The value of high-speed trains in intermediate regions: a cross-border perspective along the Oslo-Stockholm corridor

This policy brief examines how small and medium-sized (SMS) cities can benefit from the introduction of a high-speed train connection. Our results indicate that such transport infrastructure projects might not be the best fit for all SMS cities, even though they can contribute to local urban developments, especially in medium-sized cities.

The Oslo–Stockholm railway corridor is subject to discussions with regard to rail traffic improvement for a faster and more environmentally friendly mode of transport. Improved train connectivity between these two Nordic capital cities would contribute towards

making this transport mode an increasingly realistic alternative to flying. In addition, the improved railway service could enhance the urban development of cities located along the transport corridor. This last point is the focus of this publication.

TWO ONGOING INITIATIVES

■ The initiative developed by the TENTacle project, in co-operation with the Värmland–Østfold cross-border committee, proposes a non-stop travel time between Oslo and Stockholm of less than 2 hours, and maximum of 2 hours 30 minutes with stops. The project, which could be completed by 2028 after the construction of new tracks, proposes three types of train service with a different number of stops. In addition to the non-stop service, the second fastest connection would stop in cities like Ski, Askim, Karlstad, Örebro and Västerås, whereas the slowest connection could have up to eight stops; 20 stations would have 1–6 stops per hour. The service would provide 2–6 trains per hour in each direction. For further information, see <http://www.varmost.net/norden-i-hoeyhastighet.6152368-177245.html>

■ The initiative developed by Oslo–Stockholm 2:55 AB, owned by the municipalities of Karlstad, Örebro and Västerås as well as the regions of Värmland, Västmanland and Örebro, proposes a travel time between Oslo and Stockholm of between 2 hours 40 minutes and 2 hours 55 minutes. The initiative is based on current planning by the Swedish Transport Administration. The project, which could be completed by 2031 after the construction of two new sections of tracks, proposes a combination of intercity trains and direct trains, having a different number of stops. The first travel time corresponds to a direct connection between the two capital cities and the second includes four or five stops. The railway would also be used by regional trains with more stops. For further information, see <https://www.oslo-sthlm.se>

DIFFERENT MOTIVATIONS FOR HIGH-SPEED RAIL

Projects for faster train connections, including high-speed rail (HSR) infrastructure, arise from different motivations. Looking at European examples, each national network contributes to one key characteristic of HSR, namely a faster rail service. Most of them also contribute towards increasing the capacity of passenger traffic by train. However, several differences in the rationales behind such projects can also be found between the diverse European experiences. For instance, the development of the HSR network in France and Italy is considered as a sign of prestige. In Spain and Sweden, developments are rather associated with the politics of regional development, serving as a tool for integration in which a high-speed train (HST) service has been approached from a regional perspective as opposed to the classic end-point HST connection (i.e. connecting two large metropolises). The HSR network in the Nordic Region is quite limited. It primarily constitutes connections between capital cities and adhering airports, but it also includes the use of conventional tracks for an HST service with limited speed in Sweden (e.g. Stockholm–Gothenburg and Stockholm–Malmö). Hence, this analysis of how SMS cities can benefit from the introduction of an HST connection looked at different cases across Europe to gather a number of examples on possible territorial and urban developments. This literature review was subsequently introduced to local and regional stakeholders at two workshops in Oslo and Karlstad and was further completed by phone interviews. The main aim of the workshops was to present the findings from the literature review and to collect inputs from local and regional stakeholders about possible territorial developments in several

SMS cities along the suggested HSR infrastructure in Värmland and Østfold.

Two initiatives are currently being developed for the HST connection between Oslo and Stockholm: TENTacle, resulting from the Interreg Baltic Sea Region project of the same name, and Oslo–Stockholm 2:55 AB, a publicly owned company aiming to improve the train traffic service between Oslo and Stockholm and the regions in-between. Both initiatives, as well as the current train corridor, are included on the map, which also details the suggested stops for an HST service between Oslo and Stockholm. The number and locations of the stops differ both from today's existing stops and between the two alternative routes.

A COMMON VISION INVOLVING LOCAL AND REGIONAL ACTORS

In most cases, the main motivation for investing in HSR infrastructure projects is to connect major urban nodes. Indeed, the national as well as the international dimension is often the main scale of such a project, increasing inter-metropolitan passenger flows. The proposed improvement along the Oslo–Stockholm train corridor follows this logic.

