

Authorities can play several roles, both in market initiative regimes and in authority initiative regimes:

- *Licensing authority*: to assess the compliance of potential operators with technical standards and the fulfilment of juridical requisites (i.e. granting access to the profession) in all regimes,
- *Authorising authority*: to judge the desirability of actual market entry by autonomous licensed operators (i.e. granting access to the market in market initiative regimes),
- *Concessioning authority*: to take the initiative to create a transport service concession and to select (by competitive tendering or otherwise) a licensed operator for the concession (i.e. granting access to the market in authority initiative),
- *Regulatory authority*: setting the ‘rules of the game’ for operators present on the market, together with the actual *watchdog* or *referee* monitoring and enforcing the rules of the game in all regimes,
- *Enterprising authority*: when the authority creates and bears the entrepreneurial risks on transport services she creates either by owning a public transport company (or non-corporatised internal division producing transport services) or by outsourcing the production of services she has designed. This either under authority initiative (legal public monopoly) or under market initiative (the services created by the authority have to be granted an authorisation by the authorising authority), and
- *Subsidising authority*: for two purposes: stimulate the general supply of services and redistributing wealth to politically chosen target groups in society (such as handicapped, elderly, unemployed,...).

It is important to state that the classification presented above only represents a number of ‘pure organisational

forms’. Few real-world examples will fully correspond to any of these organisational forms. 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. In real world cases, ‘delegated management’ and ‘concessioning’ can also sometimes be observed in combination with each other, all depending on the sharing of risks between authority and operators. ‘Two step regimes’ can also be observed. In market initiative regimes, e.g., the authority can be given a role as complementary initiator of (social) services, such as in the British bus sector. Such services are then however outsourced to private operators selected by competitive tendering. A combination in the reverse order is also possible and is encountered in Britain in the railway sector. 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. However, as in Germany, legal principles do not always correspond to the reality as various subsidies and cross-subsidies blur the distinction between profitable and non-profitable services. Finally, an often observed confusion is that between authorisation regimes dominated by authority-owned companies and public management under authority initiative regimes. While these forms do indeed function similarly in practice, they are based on fundamentally different legal regimes. In a context of change, and for the analysis of the barriers to change, it is essential to distinguish clearly between law and practice there were relevant. In some cases practices will be easier to change than the law, in other cases changing the law will be the only way for practices to evolve.

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, we will use here the following denominations:

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 S.2 translates these to the public transport sector, without yet referring to any specific legal or regulatory setting (this example refers to a simple bus networks for small-scale cities; terms would obviously be longer when fixed infrastructures are involved):

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. It should be noted that the strategic, tactical and operational levels considered here are seen from the point of view of the appearance of transport services to the passenger, i.e. at the system level, *and not* from the point of view of a specific (private) transport operator involved in production somewhere in the chain of actors, i.e. at the actor level. Indeed, any such actor will have its *own* strategy, tactics and operations and these should not be confused with what is presented above.

