

Challenges and opportunities for cohesive ticketing and traffic information systems in the Greater Copenhagen region

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Background

Cross-border regions are characterised by many inherent challenges. Such challenges can include differences in languages, cultures, currencies, markets, labour market conditions, political visions and priorities, governance structures – to name but a few (e.g. Cavallaro and Dianin 2019; Cheng and Fotheringham 2013; Knowles and Mattiessen 2009). Greater Copenhagen¹ is no different in terms of the challenges it faces as a cross-border region (Mattiessen 2000).

Greater Copenhagen is often cited as exemplary in terms of cross-border cooperation (e.g. Thomas and O'Donoghue 2013). This is in part owing to the long-term vision which has allowed the region to grow as it has (Hospers 2006). Shared historical contexts as well strong socio-political willingness have meant that huge resources have been invested into the development of infrastructure such as the Öresund fixed link (Mattiessen 2004). An expanded labour market, greater opportunities for housing and commuting, as well as tourism have functioned as core drivers for this development (Wiborg et al. 2019).

Cross-border transport systems face their own unique challenges. For this project, we have focused exclusively on the challenges related to ticketing and traffic information, and the issues these systems pose when striving for a cohesive transport system in a cross-border region. For ticketing systems, the most palpable issues relate to cohesive fares; zones; ticket formats; payment types; validity; ticket inspection; legibility as well as differentiation in terms of how these issues affect different groups of passengers. With respect to traffic information, issues are characterised by the sharing of information between authorities; different platforms displaying conflicting information; the provision of information in different formats; the punctuality of the information provided; the usefulness of the information provided; as well as particular difficulties when delays and/or disturbances in the system arise.

A recent study of passengers travelling over the Öresund revealed that, overall, passengers are generally quite satisfied (Epinion 2019). However, there were reports of solutions that appear illogical (mainly with respect to traffic information). Solutions related to both ticketing and traffic information were described as confusing by several passengers. Inconsistencies with travel guarantees were also cited as problematic, as was the existence of many different platforms with conflicting traffic information. Some passengers even highlighted their reliance on informal platforms for up-to-date traffic information, particularly when delays arise. These respective issues have differing levels of importance for different groups. For instance, it was

¹ Formerly referred to as the Öresund Region, and now expanded to include the region of Halland.

found that, in general, commuters tend to draw on strategies based on their experience, and tend to be well-prepared in the event of a serious delay by bringing food with them or having a back-up plan (ibid.).

Aim and research questions

The aim of this study is to investigate the possibility to develop a more cohesive cross-border transport system in Greater Copenhagen. This approach involves compiling the perspectives of the actors involved in and affected by the development of the cross-border transport system, particularly with respect to ticketing and traffic information systems. The following research questions are posed:

1. What are the challenges and opportunities for developing more cohesive ticketing and traffic information systems in Greater Copenhagen?
2. Whose challenges and opportunities are they?
3. How are these challenges and opportunities perceived by the different actors with different perspectives?

Methods

Informed by a systematic exploration of the literature, key questions of interest were compiled and used to shape a draft discussion guide, which in turn served as the guiding document for the study. This discussion guide was then tailored according to the type of interview conducted, and the corresponding interviewee. Sampling of potential interviewees took place during September-October 2019. In early November 2019, potential interviewees were contacted by email and/or telephone and given details about the scope of the study and its intended purpose.

In total, twelve semi-structured interviews were conducted with fifteen interviewees during November 2019-January 2020. Representatives from public transport providers, a partnership organisation (an organisation facilitating cooperation between transport providers), national transport authorities, public transport passenger interest groups, a tourist organisation, a knowledge centre, as well as a transport ministry were interviewed. Interviews were carried out in a range of different locations in the Greater Copenhagen region, and usually at the workplace of the interviewee. Of these twelve interviews, five were conducted in Swedish, six in a combination of Danish and Swedish, and one in English. All interviews were recorded and transcribed. The duration of all interviews fell within the range of 30-90 minutes.

Post-structuralist and Hermeneutic perspectives in a reflexive methodology were adopted while framing the research, forming the research questions, designing the approach, as well as while analysing the material (see Alvesson and Sköldberg 2009; Alvesson 2011). The analysis of the material consisted of: (1) A basic thematic analysis; (2) A more in-depth thematic analysis; and (3) A more in-depth detailed content analysis, and subsequent revision of the thematic analyses based on these results.

Preliminary results

There were six predominant overarching themes resulting from the thematic analyses². A summary of each of these themes is presented below:

1. Focus on the customer

This theme was drawn from a notable rhetoric of focusing on the customer. This rhetoric was very tangible on both sides of the Öresund. However, tensions regarding ‘the customer’ were also rather apparent, with public transport providers claiming to have the customer as their main focus, but passenger representative groups tending to question this claim. Public transport providers appeared to have a considerable focus on relations between and across organisations. This was particularly evident on the Danish side of the region. Here, a sense of friction between focusing on the customer and focusing on inter-organisational relations became rather apparent. Moreover, narratives surrounding agility, effectiveness and the interests of the respective organisations were rather prominent (especially on the Danish side), causing us to call into question whether the focus on the customer tends to somewhat drift into the background when other interests come to the fore. On the Swedish side, in the Skåne region, the regional public transport authority have invested heavily in the development of their own combined application for trip planning, and purchasing and displaying tickets. ‘Control’ and ‘closeness to the customer’ were cited as key reasons for doing so, linking back to the theme of a focus on the customer.

