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Developments in Public Transport Governance in the Netherlands; The Maturing of Tendering

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ABSTRACT

In 2001, competitive tendering was introduced for most concessions in the Netherlands, to be carried out by regional authorities. These authorities received a great deal of freedom to implement the tendering in the way they saw fit. Over the years, issues arose that challenged the effectiveness of the tendering approaches. This article, as its precursors in earlier Thredbo conferences, captures these issues and the lessons drawn over the last 15 years and shows in what phases tendering has matured, based on the Dutch experience, that could help other authorities in the process of tuning their tendering of public transport.

1. Introduction

Public transport has for long been a policy instrument for a wide set of public values like employment, accessibility, sustainability and many others (Banister, 2008, Banister and Button 2015). Governance of public transport consists of the set of institutions providing actors with agency (the power to act) and funding (the means to act), structuring their actions towards a public transport system, with the expected result to attain specific public values (see for an overview Stoker, 1998). A great deal of literature has been focusing on various aspects of governance and their role in reaching the goals set on public values, both in public transport and outside. Much of the literature focusses on the relation between the authority and the operator and to understand how governance by the authority drives performance of the operator, with a great deal of attention given to competitive tendering, free market models and trusted partnerships (Hensher and Wallis, 2005, Van de Velde and Pruijmboom, 2005, Ongkittikul and Geerlings, 2006, Roy and Yvrade-Billon, 2007, Boitani et al, 2013, Van de Velde and Preston 2013, Nelson and Merkert, 2013, Buehler and Pucher, 2015). Governance questions can cover a wider set of actors in the field, including travellers and drivers, designers and builders, inspectors and directors, and more (for example Lyons and Harman, 2002, Klijn and Teisman, 2003 and Steenhuisen and Van Eeten, 2008). The institutions studied structure behaviour of all these actors and their contributions to the performance of public transport.

That literature shows the wide variety of aspects of governance that go beyond the elements we focus on here. Choosing or better amending the governance for public transport is a complex design issue that governments, supranational, federative, national and regional

have to deal with to realise the goals they have set for public transport. They generally built on existing institutions, often within institutional contexts created by other governments. The literature includes a wide variety of design aspects all evaluated for their role in driving the performance of the public transport system.

Governance includes institutions on regulating markets (for example ensuring competition through a market regulator, for example Sohail et al, 2006), technologies (for example ensuring safety through certification, for example Papadopoulos and McDermid, 1999) and services (for example ensuring minimum levels, those mentioned above), often in relation to procurement approachesⁱⁱ, contracts, and contract management strategies. The development in these institutions provide an ever changing backdrop for government and operator actions. For example, the institutions of European market regulation have driven procurement away from in-house operations and towards competitive tendering and a free market approach. The technology of rail based systems drove many authorities to have stronger government initiative than with bus systems, because of the stronger dependency between inherently monopolistic infrastructure and service provision.

Much of the literature above looks at a specific element of governance and its effect on performance, for example establishing the effect of tendering as a procurement approach on efficiency. That focused approach is very valuable, but misses the various dependencies between governance elements. This article, and its three precursors (Veeneman, 2010, Veeneman and Van de Velde, 2014, Veeneman 2016), take a different approach. They focus on dependencies between governance elements. Because of the dependencies of governance elements, institutional changes on one key element often trigger changes in other. For example, the success of opening up the market can rely on the establishment of a strong market regulator. Or the success of tendering of services could depend on a change in the way that busses are procured.

These dependencies are the key topic of this article and its precursors. Through a longitudinal analysis of the governance of a particular country, in our case the Netherlands, the article evaluates how the overall governance has matured from the introduction of tendering in 2001. The article does this from the perspective of the regional transport authorities making the key decisions on procurement, contract and contract management, within a context of European and Dutch regulation of markets, technologies and services. In the Netherlands, an obligation to competitively tender was introduced in 2001. An exemption was later made for the 4 larger cities of Amsterdam, Rotterdam, The Hague, and Utrecht. The obligation went hand in hand with a decentralisation of agency to provinces (the country has 12 provinces) and 7 urban regions. In recent years, most of these urban regions were liquidated, bringing the agency and funding to the respective provinces.

