Research in Transportation Economics xxx (xxxx) xxx-xxx

Contents lists available at ScienceDirect



Research in Transportation Economics



journal homepage: www.elsevier.com/locate/retrec

Collaboration in public transport planning - Why, how and what?

Alexander Paulsson^{a,*,1}, Karolina Isaksson^{a,1}, Claus Hedegaard Sørensen^{a,1}, Robert Hrelja^{a,1}, Tom Rye^{b,1}, Christina Scholten^{c,1}

 $^{
m a}$ VTI (Swedish National Road and Transport Research Institute), MAP Unit, Sweden

^b Edinburgh Napier University, United Kingdom

^c Malmö University, Sweden

ARTICLE INFO

Keywords: Public transport Governance Collaboration Network Sweden*Classification codes*: L910 L920 L980

ABSTRACT

This paper is about collaboration in public transport governance. Drawing upon the emerging literature that views collaboration through the lens of networks, we explore why and how regional public transport authorities collaborate with both municipalities and public transport operators in the planning of public transport. We also explore the advantages and disadvantages of such collaborations. Based on interviews with civil servants (government officers) in the Swedish metropolitan regions of Stockholm, Västra Götaland and Scania, we conclude that collaboration is, firstly, a way for the regional public transport authorities (RPTA) to engage with the local municipalities and develop joint agreements on public transport priorities. It is also a way to build a common identity with the public transport operators, who operate services under tendered contracts. Secondly, we find that collaboration takes place during official meetings, as well as in informal conversations and face-to-face dialogues. Thirdly, the potential advantages and disadvantages of collaboration hinge on the ability of coordinating actors to put in place processes where the feasibility of plans can be established, and where a sense of common identity can be constructed.

1. Introduction

During the past decades, public transport in Europe has experienced comprehensive policy changes and organizational reforms (van de Velde, 2014). The overarching policy changes can be summarized under the rubrics of sustainability (Hrelja et al., 2013), austerity (Veeneman et al., 2015) and competition (van de Velde, 2008). Regarding sustainability, public transport is positioned as a key in the transition to a sustainable and attractive urban environment (Banister, 2008; Sørensen & Gudmundsson, 2010). A modal shift from car to public transport, cycling and walking is deemed necessary for lowering the levels of carbon emissions (Sims et al., 2014) and improving public health (Ming Wen & Rissel, 2008) and liveability of communities (Kenworthy, 2006, 2007).

At the same time as these policy changes have emerged, comprehensive organizational reforms have also impacted on public transport (van de Velde, 2014). New forms of collaboration have emerged as a response to these reforms (Rye, Monios, Hrelja, & Isaksson, 2018), both between public organizations and between organizations in the private and the public sectors (cf. Lagreid & Rykkja, 2015). These new forms of collaboration can be seen as a response to a vision of sustainability that aims to facilitate a transition to a sustainable and attractive urban environment, for instance by closer integration of land-use and transport planning (Legacy, Curtis, & Sturup, 2012). However, it can also be seen as a consequence of austerity policy (resources from new partners are needed because of reductions in staff) and competition policies (to avoid policy fragmentation when different stakeholders primarily pursue their own interests). In previous literature, these types of collaborations have been explored with a conceptual focus on partnerships, often with the aim to understand under what conditions certain partnerships are "successful" whilst others are not (see e.g. Stanley & Hensher, 2008; Stanley, 2010; Dementiev, 2016; see also; Davison & Knowles, 2006). Moreover, there are works that consider collaboration as important for providing for more deliberative qualities in planning and policy making (Healey, 1997). Thus, the policy changes and organizational reforms are linked.

In the field of public transport planning and governance, relatively little research has been devoted to collaboration in a competitive tendering setting, as compared to a setting where negotiated performancebased contracts are in place. Collaboration between public transport authorities and municipalities (responsible for land-use planning and housing development) has also received little attention. There are a few

* Corresponding author. Swedish National Road and Transport Research Institute, 581 95, Linköping, Sweden.

E-mail address: alexander.paulsson@vti.se (A. Paulsson).

https://doi.org/10.1016/j.retrec.2018.06.013 Received 29 November 2017; Received in revised form 20 May 2018; Accepted 27 June 2018 0739-8859/ © 2018 Elsevier Ltd. All rights reserved.

Please cite this article as: Paulsson, A., Research in Transportation Economics (2018), https://doi.org/10.1016/j.retrec.2018.06.013

¹ All authors are also affiliated to the Swedish Knowledge Centre for Public Transport (K2).

exceptions though, like Sørensen and Longva (2011), who discuss the steering mechanisms involved in public transport planning, Hrelja, Pettersson, and Westerdahl (2016) and Hrelja, Monios, Rye, & Scholten (2017) who discuss the qualities needed for a successful collaboration between land-use and public transport planning, and Sagiaris (2016) who has looked at strategic cooperation and citizen involvement.

Much of the current literature draws upon either hierarchical relationships, where formal authority is distributed along a chain of command, or market-based relationships, where actors are expected to behave opportunistically (Inno-V et al., 2008). This study seeks to go beyond this binary framework by contributing to an emerging stream of literature that understands collaboration through the lens of networks, and more specifically, through the lens of governance networks, which refers to the existence of institutionalized interaction among actors from state, market and civil society, who aim to "coordinate their actions in the pursuit of common understandings and shared goals" (Torfing, Sørensen, & Fotel, 2009, p. 285).

A starting point in this paper is that functioning public transport increasingly requires the successful collaboration of a number of discrete organizations. The purpose of this article, then, is to explore the ideas and practices that characterise collaboration between public transport authorities and municipalities, and between public transport authorities and operators, in current public transport planning. We will specifically examine (1) why network governance has emerged as an important organizing principle for developing public transport (i.e. what "problem" is collaboration supposed to solve); (2) how do key actors involved in public transport policy and planning interact when developing public transport (which arenas and situations are they part of, when networking?); and, finally, (3) what are the practical implications of collaborating for key actors (i.e. what advantages, disadvantages and challenges are being identified in the narratives of collaboration?). Our focus is thus directed towards the collaborative arrangements themselves, and not on demonstrating the delivery through of better "outcomes" such as increased ridership, higher customer satisfaction etc. We demonstrate that actors engage in collaboration because they seek better outcomes, but further research is required to demonstrate that it indeed does deliver these. In this paper, our overall ambition is rather to provide further insights on collaboration from the perspective of network governance.

