

## **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.*

## **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. The third section provides an analysis of the functioning of the current situation based upon workshops that were organised with main stakeholders. 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.

### **The Dutch public transport reform in short**

The Dutch public transport regime was revolutionized by the introduction of a competitive tendering (further 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 lead 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.

### **Results so far**

Most of 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 to 60 percent) at lower budgets (5 to 10 percent). 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., 2007). 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. The figure below gives an overview of quality perception in these concessions, compared to 2001, both for tendered and non-tendered concessions.

**Table 1** Growth of traveller perception of public transport service quality in Dutch concessions

	Tendered bus concessions, split by year of first competitive tendering					Non-tendered bus concessions
	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%

Adapted from KPVV (2007a)

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 percent rise. For the concessions that were tendered earlier, the graph shows that the improvement was larger (more than 5 percent) than for those concessions not tendered (4 percent).

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 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.

## **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 CT usage 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.

### **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 were as such:

- The Zaanstreek concession (2004-2010) provided 30% more supply (in bus-hours) for a 10% lower budget, while the operator promised a revenue growth of more than 25%.
- The Waterland concession (2005-2011) provided 50% more supply (in bus-hours) for a 10% lower budget, while the operator promised a revenue growth of more than 35%.
- The Amstelland-Meerlanden concession (2007-2015) provided 60% more supply (in bus-hours) for a 5% lower budget, while the operator promised a revenue growth of more than 50%.

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. The amount of compensation per passenger-km is determined through the bidding by dividing the pre-determined available budget by the promised passenger ridership for each year. The realised number of passenger-km then determines the amount paid to the operator each

year. The contracted service supply level has, at least, to be realized, but the operator may provide more.

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 CT. 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.

#### **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 Pruijmbloom, 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 awarding criterion. Part of the awarding model was also the price for additional work. Several operators handed in bids that proved to be unfeasible, 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 three weeks before the start of the new concession. Finally, the Province awarded the concessions to the runners-up, who had three 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, three months to carry it out and six 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 a too detailed 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 advices 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 the unlucky coupling of public law instruments within the new transport act (where the authority uses unilateral decisions and subsidy payments to realise its policy aims) with the simultaneous attempt to make use of private law mechanisms (CT and contracting) with market players. The committee calls for alternative steering mechanisms that would avoid having to determine so many things contractually. The committee concluded that if the public law construction needs to be maintained, it should be considerably simplified, removing the current complex pile-up of all too many overlapping but not coinciding laws and regulations.

### **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., 2006). The graph below summarises some of these practices as well as their evolutions in recent years by categorizing the main allocations of the tactical level between operator and authority and distinguishing between two 'periods':

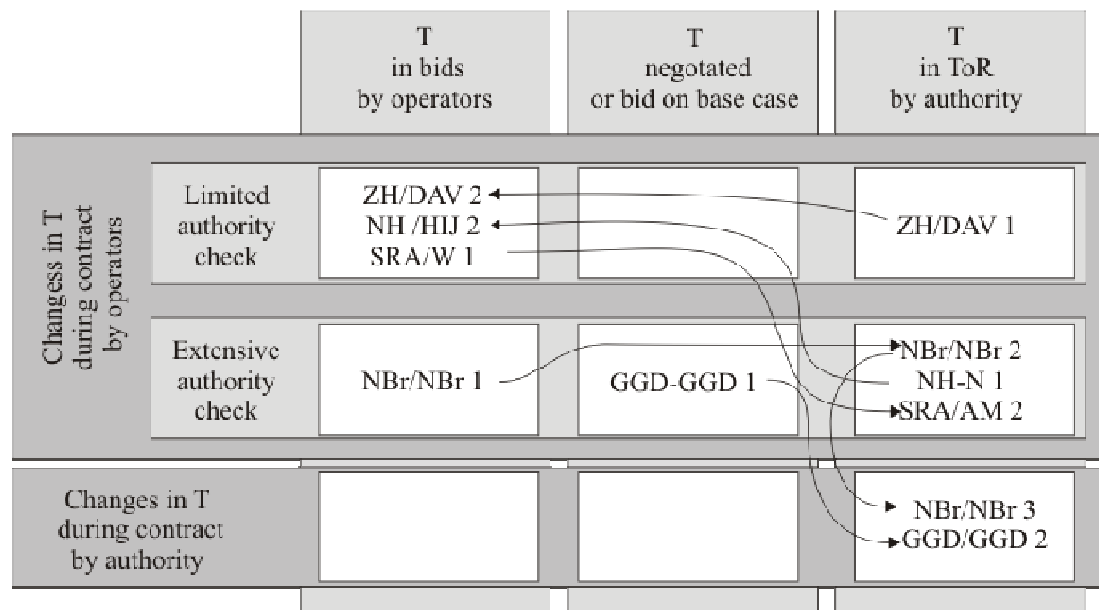
- The three columns indicate the localization of the tactical level (T) during the bidding phase: service determined in the bidding phase by the (potential) operators, in negotiations between the parties or services pre-determined by the authority.

- 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).

The figure shows as few cases of authorities and concessions presented in the table below. The arrows and numbering show how these authorities changed their minds about the localization of the tactical level in successive CT rounds.