This means that currently 12 provinces and two urban regions, one for the region of Rotterdam and The Hague and one for the Amsterdam region, are the authorities for public transport. All these regional authorities are responsible for bus, tram and metro services and also for regional train services in their respective areas. Almost all concessions are competitively tendered every 8 to 10 years. Exceptions are the city of Amsterdam concession and the concessions (tram and metro) of Rotterdam and The Hague, which are direct award concessions to the municipal operators. Although this only concerns these three cities, public transport there comprise a large portion of the total traveller kilometres. (see Veeneman, 2016) The national government is the authority for the national rail network, operated in a direct award concession to the national railway operator NS.

For a full introduction of the Netherlands, Van de Velde and Veeneman (2014) and Veeneman (2010, 2016) give an overview of the introduction of tendering and the following developments in terms of governance and market. In terms of the changes in governance in recent years, they will be addressed below. In terms of the market in recent years, public transport use has been largely steady. Although supply generally grew, made possible by more efficient provision of services driven by competitive tendering, the development of demand in recent years in limited.

The regional authorities mentioned have regional transport plans that drive investments and service development. Authorities have developed away from policy documents prioritizing goals for public transport. Public transport is seen as a condition sine qua non (especially for for the cities) and the contribution of public transport is hardly under debate. This means that the policy papers are about optimising the system in terms of capacity and network optimisation to customer needs, rather than towards a prioritization of specific goals (see for example Stadsregio Amsterdam, 2010 and MRDH, 2018). This fits with a national trend to make policy more integrated, rather than siloed per mode or policy field. Mobility is expected to contribute to broadly formulated spatial policy goals, with the more tactical focus described above as a consequence. Obviously, the authorities acknowledge that public transport should be provided in a sustainable way, with authorities together aiming for full-electric provision of services by 2030.

Policy documents of many of the regional authorities show their struggle with the future use of new forms of services, including mobility-as-a-service, self-driving technologies, and sharing systems. As they are preparing for tendering the next concession for eight to ten years, it is clear that these innovations will impact their tenders. Also here, we see less focus on explicit goal prioritization and more on system performance in capacity and alignment with demand. There is an implicit shift in many of the regions, away from universal access to traditional public transport services, towards a focus on high demand routes (see for example Provincie Overijssel, 2016, Provincie Noord-Brabant, 2012, Provincie Groningen, 2016) and flexible solutions outside the corridors around these routes.

In terms of costs and revenues, latest available data on a national level shows from 2012 shows that total subsidies from the regional authorities accounted to $M \in 1,03$ (Boot et al. 2014). Pricing in public transport consists of two regimes, national train services and the services rendered on behalf of regional transport authorities. Here we only discuss the latter, in line with the scope of this article. Total revenue from travellers (urban and regional public transport services and including student card revenues) was around M \in 1.0 in 2013 (First Dutch 2015, NS, 2014) for the whole country. Pricing stayed almost level. The national base rate, for every trip developed from \in 0.85 in 2010 to \in 0.88 in 2015 (and \in 0.88 in 2018). The average kilometre prices, as set separately by the regional authorities, stayed at \in 0.15 in 2010 and 2015 (\in 0.16 in 2018)¹ (DOVA, 2018).

¹ All in 2015 prices



Figure 1 Average trips per capita in key modes per year, 2010 = 100% (Source: CBS Statline 2017)



Figure 2 Average kilometers per capita in key modes per year, 2010 = 100% (Source: CBS Statline, 2017)

Public transport has been at a stable 6 percent of total trips and 13 percent of kilometres since 2010. The relatively low numbers in model split for the Netherlands are largely related to the high percentages of trips and even kilometres on bicycle. In kilometres per person per year, car use dropped by two percent from 2010 to 2015 and bicycle use grew by two percent in the same period, leaving the percentage of public transport level, with the number fluctuating around that level over the years. For trips, the same development was seen, with a shift of three percent away from cars to bicycles, again leaving the trips for public transport at the same level. Also here, there is not an clear trend with numbers fluctuating around this level. The charts above show the development of the average trips and kilometres per person on key modes from 2010 to 2015, with 2010 as 100%. They show a slight growth of bike and train relative to car and bus, tram and metro, with the limited impact on modal split shown above.

2. Approach

Like in the precursors of this article, semi-structured interviews were carried out with key staff of the regional public transports authorities of the Netherlands, responsible for both procurement of services and contract management. The key question was how they changed the way they procured and managed (mostly competitively tendered) public transport concessions in their region from an earlier concession period to the most current concession period. The aim was to understand which lessons they themselves had drawn at these pivotal moments of the development of a new concession.