The questions above are explored in the context of Sweden. Sweden is a particularly interesting case as a new act governing public transport entered into force in 2012 (Swedish Government, 2010a). This act had as one of its key aims a broadening of the supply of public transport operators in the market, thus strengthening competition, which is assumed to lead to an increase of ridership and increased modal share for public transport and thereby supporting the more sustainable development of society. Another aim was to clarify roles and relations between key actors, and ensure that long-term strategic decisions on public transport were in the hands of the public sector, in order to increase transparency and facilitate coordination with other planning sectors (Swedish Government, 2010a). The newly instituted Regional Public Transport Authorities (RPTA's) were assigned a central role as being responsible for the development of regional transport supply programmes (TSP) which, according to the legislation, should build on clear targets for the regional public transport system and plan for how these targets should be accomplished (Swedish Government, 2010a). Another key task for the RPTA is to conduct market analysis, exercise market surveillance and set the Public Service Obligations (PSO), that is, to determine the amount and level of public transport that should be procured. Thus, a key dimension of the new act was to demarcate the boundaries between the public and private sectors, where the public sector was to develop TSPs, decide PSO's, conduct market analysis and plan long term investments, while the private sector organizations were assigned a freer role as the Act opened up the local and regional public transport sector to competition "in the market", adding to the existing "for the market" competition (White, 2006). Additionally, although the

Research in Transportation Economics xxx (xxxx) xxx-xxx

new Act is aimed at underpinning a more strategic and coordinated approach to public transport, it does not regulate the integration of land use and public transport planning at the local level. It is solely a municipal responsibility to plan land use. Out of this new context, two sets of relationships emerge as critical: those between RPTAs and municipalities, and those between the RPTAs and the operators. We will in the empirical part discuss collaborations between these public and private organizations.

The paper is structured as follows: First, a review of the existing literature is conducted. Secondly, we explain how we gathered the empirical material and conducted the analysis. Third, we describe, based on the empirical material, how key actors involved in public transport planning describe and view collaborations between public-public actors, primarily between the RPTA's and municipalities in terms of land-use and transport planning. Fourth, we turn to how key actors involved in public transport tendering perceive collaborations in public-private relationships, which primarily relates to the procuring RPTAs and to the public transport operators, who deliver traffic. Fifth, we discuss the empirical findings, and finally conclusions are drawn.

2. Theory: collaboration and the governance of networks

This paper draws on the emerging literature on networks in public governance. As public-sector governance has become increasingly fragmented, network governance has emerged as a solution to the problems with inter-organizational collaboration (Goldsmith & Eggers, 2005). Different forms of collaboration tend to arise because independent organizations are interdependent on each other in achieving a shared goal (Provan & Kenis, 2008, p. 321). Another way of understanding collaboration is that the actors within the network need to agree upon required means to provide public transport, but the individual actor might still have different goals which can therefore lead to conflicting interests (Hrelja et al., 2016). Networks are more than the sum of its parts, and this has appealed to politicians and policy-makers (e.g. Goldsmith & Eggers, 2005). The quality of collaboration within a network is then based on mutual trust and ability to develop shared visions whilst still providing space for the individual actor to fulfil its objectives. This means that successful collaboration manages to develop and host both common shared goals and individual actors' objectives.

Studies of network governance in this context of public transport are scarce, as most studies focus on either hierarchy, (i.e. studies of public actors with distinct roles for the development of public transport - see e.g. Rönnbäck, 2008) or market - and on the implications of market solutions (public tendering or procurement and contract design) (see e.g. Hansson, 2010; Hansson & Holmgren, 2011; van de Velde & Wallis, 2013; van de Velde, 2014). In the market individuals and organizations are assumed to maximize their own interest ("the invisible hand"), while in the hierarchy, formal power (authority) is organized in a chain of command. According to network theory, however, coordinated actions between organizations are supposed to emerge voluntarily because of genuine interdependence, with mutual trust being a condition for the collaboration between the involved actors to evolve (Sørensen & Gudmundsson, 2010; Sørensen & Longva, 2011). This also means that the participants in a network often share some common background, e.g. professional or educational background. Speaking generally about networks, Powell (1990, p 326) suggests that it is easier to "sustain network-like arrangements" in more homogeneous groups due to their greater level of trust. In heterogeneous groups, on the other hand, calculative attitudes tend to replace collaborative ones, and formal contracts tend to replace informal agreements.

A network, then, is defined as a relationship where "the items exchanged [...] possess qualities that are not easily measured, and the relations are so long-term and recurrent that it is difficult to speak of the parties as separate entities", and where "the entangling of obligation and reputation reaches a point that the actions of the parties are interdependent, but there is no common ownership or legal

framework". Relationships displaying these characteristics are "neither a market transaction nor a hierarchical governance structure, but a separate, different mode of exchange, one with its own logic, a network" (Powell, 1990. p. 301).

When market, hierarchy and network forms of governance are discussed in the literature on public transport, complete marketization is often at the one end, and production 'in house' is at the other end (Inno-V et al., 2008). Between these ends there is a continuum. When networks are mentioned in the literature on public transport, it is mainly in the form of partnerships (Stanley & Hensher, 2008; Sørensen & Gudmundsson, 2010). A significant theme coming out of previous research on partnerships in public transport policy and planning is related to trust, and key conditions for developing trusting partnerships (see e.g. Longva & Osland, 2007; Stanley, 2010; Stanley & Hensher, 2008; Stanley & Longva, 2010). While previous works give important insights into collaborative arrangements, the distinct logic characterizing networks is rarely drawn upon. This is understandable, though, for in a fragmented and complex governance landscape, like in the case of public transport, neither market, hierarchy nor network are found in their pure forms. As these logics coexist and overlap with each other, market, hierarchy and network are found in hybrid forms (Christensen & Lægreid, 2007; Rhodes, 1997).

2.1. Why network?

There is a stream of research that is devoted to studying why networks in public governance emerge. Networks can be devised either to enhance vertical or horizontal collaboration (Lagreid & Rykkja, 2015; Sørensen & Gudmundsson, 2010). While vertical collaboration links different levels of government, e.g. the state, the regions, and the municipalities, when networking to accomplish a designated objective, horizontal collaboration signifies the networks between the public transport authority and the public transport operators or between the public transport authority and the municipalities. Besides the distinction between vertical or horizontal collaboration, networks are sometimes said to operate "in the shadow of hierarchy" (Héritier & Lehmkuhl, 2008; Scharpf, 1994). The idea behind this expression is that many forms of interactions take place and develop - vertically as well as horizontally - in informal networks that supplement or occasionally bypass formal hierarchies. If this were not the case, the formal hierarchy would be overloaded with decisions-to-be-made. Even though the chain of command in the formal hierarchy is rarely directly drawn upon, the mere existence of the formal hierarchy allows these informal and shadowy networks to work effectively (Lagreid & Rykkja, 2015; Scharpf, 1994). Such informal and shadowy networks also allow organizations to make decisions that they otherwise would not be able to do (Hrelja et al., 2017). The danger with relying on too many such networks in the decision-making process is however that they lack both transparency and accountability mechanisms (c.f. Rhodes, 2000).