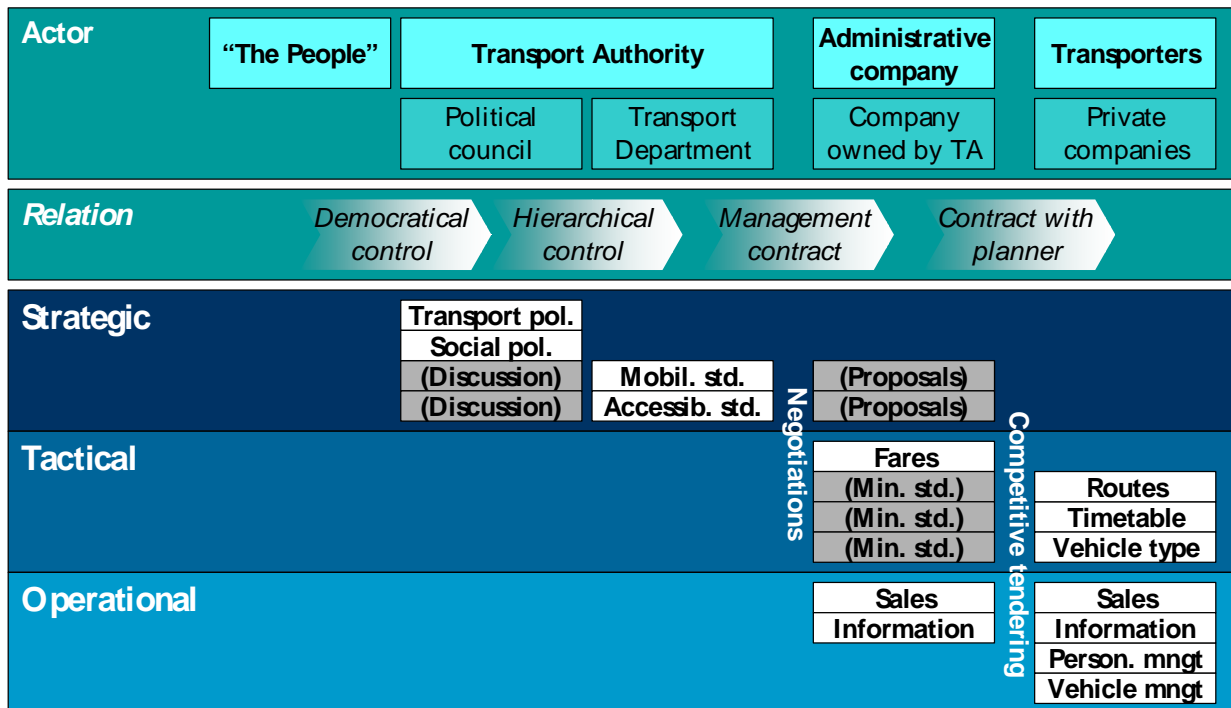
Level	General description	Decision	
		“Software”	“Hardware”
Strategic Long term (5 year)	<i>What do we want to achieve?</i>	General goals Transport policy Market share Profitability General description of the services Area Target groups Intermodality	
Tactical Medium term (1-2 year)	<i>Which services 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 mngt

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Figure S.2: Levels of planning and control in public transport

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. 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 representations of both existing and conceptual organisational forms in public transport. The focus here is on the role of the authority (or

authorities) as concessioning authority, taking the initiative for the creation of services and heading the chain of actors, and in its role of authorising and regulatory authority when controlling market initiative. Examples can 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. Only one example (Figure S.3) will be given here (further illustrations and explanations can be found in the report).



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Figure S.3: Tendering of the realisation with re-design incentives in sub-areas

In many cases decisions pertaining to one topic, such as fares or routes, will not be attributed totally to solely one actor. As far as fares are concerned, it is possible to observe that a political council wants to retain decision power on maximum average fare increases, sometimes even on fare levels, that the fare structure is determined by a co-ordinating body charged with public transport planning and that the actual fare level is determined by the transport operators within the limits set by the other actors. This could also be included in the graphs.

Organisational forms in public transport evolve. Figure S.4 is one way to represent this graphically as far as the levels of planning and control are concerned.

This does not include the financial side however. This figure depicts, *as an example only*, the following evolution:

- The starting point is a publicly-owned operator who is subject to a diffuse authority influence which takes mostly place at the tactical level (fares, bus stops, routes) and to a lesser extent at the strategic level (social aims for the public transport services).
- The first step entails a refocussing of the authority's intervention to the strategic level (specifying the aims of the public transport system rather than the means) and leaving more design