The interviewees at the authorities were asked to mention the three key changes they carried through from the former to the most current concession period. These were recorded and coded to establish which of these changes were most prevalent in the country. Following that question, a list of possible topics of change was presented to them, to broaden the perspective of possible changes of the concession. This list consisted of three categories: actors, resources and services. First, the lists focussed on actors and organisational changes in the authorities' interactions with these actors: municipalities in their area, bordering regional public transport authorities, and the national government, other departments within their governmental organisation (like road management or financial departments), technology providers, operators bidding and operators operating in their area, and traveller unions. Second, the list focussed on resources needed for the provision of public transport: staff, vehicles, energy, information, and infrastructures. Energy would for example look at changing requirements for energy used, like electricity, hydrogen or bio-fuels, which would also require changes in vehicles and infrastructure. Information would look at the information the authorities would ask of and provide to the operators during the tendering and the concession period, like passenger counts, fuel consumption, fare box revenues, etc. Infrastructure would focus on road, energy or information infrastructures, for example changes in bus lanes, hydrogen filling points, or travel information panels. Obviously, some of the changes that were taken on in concessions would incur multiple changes in resources, like a new bus station with travel information panels showing real-time bus arrivals demanding automated vehicle location information from the operators, with technologies installed vehicles and facilities. Third, the interview focused on service characteristics in the concession. Concession regions, lines, stops, frequencies, operating times, operating speeds, prices, rebate schemes, all these could be part of the demands the authority is putting forward to the operators. These three categories, actors, resources, and service characteristics and their subcategories were put forward to the interviewees to trigger further answers on possible changes that were made from the earlier to the most current concession and these changes were also recorded and coded.

These interviews were carried out at all 13 public transport authorities in the Netherlands. After coding of the interviews, the three changes that were most mentioned in the interviews were selected, with a distinction of regional changes occurring most and the national changes influencing all regions. Below, these two, regional changes and national changes, are presented first in paragraph 3. In addition, some of the interviews provided interesting singular changes that are presented separately in paragraph 4. They will also be discussed. Following that, the developments that were described in the precursors of this article and this article are put in perspective to look at the process of maturing of public transport tendering and in which direction this has matured, obviously from the Dutch experience. Maturing is the process through which authorities learn about the effectiveness of their governance model and adjust and tune it accordingly, which is set opposed to switching governance model changes, like the introduction of tendering (see also Veeneman 2002 and Veeneman and Van de Velde, 2014) With In this latter part, the question is addressed on how different governance elements, both institutional and behavioural, have aligned.

3. Three key developments regionally

3.1 Concentration of supply on high demand routes

This is a trend that has been going on for long, but seems to be picking up momentum. In the urban areas metro and tram system have had a slow but steady increase. Amsterdam will soon be opening a new metro line, Rotterdam and The Hague are changing a third heavy real line to connect to the metro and tram networks of those cities, and Utrecht is extending its tram system. The metro systems of Amsterdam and Rotterdam are strong backbones that since they have gates after the introduction of the national OV-Chipkaart, are also strong sources of revenue.

On the other side of the spectrum, authorities are pushing for the reduction of scheduled services in low demand areas. Before austerity measures after the financial crisis of 2008, efforts to drop services with low frequencies were often met with protest, which kept the political will to keep them going high. However, despite budgets not shrinking significantly, the acceptance that empty busses can be seen as wasteful has grown and authorities have been also looking more for alternatives.

This means that almost all authorities are pushing "stretching and bundling": concentrating bus lines in to less routes and increasing the frequencies on those routes. Due to this development, public transport is shifting the balance between service spread (having the option to travel everywhere always) to service focus (having high frequency travel at concentrated corridors).

This redistribution of capacity, away from twisty routes along villages to direct routes into larger towns, has had success in several of the regions. For example, in the Groningen area the more frequent routes drove 15 percent per annum passenger growth on some lines. This focus drove authorities to look for new solutions for the first and last mile of the trips. Tendering of the high frequency services for these lines stayed close to the original design of tendering: procurement of capacity on predestined routes. However, the changes around this drove authorities to really reconsider the way in which they were tendering out their services and led to hybrid requests for proposals, partly the procurement of predesigned routes for high frequency services and partly something very different, discussed below.

Tendering has made the conversation between authority and operator ever more focused on performance. As opposed to the situation prior to tendering, authorities have departments with a clear sense of costs and revenues of public transport, specific lines, time, and modes. Tendering brought explicit bids, which in turn brought detailed contracts, which drove strong contract management by the authority, which supported a more selective focus on which services to sustain. The discussion about the costs of empty busses was now easily fuelled by authority contract managers. This, together with austerity measures by the national government seems to have driven this push towards concentration of supply.