There is also a stream of research studying the kind of problems that networks are set to solve. Networks are often prompted by so-called "wicked" problems, where no single organisation has the capacity and competence to (ever fully) solve the problem at hand. Speaking about the public sector more broadly, Lagreid and Rykkja (2015) argue that the need for coordinated actions arise out of silo-thinking, which NPMreforms have strengthened during the past decades. Network collaboration is characterized by combinations, complexity, layering and hybridization of organizational and market features. To grapple with "wicked" policy problems, the question is not whether to choose hierarchy or network, but "how the particular mix of coordination forms develop and how the trade-off between hierarchy and network arrangements is altered" (Lagreid & Rykkja, 2015, p. 486).

Therefore, the previous literature paints a picture where networks emerge either because of slow and inefficient hierarchies, because of institutional fragmentation as previous large vertically integrated organizations are broken up, or because silo-thinking is ill-equipped to solve the "wicked" problems that public-sector organizations face. Both vertical and horizontal collaboration may take place in form of networks.

2.2. How to network?

For a network to be established, mutual trust and shared understandings are often positioned as crucial ingredients. This is emphasized in the previous literature (Powell, 1990). However, little has been said about the fact that a "common language" is also required. Without a common language, with generally accepted concepts and narratives, dialogue and common understanding or trust cannot be established between its members. To exemplify this, Hajer and Versteeg (2005) point to the EU's ambition to establish a Trans-European Network (TEN) in the 1990s. The launch of the Trans-European Network was more than just a transnational policy in the field of transport, it also included the launch of a common language, which enabled different national transport authorities to communicate with each other at a whole new and higher level of detail than before. Hajer and Versteeg show how this common language was a key dimension for the emergence of a transnational policy network.

2.3. What advantages and disadvantages of networks?

Dependence on networks may hamper transparency and accountability in decision-making processes. There is a stream of research which has investigated this, by adding a power perspective to the understanding of network governance, for instance Hansson (2011) who examined the power tactics behind public transport procurements in Sweden.

Besides the issue of transparency and accountability in decisionmaking processes, networks may also become disadvantageous and a challenge when there are too many actors involved. A large number of participants makes it difficult to personally know everyone and their intentions. Are there any free-riders, or do all participants contribute to the same degree? The uncertainty lurking behind this question could in and of itself start undermining the necessary but fragile trust within the network. And when it starts becoming difficult to know why participants are part of the network, the network will eventually break apart and regroup (Schrank & Whitford, 2011). The advantages with collaborating in networks is that decision-making processes could work more efficiently than compared to the hierarchy and its chain of command. Compared to the market, a network is built on broad common goals (and is not only utility maximizing) and long-term relationships tend to evolve, where the involved participants trust each other and have confidence in their respective counterpart (Powell, 1990).

Other challenges with network arrangements are related to whether the network has mainly part-time participants with loyalty to their primary position; whether they lack a clear mandate, appropriate resources, authority and potent governance tools, and; if there are regular or irregular meetings (Lagreid & Rykkja, 2015).

In this study, we employ network as an etic concept, which is "an outsider perspective on human behavior, activity, or culture" (Hammond & Wellington, 2012, p. 57). As an etic concept, network is filled with assumptions from the theoretical literature mentioned above, while network governance is to be understood as a model of governance based on the concept of network. Collaboration, on the other hand, is an emic concept, representing "what is meaningful to members inside an organisation or participants within a social activity" (Hammond & Wellington, 2012, p. 57). Collaboration, being an emic concept, is used primarily by the interviewees to refer to a variety of processes where they work together with other public and private actors to define and accomplish common goals. The same goes for partnerships, which is a term that comes up in our empirical material (see further below). Network, therefore, is to be understood as a lens through which we analyse the multiple ways the interviewees refer to,

use or talk about collaboration.

In sum, networks have become a central feature in public governance and they include various forms of collaboration. Collaboration as a concept has emerged among practitioners, and not only in public transport, but also in many other public services over the past decade. Partnership is a specific type of voluntary collaboration between public and private entities studied in this paper in the public transport sector. In this section, we described *why* collaboration may be understood as a form of coordination in networks, *how* such coordination in networks evolves and stabilizes, as well as the *advantages and disadvantages* of coordinating actors in networks through collaboration. What emerges from this description is a picture where networks appear as a third logic, alongside the hierarchy and the market, and something that cannot be seen merely as a blend of or a stop on a continuum between the two.

3. Material and methods

The article is part of a larger research project which has focused on collaboration in public transport planning in three Swedish regions: Stockholm, Västra Götaland and Scania.² These are the three main metropolitan regions in Sweden, and are also the regions with most well-developed public transport systems in the country. Together they account for almost 60 per cent of the vehicle mileage, 70 per cent of passenger km, and 84 per cent of the number of public transport passengers in all of Sweden (Trafikanalys, 2016). However, these regions also experience the greatest pressures to further develop their public transport systems due to congestion, population growth in the larger cities and a general need to prioritize sustainable travel if sustainability goals are to be reached. Västra Götaland and Scania are known for their particularly close collaboration between RPTA and operators. Stockholm is renowned for its high public transport ridership maintained over many decades. However, it is now facing challenges to retain and increase the public transport modal split, due to some urban sprawl and large-scale investments in road capacity (c.f. Paulsson, Hylander, & Hrelja, 2017).

This research project has been carried out by a team of six researchers over a time-period of four years. We have applied an exploratory approach, working step-wise to identify specific research questions focused on collaboration and network governance, partly through regular dialogue with a reference group of public transport professionals from the three regions. The reference group has given important input and contextualized the specific conditions for public transport policy and planning in each region, thus further refining the focus of the research.

The article is based empirically on qualitative, semi-structured research interviews with representatives from RPTAs (including both the parts of the organisation focus on strategic planning and those parts of the organisation that work with scheduling, detailed route planning and tendering), municipalities and public transport operators from the Swedish regions – three types of organizations/actors with strategic roles in the development of the public transport network and level of service (see introduction).

Among these organizations, we interviewed a total of 24 persons of which 12 were from the RPTA's, 9 from municipalities and 3 from public transport operators (however, operators were not interviewed in Stockholm). The interviewees hold a variety of positions; some of them are high-ranking senior managers, but most of them fall into the category of experienced professionals, someone who might not have a formally high-ranking position, but who still has a critical role in the work of his/her organisation.