**Table 2:** Used abbreviations for authorities and concessions

Authorities		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	Metropolitan Region Amsterdam	W	Waterland
		AM	Amstel- en Meerlanden
ZH	Province of Southern Holland	DAV	Drechtsteden-Alblasserwaard-Vijfherenland



**Figure 1** Development of the tactical level for five authorities in the Netherlands

A first observation of the figure indicates a tendency to move from the upper left to the lower right, but some authorities also moved in the opposite direction. 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 vehicle (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.

### **PROBLEMS WITH THE CURRENT SET-UP**

The previous section gives a first overview of general effects that CT 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 such complex form 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 for a further description of this process):

- First, the expert meetings showed that the authorities often have very high expectations on 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 higher 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) 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.

## **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 set up of their CT procedures, contracts and relation with operators.

### ***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 busses, 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.

### ***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 operator. 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) 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 (policy 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 organisation 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.

### ***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 model 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 underemphasise 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 underperformance in order to balance the tendency to overbid in this awarding model. Such penalty should be larger than gains from underdelivering, 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) is 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 busses) with the additional costs to the operator and the authority can make a balanced choice (what are clean busses worth). The second type also has a political disadvantage: politicians want to be able to ensure specific services 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. 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 shown to give problems in quality assurance, as all incentives are focused on low price.

### ***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 is payment method is in effect similar to subsidisation in the Netherlands prior to CT). Such contract can be classified as 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 an 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 contract as changes in services ordered by the authority have immediate consequences for the fare-box and contract balance. Such 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 authority to intervene in service definition.

None of the three contract types is the 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.

### ***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., 2006)? 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., 2006 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.

The authorities interviewed saw how some of their institutional choices failed, and started 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 substantial level of freedom to the 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 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 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 in the lines also concluded by Stanley (2007).

## **CONCLUSIONS**

Confirming the conclusion of a former paper (van de Velde et al., 2006), one can still observe a variety of changing configurations within the institutional setting both at the governance level and at the contractual level. 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 roughly speaking two extreme models now in the Dutch tendering practice:

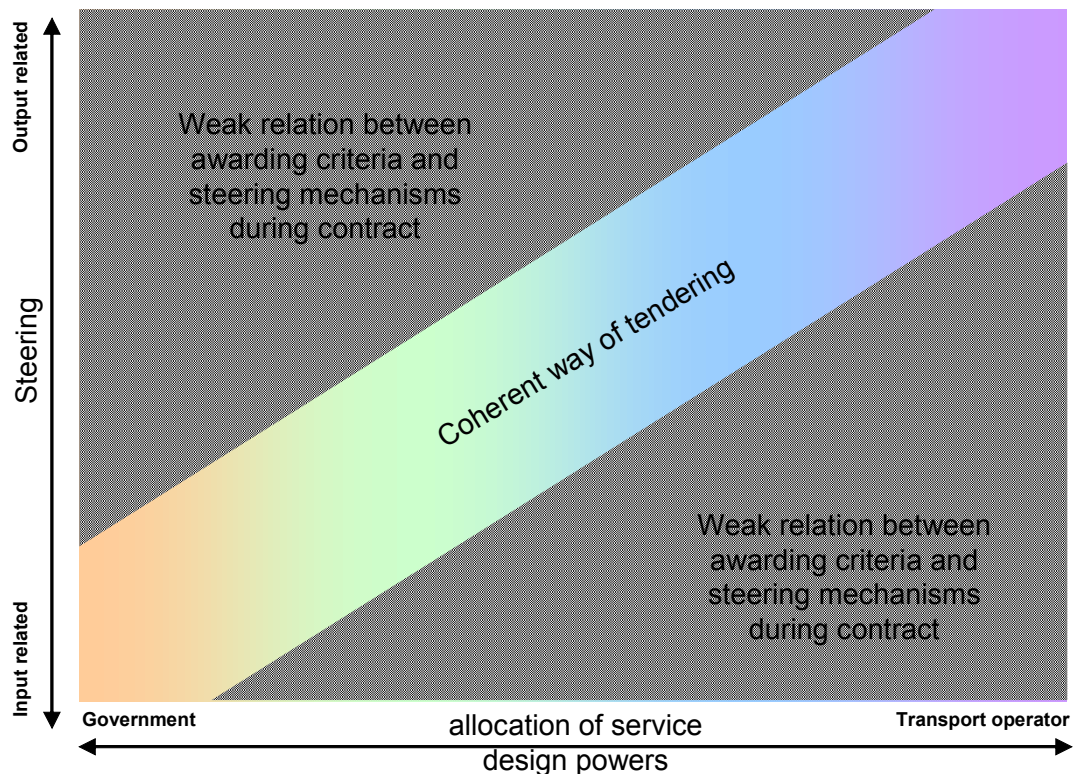
- Substantial freedom for the operator: trust on the creativity of the operator, service design on the side of the operator, functional tendering, revenue risk for the operator, award based on the quality of the plans, steering through realised output usually with a rather high bonus/penalty system, role of consumers' organisations 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' organisations 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 the side of the authority.

Figure 2 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 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 specify more rigidly 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.



**Figure 2** Coherent way of tendering (Source: Lutje Schipholt et al., 2006)

While this problem exists in some cases, it is also important to note that the majority of cases functions 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.

One main point comes out of the opinions of the experts cited in this paper: a very clear call for more ‘relational 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 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.

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