3.2 MAAS, but not MAAS

Mobility-as-a-Service (MAAS) is this idea that all mobility options are combined into an integrated set of services with a single interface for the traveller in terms of travel planning, payments, identification, information, etc. MAAS is put into the market by its key players as a service layer on top of many different modes, tying them all together (Hietanen, 2014). What the popular concept has shown is that modalities are largely siloed in these regards. And governance plays an important role here, different governmental layers serve as the authorities for different modalities and drive these modalities towards different demands and systems on the above-mentioned traveller interfaces.

In the Netherlands, some of those potential silos were already dealt with. There is a national travel planner (OV9292) and there is a national ticketing system for payment and identification (OV-Chipkaart). However, both mostly focus on the traditional modes of public transport. In addition, there are some small initiatives, like the inclusion of bike hire information (like bicycle availability) into travel planning apps or identification to shared cars through the OV-Chipkaart.

What the MAAS concept has showed public transport authorities is that they have a particular focus and do not provide an integrated set of mobility services, which manifests itself in tendering for bus hours for a limited number of services types or vehicle types at specific prices. Most of the interviewed authorities are making a step away from that narrow focus. Multimodal concessions are becoming mainstream, Amsterdam went the farthest with the concession for Amstelland-Meerlanden, south of the city. The operators were asked to come up with an integrated set of mobility services, which they delivered upon, including bicycle hire, car sharing, demand dependent services, and a travel control centre where people could make reservations. Many authorities are looking at this as an example for their future tendering.

The development aligns with long standing efforts most of the authorities mention to integrate demand dependent services (see also Mulley and Nelson, 2009) and regular public transport. Here governance is in the way. Municipalities are responsible for demand responsive services for specific vulnerable groups, although they join forces with other municipalities to tender these services out together to a single service provider. On the other hand, provinces are responsible for scheduled public transport. The provinces have been looking for ways to integrate these services, especially as in more rural areas scheduled bus services did not suit the demand patterns anymore (see also above). It seemed logical to tie the various services together, but many of the authorities have been struggling in their negotiations with municipalities to make this work, where others were successful. The Amsterdam success could be partly explained as the metropolitan region already is a cooperation of municipalities, bringing demand responsive and scheduled already in a single hand.

Although this development is often called MAAS, it is not really in the narrower sense of the concept of mobility as a service. That concept is generally seen as a layer of traveller interfaces over all existing modalities. Here, large part of that the traveller interface is already existing, with the travel planners and ticketing system mentioned above. The effort is to bring more types of services under those systems, shift from low demand scheduled to demand responsive, include other alternative services like shared bicycles, cars and rides, and include those in an integrated set of services to the traveller. However, it still excludes more private mobility options of car and bicycle.

This illustrates a key change in the way competitive tendering is carried out: it is moving away from the procurement of capacity (bus hours on scheduled lines) towards the contracting of a service provider with a wide range of services. This has had an impact of the requests for proposals, moving away from detailed service descriptions and towards more functional demands. This is further strengthened by the development described next. It also changes the process developing the request for proposal. Several of the authorities mentioned that they have given a stronger position in that process to municipalities in the area. Because of that, the tendering processes start earlier, creating more time for negotiations with the municipalities. Earlier, the hard deadline of the new concession start would push out these negotiations as they added complexity. The experience has been that

in later stages this has a negative effect, with uncooperative municipalities in later changes in the tendering process.

3.3 Flexibility in concessions grows and changes

At the early years of tendering in the Netherlands, authorities were very much focused on defining the services they wanted from the operators. Even when they applied net cost contract, in the process of writing the request for proposal, the inclination was to make sure those services were provided that the authority wished. In a sense, this led to a mismatch between narrowly defined service requirements in the request for proposals, with net cost contracts.

During those early concessions from 2001, many of the authorities discovered that this clear and narrow definition of the services, through prescribed lines, operating hours, stops etc. in the request for proposal and consequently affirmed in the proposals, led to public transport services being very rigid for the 8 years that the operator would run the concession. This was strengthened by legal action from competing bidding operators during the concession if changes were made in the first half of the concession period, claiming that their bid would have been better at providing the now newly defined services, so, they should have won the bid. Even though only a few court cases occurred, authorities and operators ended up avoiding changes.