The interviews were characterized by conversations and lasted

between 45 and 90 min each. Interview data is never a simple representation of reality (Kvale, 2007). Sometimes there are contradictory statements and accounts provided both within and between different interviews. This however, does not undermine the value of interview data. By formulating reflexive arguments and experiences, interviewees are producing, in this case, the professional reality they are part of. Since the main interest in our work is related to the perspectives and experiences of people working in collaborative arrangements, we see their statements as valid records of the complex dimensions of the emerging practice of collaboration and network governance.

4. Results

In this article (as already mentioned), we employ network governance as an etic concept (i.e. from a researchers' perspective). Collaboration, on the other hand, is an emic concept, used primarily by the interviewees. In the empirical analysis that follows, we will first describe how interviewees discuss why there is a need for collaboration, how they collaborate and finally what advantages and disadvantages they see with collaboration (first in relationship to public-public organizational collaboration and then to public-private organizational collaboration). We will then, in section 5, discuss the multiple ways the interviewees refer to, use or talk about collaboration through the lens of the network governance concept.

4.1. Public-public collaboration: the RPTAs and the municipalities

4.1.1. Why collaboration?

According to the interviews with public organizations involved in public transport planning and development at regional and local levels, there are several reasons to collaborate. Interviewees from both municipalities and RPTA's stress collaboration as important for integrating local and regional traffic systems, for making decisions on priorities between various traffic modes on local and regional roads and tracks, for the location and design of single bus-stops as well as larger public transport nodes, and - more generally – for the location and design of areas for housing, work and services. One of the actors interviewed, who works as a strategist at the division for Strategic Development in the RPTA at Stockholm Regional Council, said that:

"There is an obvious need for collaboration, all the time. I would say that our ability to collaborate is very much what $/ \dots /$ determines our success. $/ \dots /$ The capability to collaborate is very, very important – in many cases more important than our specialist skills. Well, I also need to know how to build a railway track, but what is more important is that I know how to talk with people about this. Within and beyond my own organization." (Rail transport strategist, Stockholm Region)

Interviewees from regional and local organizations stress that even though the RPTAs have the overall responsibility for planning and developing the public transport network, they are in practice dependent upon municipalities who are in control of land use planning. Several of the interviewees talk about collaboration as a key feature for reaching joint agreements and anchoring decisions and priorities. The development of properly functioning public transport is also dependent on knowledge of local conditions – and this knowledge is normally found in the municipal organizations, which further reinforces the need for networks, dialogue and collaboration between the RPTA and the municipalities. An official from Gothenburg notes that they have a very strategic position in relation to the development of public transport and that they do what they can to influence the overall direction of public transport development:

"The basic idea is that the municipalities still have an important role in public transport issues, we still have the ability to influence the

 $^{^2}$ The study also included an international outlook to the Netherlands, Germany and Britain (outside London). See Rye et al., 2018.

strategic development of public transport, and we do so through a number of political forums" (official, city of Gothenburg)

In addition to the practical reasons for collaboration, there are other explanations, one being that collaboration is seen as an important quality and a democratic ideal in planning and decision making. Several of the interviewees talk about collaboration as an important factor for making good, wise and long-term sustainable decisions, and for creating energy and commitment around specific projects and longterm investments.

4.1.2. How to collaborate?

In practice, collaboration is carried out in many different ways. The three RPTAs have seen a need for continuous dialogue with the municipalities in their region on both long-term and short-term issues. In Stockholm, the RPTA has recurring and regular consultation meetings with municipalities, ranging from municipal political consultations to sectoral consultations, municipal planning meetings and municipal follow-up meetings. In Västra Götaland, there is a similar, but even more developed formal structure of meetings and forums for collaboration and dialogue between local and regional actors. In Scania, the number of formalized meetings and arenas is fewer, but there are strong informal networks which allows for close collaboration between local and regional organizations (Hrelja et al., 2017).

In Västra Götaland and Scania there are sub-regional arenas and processes for collaboration and consensus-building on public transport issues. In Västra Götaland, these arenas have been initiated by the RPTA with the aim of enabling joint political agreements and establish stable conditions for implementation, as mentioned above. The interviewees who are involved in these arenas/processes in Västra Götaland view them as important, but at the same time "a rather tiresome" way of working, because they consume a lot of time and resources for senior executives. Still however, it is emphasized as important to maintain these arenas, not least because there are always issues that are potentially politically difficult to deal with, that these arenas help to resolve. The arenas they mention are also seen as important for maintaining joint strategic planning and governance capacity between the municipalities and the RPTA.

Most of the interviewees stress that the main reason for spending time and energy in various collaborative arenas is that it is important to establish a mutual understanding of the long-term visions and priorities and decisions that need to be set and taken to be able to develop a wellfunctioning public transport system. However, a few interviewees referred to situations when networking organizations did not manage to create common goals. The interviews show that there are limits of what can be achieved through collaboration. For example, some municipalities in the Stockholm region expressed a negotiation-oriented approach according to which the joint discussions and recurring dialogue with the RPTA is seen as a way to try to maximize their own benefit for instance by getting as much regional support as possible for locally prioritized projects. An opposite approach is more focused on collaborative processes as a way to initiate joint learning processes and a more "genuine consensus" among actors. This last approach was stressed by several interviewees in Västra Götaland, and referred to as a consciously chosen, strategic deliberate model they had pursued in their work. An experienced official finds that:

"Doing things together, in joint interaction, might be difficult – but it is $/ \dots /$ better. It is about respect and a joint understanding that we all share a common goal." (civil servant, Västra Götaland)

4.1.3. What advantages and disadvantages of collaboration?

Although a majority of our interviewees generally said that they find collaboration important and meaningful, a number of thorny questions emerged that indicate that there are some doubts regarding what collaboration can really "do". From the interviews, it is clear that

Research in Transportation Economics xxx (xxxx) xxx-xxx

collaboration cannot solve everything. In practice, hard decisions on financing and also the timing of formal, statutory processes are critical matters for public transport planning. The development of a properly functioning local and regional public transport system also requires priorities to be established. Both of these aspects of the organisation's work tend to be difficult to manage through collaboration and consensus-building. In Scania, the coordinator of one of the sub-regional arenas reflected on some of the difficulties involved when local politicians are supposed to agree on joint visions and strategies at a regional or sub-regional scale. According to her it is not easy for local politicians to be part of a committee where they have to discuss and agree on regional or sub-regional priorities through a process with no formal legal status. In addition, local politicians will meet their voters and it may not always be easy to explain why they have decided to prioritize investments in neighboring municipalities over investments in their own mandate area.