2. ‘The Other Side’

There was an apparent lack of communication, clarity or knowledge (or lack of all three) regarding what is happening on ‘The Other Side’ (on the other side of the Öresund fixed link to where the interviewee was based). This theme was rather evident with respect to key areas such as changes to zones, or even train movements. This theme could relate to the issue of some activities being carried out in close cooperation with one another, with others carried out separately. For instance, it became apparent that planning is carried out separately on either side but traffic/operations is managed in cooperation with one another. There was a recurring theme of ‘The Other Side’ being something out of reach, and indeed, outside of the mandate for many actors. This theme was reinforced by a ‘We’ and ‘They’ narrative, with some interviewees actually using this expression to underscore how they perceive there to be a tangible distance between the two sides with respect to certain aspects of cooperation.

3. Tidying up at home first

There was a clear sense of the regions having a lot to deal with in terms of ensuring cooperation between different organisations *within* the respective regions (especially on the Danish side). This was also linked to ensuring cooperation between regions within the respective countries. It became rather clear that ensuring intra-regional and inter-regional cooperation internally (within the respective countries) consumes a lot of focus and energy. It was further implied that, only after said cooperation is prioritised, can focus and energy be invested in cross-border concerns. This trend could, in turn, mean that the remaining focus and energy may not be optimal in terms of the active pursuit and maintenance of cross-border cooperation, at least with respect to certain aspects.

² These results are preliminary and will be expanded upon and adjusted in line with the results of the more in-depth analyses.

4. Political challenges

A sense of the regions/countries turning inwards rather than towards one another was another rather apparent theme. However, this was referred to as a bigger trend in Europe and worldwide, and not something that is specific to the Greater Copenhagen cross-border region. The border controls which were introduced in 2015-2016 were described as, at least initially, very difficult for commuters, especially those commuting by public transport, with one interviewee even citing a link between the introduction of the border controls and effects for quality of life. Some decisions were framed as being politically difficult and very tightly linked to internal issues (within the respective regions and beyond), particularly with respect to infrastructure. This theme was linked to a recurring 'we' and 'they' narrative, as mentioned above. Furthermore, there appeared to be an apparent lack of explicit responsibility for cooperation with respect to certain issues. For instance, some issues surrounding the sharing of traffic information seemed to be linked to a lack of defined and explicit responsibility, although it was highlighted that ample opportunity exists. This could suggest a link back to political willingness, or indeed a lack of awareness among some decision makers.

5. Back to basics

Several interviewees expressed an explicit need to 'go back to basics' with respect to certain aspects of cross-border public transport provision. It was highlighted that instead of focusing on and investing in common ticketing and traffic information systems, some more rudimentary elements of the transport system should be developed. Some interviewees highlighted how, in some cases, there is too much distance between the public transport actor and the problem (particularly with respect to traffic information and delays). These same interviewees questioned whether there is just too much automation and no one physically on the ground to deal with such issues when they arise. The development of a combined app was sought after on the Danish side, this in turn being considered more basic than the development of a common transport system. Other actors highlighted how wayfinding and legibility (particularly for tourists) should be a more central focus in terms of the development of the transport system. Overall, there was a latent sense of opportunities for the basic elements (e.g. reliability, maintenance of trains, basic traffic information) to be improved upon first before making any more significant or ambitious investments.

6. The low-hanging fruits

There was an overall sense of there being no need for an overhaul of the entire system (or systems) with respect to traffic information and ticketing. Several interviewees instead highlighted that small changes can be made to some key areas where investments have already been made. For instance, it was suggested that common standards for traffic information (e.g. the same information but in different formats) could be agreed upon. It was highlighted that instead of a common system, a way of allowing the systems to effectively talk to each other could be a focus for investment. Overall, there was a notable sense of pride surrounding achievements with respect to the existing systems (this applied to all sides). However, this pride seemed to be fragmented by a sense of things moving too slowly, in terms of developing more effective solutions. Several interviewees made the point that common systems are not really 'on the table' at the moment, and that more piecemeal, incremental developments could function as an interim step in this direction.

Preliminary Conclusions

Preliminary conclusions point to the need for the formalisation of the cooperation and coordination between actors on both sides of the Öresund. One step towards such a formalisation could be the allocation of explicit responsibility for cooperation and coordination at the respective organisations. This is with respect to both ticketing and traffic information systems. With respect to the latter, this would imply Trafikverket (Sweden) and Banedanmark and DSB (Denmark). With respect to the former, the picture is not as clear-cut. On the Swedish side, this would be a task for Skånetrafiken, while on the Danish side, it is not so straightforward. Several actors and organisations would most likely need to be involved; a task that could be facilitated by and through Din Offentlige Transport (DOT). Through the adoption of such concrete steps, a clearer structure for the development of the cohesion of the region could be established.

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