Various authorities took different steps to deal with this. Three authorities at one point decided to go all the way and go for gross cost contracts, taking the risks in revenues and defining the services at least in part themselves during the concession. They tendered for public transport capacity, although all left a major role for the operator in detailing the services. The provinces of Noord-Brabant, Overijssel and the OV-Bureau for the provinces of Groningen and Drenthe went that route. Only the last authority is still on that track, though. Most authorities looked for a different way to build in flexibility into the contract. They moved their request for proposals away from narrowly defining the services and put more broad conditions into the request for proposal. In addition, the request for proposals often treated the services in the bid as a reference, detailing a process through which changes in services would be decided upon, with roles for the authority and the operator. The requests for proposal were redefined, putting more emphasis on the way the operator would function as a service provider and less on the exact services to be provided. Although this has been going on for quite some time, the interviews showed this change was still ongoing. However, many of the authorities mention that they feel the need to further flexibility in the concessions. That has two reasons, both driven by technological change. First, all authorities are citing that they will move to electric busses in the near future, within the timeframe of the

most current concession they tender, more on that below. All see it as inevitable, if public transport wants to keep strengthening environmental sustainability. However, for full roll-out in current concessions supply of electric busses is still limited, battery and charging technologies are still developing. Second, the promise of self-driving vehicles for public transport is huge. The business case of many bus lines in the more peripheral areas is rather poor. If one could strip the costs related to drivers and reduce the cost of energy by going electric, these areas of less dense demand could be served by autonomous demand driven vehicles, linking to more frequent and fast bus, tram, metro and train services. Authorities see that promise and what to set up their upcoming concessions in such way that this new potential can be tapped when available. This led one authority (Overijssel) to build in a planned reduction of traditional public transport services for the upcoming concession, with

expected bus hours reduced every year of the upcoming ten-year concession. The funding freed up by this reduction of traditional services will be used for alternatives or strengthening of higher capacity services. Because of the different business case of the alternatives, these could very well fall outside the tendered concession, for example private initiatives supported with some seed money from the authorities. Authorities are looking at their concessions to be able to foster and align with those possible development in the upcoming concessions, even though they are still in their infancy.

Counterintuitive to this is that the duration of concessions is growing. Most authorities have moved towards the legal maximum of ten years for their concessions. Many authorities are moving to 15 years, only possible when investments are made by the operator, which they focus on electric busses. This means that flexibility is built into longer concessions, rather than flexibility by shorter concessions.

Concluding, competitive tendering in public transport is an instrument that at first glance looks like the procurement of services. In reality of the Dutch tendering process, it proved to be more like the creation of a relation with a service provider, even in those cases where gross cost contracts were used. Those two are essentially different approaches. All authorities have made the move from the former to the latter approach. With technological development rapidly developing, tendering again has to make a step, with some authorities choosing for built in shrinkage of the concession.

4. Three key developments on a national level

4.1 Regions start working nationally

In the precursors of this article, fragmentation was discussed as one of the key issues authorities had been battling. This meant that over the years, concessions became bigger, lasted longer, contained more modalities. Authorities cooperated, merged, or were consolidated into the 12 provinces and the two metropolitan regions.

Because this way of reducing fragmentation was seemingly exhausted, new initiatives popped up to cooperate on specific topics in the field of public transport. Rather than battling fragmentation through bigger concessions and larger authorities, the regional authorities worked together on specific topics, coordinating their agenda's.

The first one that developed after 2015 was in the field of electric busses. The intention to go to emission free public transport was already discussed above. However, the market for electric busses is still very much in development. The Dutch public transport authorities signed a covenant in 2016 to let all busses be zero-emission in 2030, with all new busses to be zero-emission from 2025. The covenant (IPO, 2016) was co-signed by the national government. This gave a substantial boost to Dutch bus industry to start working towards electric busses, with a significant amount of projects looking for the best implementations of battery and charging technologies.

A second example that developed further after 2015 is that all authorities had been trying to get detailed data from the operators on ridership and vehicle location. The tendering had matured over the years, with requests for proposals providing more details on the data that the operators were expected to provide. However, approaches were not standardised, leading to higher costs. In addition, having a national ticket system did not mean a national price system. A wide variety of prices was the result, with uncertainty for travellers crossing borders of transport authorities. In 2015, the regional public transport authorities started a new national body in which they are cooperating in standardising data and homogenizing pricing.

A third development after 2015 is that provinces, metropolitan regions and operators developed a shared vision on public transport in 2040 (Ministerie van Infrastructuur en Milieu, 2016). In a unitary state, regions are mostly expected to follow the vision of the national government. However, that national government decided that they would have to develop the vision with the regional authorities in a shared effort.