Another difficulty mentioned by several of the interviewees goes back to the need to prioritize between public transport as a land use in itself, and other ways of planning and using land. Interviewees referred several times to the importance of having a clear and comprehensive agreement setting out the principles of how much space public transport should occupy in the built environment. In relation to this, the interviewees express that collaboration is often easy among officials, but more difficult when local politicians get involved. An official from Stockholm Region said that:

"When we meet civil servants from different municipalities in the region, we often agree on how to develop things. But then, when it comes to $/ \dots /$ hard decisions about parking standards and bus lanes and such things then it's more difficult. When decisions are to be made /about such things/ in municipalities with a strong carculture, then it is difficult to make decisions that challenge the current regime. $/ \dots /$ Change is always difficult." (official, Stockholm Region)

This statement illustrates that it is not always possible to reach agreements by simply "collaborating more and better." If collaboration takes place informally or with a clear political basis, there is a risk of uncertainty about what has actually been agreed and the status of the priorities that are being set by means of collaborative efforts. There may also be a tendency for questions and perspectives that are politically "risky" or "difficult" to fall between two stools and/or not to be discussed at all in collaboration processes. According to the interviewees, there is often a need for clear overall political support and priorities if collaborative approaches are to have the chance to work smoothly and lead to concrete outcomes.

4.2. Public-private collaboration: RPTA's and the public transport operators

The interviewees for this section are from the regions of Västra Götaland and Scania since, as already mentioned, the relationship between the regional PTA and operators was not a topic for the interviews in Stockholm. It is important to note that there is also a contractual relationship between these parties in Västra Götaland and Scania: public transport is provided by operators running under competitively awarded gross-cost with incentive contracts, and this forms the basis for the relationship between the two. In this context, collaboration has been encouraged to supplement the solely contractual relationship, as our empirical data illustrate.

4.2.1. Why collaboration?

The interviewees all agree that the need for collaboration is "obvious", and they often seem to consider that it is unnecessary to make an argument for collaboration. However, when they are asked to justify it, they stress that the large number of interdependent organizations in public transport generates a real need for collaboration. Collaboration is necessary to establish common objectives, to secure application of the

A. Paulsson et al.

entire pool of competences represented by all the organizations, to provide mutual information exchange, and to establish procedures that allow organizations to work together in a reciprocal manner to influence decision making.

As examples, the interviewees mentioned physical design such as bus stops, which might not be appropriately located and designed if operators are not involved in the planning process. Another example is the RPTA's situation as a regional organisation with limited knowledge of local conditions, something that the operators, in contrast, possess. A third example is the planning and implementation of an express bus line in the city of Malmö (Scania), where collaboration between the RPTA, the city administration and the operator positively contributed to the result.

For many of the interviewees, their view of collaboration often stems from an evaluation of the previous relationship between organizations as one characterized by "confrontations" between RPTA and operators, adverse Us-and-Them-images, and a climate sometimes described as "two different worlds". Given such a backdrop, the current collaborative relationships are viewed very positively because they help to bring these previously completely separate world views together. The interviewees saw common basic interests as an important requirement for the establishment of collaborative relationships. In essence, authorities as well as operators are seen to have a common interest in passenger growth and this is something that requires collaboration in order to provide an attractive product.

4.2.2. How to collaborate?

The way in which collaboration between RPTA and operators takes place differs between the regions studied in this paper. In both cases, however, collaboration causes the transfer of more tasks and responsibility from the RPTA to the operators. In both regions, the operators today have increased responsibility and influence regarding bus routes, time tables and local marketing, compared to the earlier situation. This implies that operators often also need to collaborate with municipalities on issues such as bus stops, bus priority measures etc.

A number of procedures have been established in both regions to facilitate collaboration. In the region of Västra Götaland, where the socalled "Västtrafikmodellen" (Västtrafik model) prevails, common objectives have been established for the RPTA and operators and are seen as essential in working towards overall objectives for public transport in the region. The interviewees emphasized that the spirit of the collaboration is one of management by objectives rather than detailed monitoring of the services delivered by the operator. The "Västtrafikmodellen" focuses on the relationship between the RPTA and the operators, and the municipalities are not involved to the same extent as in Scania (see below). Other procedures that have been established include a common business development plan between the RPTA and the operator; a common business management group covering the authority and the operator; and in addition, "process maps", which explain the processes, milestones, and when decisions should be taken to progress certain situations (such as, for example, when an operator suggests a change to a service). In addition, a process development group exist to continually review the efficacy of the collaboration process itself. This group includes employees of the RPTA as well as the operators and meets two - three times a year to review recent experience in collaborative working and to consider how it can be improved. Finally, there is a web space to facilitate collaboration.

In Scania, a major focus is to establish common objectives between the RPTA and operators. The 2012 legislation and the Swedish public transport industry's goal of doubling the number of public transport passengers have been key drivers of this work. Appended to the statement of common objectives is a more detailed memorandum of understanding, explaining how collaboration should take place. Building on this, a collaboration between the RPTA, the operator and the four largest municipalities in Scania has been established. This includes common work- and steering committees, numbering amongst their members some of the CEOs of the organizations involved. The work is organized in three themes: traffic planning, business development, and operations, each with monthly committee meetings. Common business plans are among the results. In the City of Helsingborg, the collaboration is even further developed with three committees managed by the RPTA, the municipality and the operator, respectively.

In addition to these established and relatively formalized procedures there are more informal contacts and meetings. For example, an interviewee representative from one of the operators in Västra Götaland explained that he would be meeting with a representative from the RPTA to consider how to present the common business development plan to the CEO of the RPTA, and the interviewee added that there "are many informal meetings of this kind outside the formal processes".

A consequence of the collaborative processes and procedures are that the actors in both regions have developed similar objectives, and various interviewees repeatedly brought up key terms such as trust, respect for people's different roles, and openness and dialogue, often using the same concepts. This suggest that a common language has evolved. Rather than being a "provider" of buses and drivers, the operators now consider themselves to be "business partners". The operators interviewed in Västra Götaland stressed that they have had to employ staff experienced in business development, marketing, and market analyses in addition to the more traditional roles dealing with operations.

4.2.3. What are the advantages and disadvantages of collaboration?

All the interviewees expressed very positive attitudes towards collaboration. Nevertheless, some disadvantages were noted, although overall the interviewees argued that the advantages clearly outweigh the disadvantages.

One disadvantage is the amount of time spent on collaboration. An operator expressed this as follows:

"It implies a lot of meetings, it takes a lot of time for us, but the result is improvement of the services – I am quite sure about that. It takes time, but we also make progress, I think so" (Traffic operator, Västra Götaland).