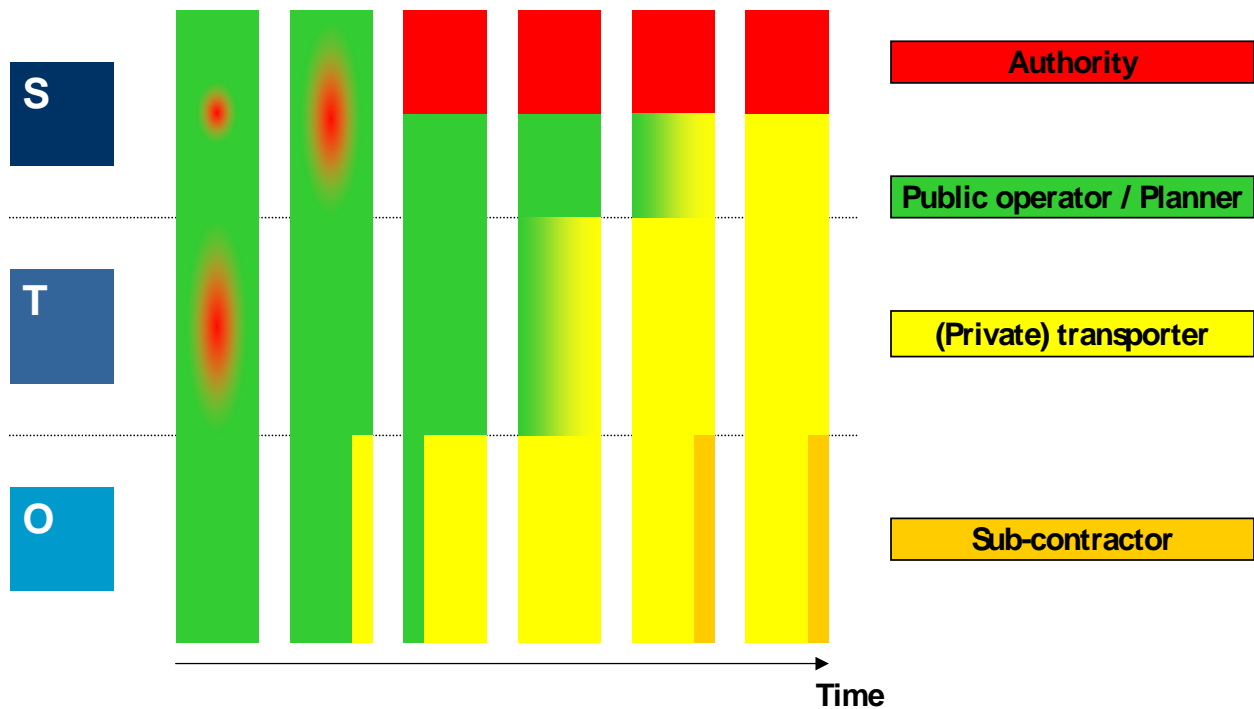
freedom to the operator. No contract exists yet between authority and operator. The operator is also requested to contract out parts of its services by competitive tendering to different transporters in order to get a comparison point for productive efficiency and induce an efficiency campaign within the public operator's organisation.

- The second step entails a contractualisation of the relationship between the authority and the publicly-owned operator. At the same time a growing share of its production is sub-contracted to competitively selected transporters. The publicly-owned operator gradually becomes a planning organ with less and less own production.
- The third step entails a transfer of some service planning powers to the competitively selected transporters. The planning organ continues to set a number of co-ordinating rules to guarantee service integration between the selected transporters.
- The fourth and fifth step entail further transfers of planning powers to the transporters. The planning

body becomes obsolete. The transporters are requested/allowed to sub-contract parts of their production if they so wish.

This is only an example, but the first three or four bars are adequate representations of the evolutions that have taken or are taking place in Denmark, Sweden and in London.

The main emphasis in the report is the classification of various forms of organisational forms, of which only a few have been touched upon in this summary. However, the report is concluded by a fifth chapter, presenting elements for further analysis of relations between actors, in particular contractual relations; principal-agent theory, risk division in terms of net-cost and gross-cost contracts, ownership versus usage and fixed versus flexible planning.



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Figure S.4: Evolution of organisational forms