4.2 Integral policy approach on national level trickling down

The national government decided to move from separate policy and legal processes for spatial, environmental, water and transport and combine them in a single process to allow for more integrated policies (see also Hull, 2008). The provinces are following that example, which would mean that transport policies, including public transport, would be more integrated with these other fields. This is a change, where the process most authorities have, like developing their requests for proposals for public transport policies, could become more complicated. It is expected to further complicate change process and increase even further the need for flexible concessions. However, what the regional effect is of this new national policy in currently unclear.

4.3 Funding changes on transfers from national to regional

Regional public transport authorities have a very limited tax base. As almost all of the taxes are levied on a national level, there is a transfer of funding from the national government to regional government. Until recently, that part of that funding was earmarked for public transport, for small projects and operational subsidies. This meant that a predefined amount of money was available for public transport, set by the national government.

Recently, the funding became part of the general transfer from the national government to the provinces. The metropolitan regions are still funded with an earmarked transfer. The authorities agree on the effect of this change. On the one hand, the earmarked transfer from the national government was not indexed for inflation, which meant a de facto austerity measure. As prices went up, the funding for public transport stayed the same. With tendering bringing higher efficiency, the effect on supply was limited. The general transfer to the provinces is indexed meaning that the continuous cutbacks have gone.

On the other hand, provincial decision makers now have agency over the funding for public transport. This means that funding can be used for other policy goals. Where in some provinces this has led to keeping or even raising the exiting budgets, in other provinces public transport funding has come under pressure. Existing contracts with operators provide obligations to the provinces, but as flexibility has been built in more and more (see above), this could lead to more volatile funding for public transport.

5. A few interesting developments not the larger trends

Above, this article mentions developments that the authorities mentioned most in term of changes they have made or will be making related to the most current tendering process they have. There were a few interesting developments that did not make the cut, but still are interesting to mention here. First, several of the authorities have become aware of the costs of leaving specific elements of public transport service provision to the private sector operators. In a first example, the cost of financing new busses in much higher for private than for public entities. One authority (Amsterdam) allowed the bidders to borrow money from them for buying electric busses cheaply. Infrastructure projects of the authority had been delayed, while funding was on the budget. That money was made active by using it as a

cheap loan to the operator, at rates the private sector could never provide. This was attractive for both the authority and the operator and helped smoothen the transition to electric busses. In a second example, the location of bus garages had long been seen as a responsibility of the operators. For strategic locations, exiting operators would not be willing to give up these facilities to new concession holders. This lead to higher costs for the new operator and consequently for the authority. The OV-Bureau for Groningen and Drenthe developed a bus garage close to the central station, reducing the empty rides of busses between the existing garage and the station, at which most lines start and end. As costs were lowered for every bidding operator that could use this strategically located garage, bids by operators were lower as were subsidies the authorities had to pay.

Both are examples of asset related financial constructions that reduce the risk or costs for the operator, executed by the authority on assets that will be totally in the hands of that operator. That is a step away from earlier approaches by most authorities unwilling to interfere in operator tasks. The balance between what is done by the authority and what by the operator is getting more and more refined and mature.

Finally, there is a slowly growing trend in regional branding of services. Most authorities would leave branding to the operator. But over the years, many of the concession have developed regional branding for the concession (U, Bravo, Breng), and specific services (R-net, Flex, Q-link). This is a move away from adopting the branding of the operator, which allowed for flexible use of busses between concessions. Authorities are finding a balance between strict branding rules, to have a clear product for the traveller, and allowing occasional generically branded busses in service, to reduce costs for available vehicles. This again is an example of ever more intricate interplay between the operator and the authority to allow for operation meeting contradicting demands, in this case low costs, low service cancellation, and clear branding.

6. The maturing of tendering and interaction of different governance elements

One of the precursors of this article (Veeneman, 2016) looked at the introduction of tendering in four phases based on the developments until 2015. A further analysis of these phases, including with the developments of the last two years, allows for a further detailing of what happens in these phases.

For this analysis, we looked at the contracts and the way they developed on the different concessions over the years. Also, we revisited the interviews of the last years to establish changes between the different years in the various regions.