Another disadvantage mentioned by the interviewees is some duplication of work, that is, RPTAs and operators carrying out the same type of work. Following up on the contracts between the RPTA and operators were cited by one interviewee (an operator) as an example of this. The interviewee believed that the collaborative set-up made it a responsibility that his organisation should carry out, and he felt that the RPTA's ambition is that this should indeed be a role of the operator, but in practice both are carrying out this work today. The interviewee further argued that by improving processes and better specifying the roles of each partner this sort of duplication could be eliminated or at least reduced.

A third disadvantage mentioned in the interviews is connected to the ability of small new-comers to enter the market. An interviewee stressed that because of the new responsibilities and tasks that have been transferred to the operators as a result of the collaborative ambitions in the Västtrafikmodell, it is difficult for small operators to provide a realistic tender. Smaller operators may have difficulties in providing timetables, taking responsibility for local marketing and so on. Larger companies are needed to carry out such tasks. An interviewee representing an operator commented:

"Some muscles are required, and it implies that the larger operators are better equipped to provide a tender than the smaller operators" (Traffic operator, Västra Götaland).

5. Discussion

Here we explore the significance of the results. We discuss each of the questions posed initially: *why* collaboration in networks-like

arrangements, *how* networks operate and *what* are the advantages and disadvantages of network governance.

Why, then, has collaboration emerged as a form of network governance? Network-like arrangements have developed because the RPTAs need to establish joint agreements and build support and commitment for public transport priorities with and among actors with roles and mandates that are critical for the long-term development of public transport. This, in turn, is a critical issue for the RPTAs' ambitions for implementing their plans and wider strategies. This is clearly illustrated in the relationships between the RPTAs and the municipalities: if the RTPA does not manage to anchor and gain support for its long-term strategies and plans, the affected municipalities could effectively obstruct them by not considering them in their local land-use development. This has bearing on the discussion about the anchoring of governance networks within formal democratic procedures and processes (Torfing et al., 2009). Without such democratic anchoring, the network, with its decisions and results, might be perceived as illegitimate by "outsiders", such as other municipalities and the public.

Another reason why actors interact in network-like arrangements has to do with establishing a shared identity. With a shared identity, the members of the networks become more like a homogenous group. And as Powell (1990) has suggested, trust also becomes easier to establish once the members of the network start to identify themselves with the other members. Furthermore, the will to establish a "common vision" indicates an ambition to establish strong relationships in the network, thereby making it a homogenous group (Powell, 1990). In particular on the market side of public transport, the interviewees suggest that they are trying to establish a shared sense of identity that is used to develop the quality of public transport in a way that would not have been possible without such an identity. Public and private organizations are looking for mutual benefits from networking, which may lead to less individual short-term profit-motivated action by organizations as might have been the case in a market driven form of collaboration. Although this is deemed necessary it is also challenging, since the private firms are under contract "at-arms-length", yet closely collaborating during the contract periods to provide services on behalf of the RPTAs.

How does collaboration through networks work? And how does collaboration lead to implementation, which are one of the main reasons for coordinated action? A common form of interaction is through meetings. There is often an agenda circulated before such meetings, but there is generally also much room for informal networking both before and after. Day-to-day communication, e.g. through emailing and telephoning, is also part of the informal links by which the networks operate. These meetings are partially a result of fragmented legal frameworks.³ This substantiates the view that collaboration in network-like arrangements is a way to secure implementation of plans through dialogue and discussion, which, in turn, creates the conditions for consensus to be achieved. Yet, support and commitment is also gained through "anchoring" and through the distribution of "information". When the interviewees mention a "common vision", this suggests the presence of strong relationships within the networks, while the references to "anchoring" and "information" might indicate either strong or weak relationships, depending on the circumstances.

What are the advantages and disadvantages of coordinating actors in networks through collaboration? From our interviews a picture is developing where collaboration is regarded as a necessary but not sufficient condition for public transport to operate successfully and delivering at high quality, for the benefit of the users. Producing and

Research in Transportation Economics xxx (xxxx) xxx-xxx

reproducing coordinated actions in networks is moreover a way to distribute authority among a group of actors and to make them feel responsible for the governance of public transport. However, collaboration is seen by interviewees as time-consuming and the concrete outcome is often uncertain.

Network, market and hierarchy co-exist and overlap with each other. This is also the case with public transport in Sweden, where collaboration and contracts co-exist and represent different logics. The tendering and contract regime might encourage operators to "play their cards close to their chest" and not always co-operate fully and openly. In that sense such logics can contradict the logic of collaboration. In the interviews, however, this was not brought up as an issue.

The lack of accountability and transparency in network-like arrangements is a potential problem, especially if informal networks are used for gaining legitimacy for plans and projects that otherwise would be difficult to move ahead with (Torfing et al., 2009). The potential lack of accountability and transparency raises questions about how to protect the wider democratic interest, and particularly the interests of public transport users. Unlike with hierarchical governance arrangements (where formal power is organized in a chain of command), there are fewer or no formal processes in place that guarantee accountability and legitimacy, and this was empirically evidenced in our interviews insofar as few of the interviewees directly mentioned the user, or user influences on the functioning of the public transport system.

Network-like arrangements might also prevent the proper functioning of the market mechanism: while networks are grounded in personal relationships, markets are supposed to be shaped by impersonal relationships (hence the expression "at arms-length" (Powell, 1990). Even though there are these challenges and potential disadvantages with networks, there is currently a strong consensus that collaboration is necessary for public transport to operate successfully. However, as resources are devoted to making these collaborations happen, this begs the question: if a lot of time is spent on collaboration, is it not then likely that the actors involved will start to believe that it has to and *must* matter and that it is a necessary precondition for public transport to operate successfully? It is outside the scope of this paper to deal with this question, but it is an important one for further work.

6. Conclusions

We have in this article illustrated that network governance in public transport is crucial for two reasons: firstly, it is a way to develop joint agreements on public transport priorities and for the RPTA (or other public passenger transport authority) to secure the implementation of its plans in a situation where municipalities decide over land-use development, and; second, it is a way to build a common identity with the operators who operate under tendered contracts at "arms-length". How networks are coordinated through collaboration function in practice is relatively ordinary, as we have shown that coordination takes place during meetings, as well as in informal conversations between civil servants and between these and the operators. Engaging in face-to-face dialogues also facilitates the development of mutual trust, which is a necessary but not sufficient condition for collaboration (Powell, 1990). Collaboration, understood as a form of coordination in networks, is not only about producing outputs and delivering decisions (cf. Pell, 2016), but its potential advantages (and disadvantages) lie in its ability to establish processes, where the feasibility of plans can be secured, and where a sense of common identity can be constructed.

In terms of policy suggestions, it is worth pointing out that collaboration requires additional resources. Unless there are sufficient resources devoted to these activities, there is a risk that collaboration merely adds a new layer of administrative duties for officials (Pell, 2016). That collaboration requires additional resources is linked, we argue, to the expansion of networks as a new emerging norm of governance in the Swedish context of public transport. Rather than operating in the shadow of hierarchy (Héritier & Lehmkuhl, 2008; Levelt &

³ While the RPTAs are governed by the Public Transport Act (Swedish Government, 2010a, SFS, 2010b:1065), the public-public relationships (between the RPTAs and the municipalities) are mediated through the Plan and Building Act (Swedish Government, 2010b, SFS, 2010:900), which gives the municipalities the exclusive competence to decide over land-use planning. The public-private relationships (between the RPTAs and the public transport operators) are mediated through the Procurement within the Utility Sectors Act (Swedish Government SFS, 2016, p. 1146, previously SFS, 2007:1092).

A. Paulsson et al.

Metze, 2013), we suggest that networks have emerged as a norm and a new form of governance in public transport, potentially overshadowing both the ways hierarchies (multi-level governance arrangements) and markets (public procurement and tendering) operate. Building upon this, we argue that hierarchies and markets increasingly operate in the shadow of networks. Hierarchy and market are stronger modes of governance, but these modes of governance are not ideal instruments to establish support, commitment and shared identity among the actors. For this network governance is needed.

Collaboration is not enough for well-functioning public transport systems, sustainable development and livable urban environments to come about. Organizational reforms or ambitions to achieve collaboration through networks might temporarily solve "wicked" problems but eventually the chain of command, with its hierarchy and political leadership, has to step in to move policies forward. For even though, as our work has shown, collaboration in network-like arrangements can result in common visions, shared understandings and possibly a common identity, this all operates at the level of civil servants, only occasionally including politicians, and equally rarely users. However, in both the RPTAs and the municipalities, trade-offs have to be made at the political level. Unless collaboration is supplemented with decisions based on political will and risk taking, policies to enhance public transport, to integrate land-use and transport planning, to reduce traffic and contribute to objectives of urban sustainable development, will not be fully delivered.

Acknowledgements

This research has been carried out with financial support by, and in collaboration with, the Swedish Innovation Agency VINNOVA (Dnr 2013-03020) and K2 – the Swedish Knowledge Centre for Public Transport (2015-2017). The authors wish to thank all the interviewees who participated in this study, as well as the reference group of professionals from the regional public transport authorities in Scania, Stockholm and Västra Götaland. We would also like to express our indebtedness to the participants the Thredbo conference in Stockholm in august 2017, who shared their constrictive comments on an earlier version of the paper.

References

- Banister, D. (2008). The sustainable mobility paradigm. Transport Policy, 15(2), 73–80. http://doi.org/. https://doi.org/10.1016/j.tranpol.2007.10.005.
- Christensen, T., & Lægreid, P. (2007). Introduction theoretical approach and research questions. In T. Christensen, & P. Lægreid (Eds.). *Transcending new public management*. Burlington: Ashgate Pub. Company.
- Davison, L. J., & Knowles, R. D. (2006). Bus quality partnerships, modal shift and traffic decongestion. Journal of Transport Geography, 14(3), 177–194.
- Dementiev, A. (2016). Strategic partnerships in local public transport. Research in Transportation Economics, 59, 65–74.
- Goldsmith, S., & Eggers, W. D. (2005). Governing by network: The new shape of the public sector. Washington, D.C: Brookings Institution Press.
- Hajer, M., & Versteeg, W. (2005). Performing governance through networks. European Political Science, 4(3), 340–347. http://doi.org/10.1057/palgrave.eps.2210034.
- Hammond, M., & Wellington, J. (2012). Research methods: The key concepts. Abingdon, Oxon: Taylor & Francis.
- Hansson, L. (2010). Solving procurement problems in public transport: Examining multiprincipal roles in relation to effective control mechanisms. *Research in Transportation Economics*, 29(1), 124–132.
- Hansson, L. (2011). The tactics behind public transport procurements: An integrated actor approach. *European Transport Research Review*, 3(4), 197–209. http://doi.org/10. 1007/s12544-011-0057-2.
- Hansson, L., & Holmgren, J. (2011). Bypassing public procurement regulation: A study of rationality in local decision making. *Regulation and Governance*, 5(3), 368–385. Healey, P. (1997). *Collaborative planning: shaping places in fragmented societies*.
- Basingstoke: Palgrave Macmillan. Héritier, A., & Lehmkuhl, D. (2008). The shadow of hierarchy and new modes of gov-
- ernance. Journal of Public Policy, 28(1), 1–17. Retrieved from http://www.jstor.org/ stable/40072033.
- Hrelja, R., Hansson, L., Richardson, T., Svensson, T., Lissandrello, E., Næss, P., et al. (2013). Innovations for sustainable public transport. Experiences and challenges in the Scandinavian countries. VTI rapport 799Linköping: VTI.

Hrelja, R., Monios, J., Rye, T., & Scholten, C. L. (2017). The interplay of formal and

Research in Transportation Economics xxx (xxxx) xxx-xxx

informal institutions between local and regional authorities when creating wellfunctioning public transport systems. *International Journal of Sustainable Transportation*, 11(8), 611–622.

- Hrelja, R., Pettersson, F., & Westerdahl, S. (2016). The qualities needed for a successful collaboration: A contribution to the conceptual understanding of collaboration for efficient public transport. *Sustainability*, 8(6), 542. https://doi.org/10.3390/ su8060542.
- Inno-V, KCW, RebelGroup, NEA, TØI, SDB, & TIS (2008). Contracting in urban public transport. Brussels: European Commission DG TREN.
- Kenworthy, J. R. (2006). The eco-city: Ten key transport and planning dimensions for sustainable city development. *Environment and Urbanization*, 18(1), 67–85. http:// doi.org/10.1177/0956247806063947.
- Kenworthy, J. (2007). Urban planning and transport paradigm shifts for cities of the postpetroleum age. *Journal of Urban Technology*, 14(2), 47–70. http://doi.org/10.1080/ 10630730701531708.

Kvale, S. (2007). Doing interviews. Los Angeles & London: Sage9781849208963 (ebook).