• Implementing,

in which the governance change towards tendering public transport is introduced. The phase is focusing on legal definition of roles and procedures with the discourse focusing on making the new market work. The authority is focusing on setting up the governance context to start tendering: defining the concessions, developing new relations with operators (sometimes privatisation or splitting up into public and private entities), new procedures for tendering (including the development of requests for proposals, consultation of other public entities, traveller and market representatives, a tendering approach), new types of contracts, new performance management systems, etc. Developing the context for the market to take off is the main focus,

• Discovering,

in which downsides of tendering are becoming apparent, which have shown to be

- Fragmentation in time, regions, concessions, and modes, which could be a Dutch phenomenon with relatively small authorities and consequently concessions, originally with short concession periods. Alignment between concessions within and between authorities becomes an issue on for example ticketing, pricing, connections, interconcession services, as travellers cross the boundaries of concessions,
- Poorly understood incentives in the tendering and the contracts with unexpected down-sides, like the winner's curseⁱⁱⁱ which was triggered by many of the first awarding models. The market is there, but the behaviours are still poorly understood. The assumptions of how the market will behave proof to be crude. For example, operators were expected to be highly innovative in the tendering context, however, the awarding models provided strong incentives to have low-priced bids, leading many operators to limit their focus on innovative services because of cost savings,
- Contradictory arrangements in the governance. Authorities stack demands and incentives supporting these demands, not understanding how these demands are contradictory in the operational and financial reality of the operator. For example, absolute demands of branding of busses for the region drive up costs for back-up vehicles, leading to lower service levels given the fixed budget. Or how authorities request innovative and more sustainable drivetrains without understanding the negative impact on reliability and punctuality of service provision, for which they also implement strong penalties. This often leads to unbalanced solutions, for example operators a priori including penalties for impunctuality in their costs for the concession, as a bid without new drivetrains would not be considered by the authority,
- Inflexibility in the concession. The introduction of tendering is an uncertain step, driving a focus on procuring services in the tendering phase and controlling the delivery according to the bid of these predefined services in the concession phase. This control focus is a primary rational at introduction: will we get what was promised. The discovery during those first concession phases is that this control focus leads to strictly defined services and limited potential for changes. As political priorities (like a change of government), possibilities in supply (like changing diesel prices), focus of demand shifts (like through a new student travel card), this proves to be problematic,
- Blaming culture, as the expectations and assumptions of authorities prove wrong, with limited flexibility and innovation in the concessions, and the governance is organised very formally on definition of services and control of delivery, the relation between authority and operator comes under pressure. In that situation, it becomes clear that the governance is not set up for developing service solutions but aimed for financial settlement, sometimes to the level of bankrupting the operator.

• Countering,

in which counter-arrangements are developed to deal with the key challenges, including

 Counter-arrangements against fragmentation through larger and multimodal concessions and cooperative arrangements with neighbouring authorities and national cooperation on issues that require national coordination,

- Counter-arrangements for extreme incentives through mitigating the extreme effects of incentives like in the awarding model (with for example diminishing points for lower prices or minimum prices) and the use of more system-performance related incentives (like on customer satisfaction or fare box revenues) and limitation of production related incentives (like on punctuality),
- Counter-arrangements for integration, through the tendering to the operator of the task to co-develop with the authority, rather than the tasks to develop services by themselves or operate service fully developed by the authority. An alternative is that either the authority gets a stronger voice in the development process in which the operator has prevalence, or the operator a stronger say when the authority has prevalence. This allows more shared development of solutions by authorities and operators, with more refined distribution of tasks based on strengths of both parties,
- Counter-arrangements for flexibility with more functional specifications in the request for proposal and stronger focus on cooperative change processes. Functional specifications and generic service level bids allow the authority and operator to be flexible together. This is even more the case with tenders that predefine the process and roles in a cooperative development of services throughout the concession years between the authority and the operator,
- **Counter-arrangements for resolution**, with separation of operator/authority arenas for development on and change of services on the one hand (in which governance is aimed at co-development and more cooperative) and processes for judgement and evaluation of agreed upon service levels on the other (in which governance is aimed at control of the delivery of the agreed upon services, with bonus and malus schemes and more conflictive).

• Realigning,

With new technologies, demand patterns, market situations, or political priorities, the intricate balance between service delivery and governance system changes. Mobility-as-a-service, sharing systems and self-driving technologies are recasting the reality in which tendering has to operate. Incentives have to be realigned, processes have to be reassessed, roles might have to change. A new balance will have to be established, with new issues and new solutions.

All in all, the maturing process of competitive tendering in the Netherlands allowed the authorities to make a great deal of design choices on the exact governance in which the tendering was formed. That freedom allowed public transport authorities to draw their lessons and implement changes in the way they did tender public transport services. The general gist of that change seems to be moving away from a market perspective towards a relational perspective. Governance will always have to be adaptive (see March and Olson 2006), a process that we have described here for public transport governance.