- Lagreid, P., & Rykkja, L. H. (2015). Organizing for "wicked problems" analyzing coordination arrangements in two policy areas: Internal security and the welfare administration. *International Journal of Public Sector Management, 28*(6), 475–493. http://doi.org/10.1108/IJPSM-01-2015-0009.
- Legacy, C., Curtis, C., & Sturup, S. (2012). Is there a good governance model for the delivery of contemporary transport policy and practice? An examination of Melbourne and Perth. *Transport Policy*, 19(1), 8–16. https://doi.org/10.1016/j. tranpol.2011.07.004.
- Levelt, M., & Metze, T. (2013). The legitimacy of regional governance networks: Gaining credibility in the shadow of hierarchy. Urban Studies, 51(11), 2371–2386. http://doi. org/10.1177/0042098013513044.
- Longva, F., & Osland, O. (2007). Organizing trust. On the institutional underpinning and erosion of trust in different organizational forms in public transport. In M. Macario, J. Viegas, & D. Hensher (Eds.). Competition and ownership in land passenger transport (pp. 489–500). Amsterdam: Elsevier.
- Ming Wen, L., & Rissel, C. (2008). Inverse associations between cycling to work, public transport, and overweight and obesity: Findings from a population based study in Australia. *Preventive Medicine*, 46(1), 29–32. http://doi.org/. https://doi.org/10. 1016/j.ypmed.2007.08.009.
- Paulsson, A., Hylander, J., & Hrelja, R. (2017). One for all, or all for oneself? Governance cultures in regional public transport planning. *European Planning Studies*, 25(12), 2293–2308. https://doi.org/10.1080/09654313.2017.1362376.
- Pell, C. (2016). Debate: Against collaboration. Public Money & Management, 36(1), 4–5. http://doi.org/10.1080/09540962.2016.1103410.
- Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. In B. M. Staw, & L. L. Cummints (Vol. Eds.), *Research in organizational behavior: Vol. 12*, (pp. 295–336). JAI Press.
- Provan, K. G., & Kenis, P. (2008). Modes of network governance: Structure, management, and effectiveness. *Journal of Public Administration Research and Theory*, 18(2), 229–252.
- Rhodes, R. A. W. (1997). Understanding governance: Policy networks, governance, reflexivity, and accountability. Open University Press.
- Rhodes, R. A. W. (2000). Governance and public administration. In J. Pierre (Ed.). Debating governance: Authority, steering and democracy. Oxford: Oxford University Press.
- Rönnbäck, P. (2008). Den kommunala policyprocessen strömmar i kollektivtrafiken och politiken. Luleå: Luleå Tekniska Universitet.
- Rye, T., Monios, J., Hrelja, R., & Isaksson, K. (2018). The relationship between formal and informal institutions for governance of public transport. *Journal of Transport Geography*, 69, 196–206.
- Sagiaris, L. (2016). Strategic participation for change: An international and interdisciplinary perspective. In J. C. Munoz, & L. Paget-Seekins (Eds.). (2016) restructuring public transport through bus rapid transit. An international and interdisciplinary perspective. Bristol: University of Bristol, Policy Press.
- Scharpf, F. W. (1994). Games real actors could play. Journal of Theoretical Politics, 6(1), 27–53.
- Schrank, A., & Whitford, J. (2011). The anatomy of network failure. Sociological Theory, 29(3), 151–177. http://doi.org/10.1111/j.1467-9558.2011.01392.x.
- Sims, R., Schaeffer, R., Creutzig, F., Cruz-Núñez, X., D'Agosto, M., Dimitriu, D., et al. (2014). Transport. In A. A. Edenhofer, O. R. Pichs-Madruga, Y. Sokona, E. Farahani, & S. Kadner, (Eds.). Mitigation of climate change. Contribution of working group III to the fifth assessment report of the intergovernmental panel on climate change. Cambridge, United Kingdom and New York. NY, USA: Cambridge University Press.
- Sørensen, C. H., & Gudmundsson, H. (2010). The impact of governance modes in sustainable transport – the case of bus transport in Greater Manchester, UK. World Review of Intermodal Transportation Research, 3(1/2), 8–25.
- Sørensen, C. H., & Longva, F. (2011). Increased coordination in public transport—which mechanisms are available? *Transport Policy*, 18(1), 117–125. http://doi.org/. https:// doi.org/10.1016/j.tranpol.2010.07.001.
- Stanley, J. K. (2010). Goal achievement with trusting partnerships at the tactical level. Research in Transportation Economics, 29(1), 99–105. http://doi.org/https://doi.org/ 10.1016/j.retrec.2010.07.013.
- Stanley, J., & Hensher, D. A. (2008). Delivering trusting partnerships for route bus services: A Melbourne case study. *Transportation Research Part A: Policy and Practice*, 42(10), 1295–1301. http://doi.org/. https://doi.org/10.1016/j.tra.2008.05.006.
- Stanley, J., & Longva, F. (2010). Workshop report: A successful contractual setting. *Research in Transportation Economics*, 29(2010), 80–88. http://dx.doi.org/10.1016/j. retrec.2010.07.011.
- Swedish Government (2010a). Ny kollektivtrafiklag [Public transport act]. (SFS 2010:1065) Stockholm: Riksdagen.

A. Paulsson et al.

Research in Transportation Economics xxx (xxxx) xxx-xxx

Swedish Government (2010b). Plan- och bygglagen [Plan and building act]. (SFS 2010:900) Stockholm: Riksdagen.

- Swedish Government (2016). Lag om upphandling inom försörjningssektorerna [[Procurement within the utility sectors act]]. (Swedish government SFS 2016:1146, previously SFS 2007:1092).
- Torfing, J., Sørensen, E., & Fotel, T. (2009). Democratic anchorage of infrastructural governance networks: The case of the Femern Belt forum. *Planning Theory*, 8(3), 282–308. http://doi.org/10.1177/1473095209104827.
- Trafikanalys (2016). Local and regional public transport 2015. Statistics. Available online: http://www.trafa.se/globalassets/statistik/kollektivtrafik/kollektivtrafik-2015.pdf, Accessed date: 18 March 2017.

Veeneman, W., Augustin, K., Enoch, M., Faivre d'Arcier, B., Malpezzi, S., & Wijmenga, N.

(2015). Austerity in public transport in Europe: The influence of governance. *Research in Transportation Economics*, *51*, 31–39.

- van de Velde, D. (2008). Competitive tendering in The Netherlands: Central planning vs. functional specifications. *Transportation Research Part a*, *42*, 1152–1162.
- van de Velde, D. (2014). Market initiative regimes in public transport in Europe: Recent developments. Research in Transportation Economics, 48(12), 33–40.
- van de Velde, D., & Wallis, I. (2013). 'Regulated deregulation' of local bus services an appraisal of international developments. *Research in Transportation Economics, 39*(1), 21–33.
- White, P. (2006). Competition in public transport in Great Britain. European Transport / Trasporti Europei, 33, 69–82.