7. Conclusions

The article is the fourth describing the development of tendering in the Netherlands, after the implementation of new governance in 2001. It shows, like its precursors, how tendering

created its own issues into which operators and authorities stumbled, and how these were addressed through the years.

In the last two years, rapid technological developments asked for (even more) flexibility in the governance of the concessions that were currently tendered out. Uncertainties around these new technologies (including self-driving and electric propulsion) in public transport service provision drove authorities to find new ways in which to bring flexibility into tendering processes that had started rather rigid.

This was only one of the aspects where changes had to be made. Next to flexibility, also on other aspects lessons were drawn and implemented in the way in which the request for proposal was developed, the competitive tendering was carried out and the concessions were managed. New realities seem to keep driving the need for changing governance and new fine-tuning of the way that authorities and operators interact to provide societies with the public transport services that provide them with the most value.

The main changes that occurred were these. First, authorities are focusing on high-demand routes, improving the overall efficiency of the system. They are seeking ways to not harm overall experience of the traveller by alternative solutions for the first and last mile. For example, in the Netherlands the bikes, with new bike sharing solutions, find their way into public transport concessions. Second, authorities start being active to deliver on the promise of MAAS. They seek way to better integrate services towards a broad mobility solution, also within the context of a concession. An example is the mobility concession in the Amsterdam region. Third, making concessions more flexible is developing beyond flexibility in scheduled service definition. The new modes (MAAS, sharing, and self-driving) are expected to develop strongly in the concession periods that are currently tendered, asking for the current requests and tenders to go way beyond the delivery of scheduled services.

On a national level, integration is the key word. With more autonomy for the regions in funding, at the same time regions are seeking ways to couple mobility better to spatial development and to cooperate with all on those topics where they can create synergy. The role of the national government is limited while at the same time national cooperation between authorities is growing.

What we see is that tendering approaches, requests for proposals, contracts, roles, all together have shifted. The big trend can be qualified as integration. The introduction of tendering left a fragmented landscape, with clear roles and tasks that were strengthened by the documents institutionalising them: regulations, request for proposals, bids and contracts. That fragmentation has been set straight after its downside became apparent: formalisation and fixation in contracts and procedures limited the potential to come to synergetic solutions crossing boundaries of actors, modes, concessions and regions. Ways were found to overcome that, by more open cooperation between operator and authority, concessions with more modes and larger sizes, supra-authority and national solutions where needed, etc. Integration has been an important way to mature the way that tendering now works in the Netherlands.

The Dutch perspective provides a detailed overview of the dependencies of different governance elements, both institutional as well as behaviour, dependent on agency and funding. These intricate dependencies intricate are captured here and could support the more integrated analysis of governance of public transport elsewhere, especially when tendering is a major element.

Interviewees

Metropolitan region Amsterdam: Nico van Paridon Metropolitan region Rotterdam/Den Haag: Gertjan Nijsink OV Bureau of the provinces Drenthe and Groningen: Jan van Selm, Erwin Stoker Province Flevoland: Rene Borsje Province Friesland: Cor van den Acker, Dieuwke Burema, Coen Dijkman Province Gelderland: Peter van den Boogaard, Gijs Pelsma, Eric Reintjes Province Limburg: Lennard van Damme, Sabine Kern, Mark Smits Province Noord-Brabant: Erica Vergroesen Province Noord-Holland: Ruurd Postma Province Overijssel: Wim Dijkstra Province Utrecht: Karin Peskens, Ellen Vrielink Province Zeeland: Frans van Langevelde Province Zuid-Holland: Marcel Scheerders

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¹ In some fields or countries, the word regulation is used for similar concepts. We like to reserve the word regulation for governance that structure markets, mostly developed on a (supra)national level. Here, the focus is on the governance that (mostly regional) authorities set-up around their interactions with operators primarily and further stakeholders. Obviously, that happens within a regulatory context. Other related concepts that are used in the literature are contracting and procurement (focused on the set-up of the relation between authority and operator in a market environment), process and network management (focused on the management of the existing relation between authority and operator in situations of differing interests). These are part of the wider governance context under study. "Which would include the choice to make or buy the services.

ⁱⁱⁱ The winners curse is the play in which of all bidding parties those with poor understanding of risks and costs are likely to win, as they are hand in bids that are overoptimistic.