As HSR projects are usually initiated by national stakeholders, SMS cities need to be proactive in seizing the opportunity to become physically connected to this new train service for their territories to benefit from better accessibility. The co-operation of local actors should aim at designing a common strategy on how these cities can benefit from HSR projects. Indeed, successful integration of cities into an HSR network is the result of the extensive mobilisation of local actors, thereby increasing their influence on where trains should stop. Special governance struc-

Map: Suggested tracks and stops for high-speed service between Oslo and Stockholm. Cartographer: Julien Grunfelder

tures have sometimes been established: the development of the Rhine-Rhone HST line in France is a case in point. Initiated by the French national train provider, a club was created to gather local and regional decision-makers.

This club had two main goals: to create a forum for discussion and exchange of information and to promote the catchment areas. Such governance structures usually include a variety of local actors such as city councils, local companies, chambers of commerce, universities, employer associations, tourism and cultural associations, environmental associations as well as representatives from the local population. These structures then investigate the best compromises for cities, for example, the choice between one strong peripheral stop and two weak ones. One strong station has a better chance of sustaining over time than two weak ones. This makes it possible for the region where the cities are located to strengthen their territorial integration via the HST service.

The two initiatives in the case of the Oslo-Stockholm corridor include different actors at different scales. The one led by the Värmland-Østfold cross-border committee mostly involves local and regional decision-makers and civil servants located in the cross-border region as well as transport experts from both Sweden and Norway. The 2:55 initiative mostly involves decision-makers and civil servants at the regional level in a number of Swedish regions as well as at the local level for a number of medium-sized cities. Apart from offering different proposals for routes and stops, what is striking in each of the two initiatives is the absence of actors covering the entire corridor. Indeed, the initiative led by Värmland-Østfold does not have any representatives from territories located east of Karlstad but includes several cities, whereas the 2:55 initiative does not have any representatives from territories located west of Karlstad. Hence, each of the initiatives is missing the full coverage of the train corridor.

REGIONAL INTEGRATION THROUGH THE HST SERVICE

Since most HST projects originate from the idea of improving inter-metropolitan flows of passengers and creating an alternative to air travel for flights below 1 hour, regional integration of SMS cities is often not one of the main objectives of such infrastructure projects. However, a couple of European experiences are of relevance for SMS cities located between Oslo and Stockholm. For instance, the Avant HST service in Spain is customised for short journeys between medium-sized cities (e.g. Calatayud–Zaragoza) and between medium-sized cities and larger metropolitan areas (e.g. Segovia–Madrid). Such journeys provide competitive accessibility by train to commuters and other frequent train users and contribute to regional integration.

Using the new railway corridor for integrating cities and their local labour markets was mentioned by regional stakeholders in Värmland as one of the most important issues for regional development. There are currently seven local labour markets on the Swedish side and two on the Norwegian side along the Oslo–Stockholm corridor. The future train service would allow the city of Karlstad, currently seen as quite isolated by local stakeholders, to be included into the local labour market of Oslo, with a new travel time of around 1 hour between these two cities. Faster train connections could also contribute to medium-sized cities such as Kristinehamn being better integrated into the labour market of Örebro thanks to a stop along the HST corridor.

Apart from the aspect of regional integration, the gain in travel time might impact on several socio-economic characteristics of the medium-sized cities, such as its demographic structure (e.g. population increase), its profile (e.g. becoming a commuter town) and its attractiveness, resulting in higher housing prices and an increase in the number of advanced tertiary-sector activities.

Experiences in Europe have highlighted that the focus on commuters tends to be more sustainable from the perspective of regional integration than other types of passenger flows. For instance, tourist flows tend to increase after the introduction of the HST service, but their numbers often shrink over time, together with the number of overnight stays in SMS cities, which is explained by the fact that tourists might prefer a day trip rather than a longer stay.

LOCAL URBAN DEVELOPMENTS IN SMS CITIES ASSOCIATED WITH HST SERVICES

SMS cities located along the possible future HST corridor can see this transport project as an opportunity to restructure the city centre, including the direct surroundings of the train station and areas located

further away. The arrival of an HST service can contribute not only to a more attractive perception of the municipality, but also to increased city-centre intermodality and a concentration of diverse functions and activities. Apart from transport-related developments, the urban developments associated with the arrival of an HST service can be categorized into three main types:

- Economic activities (e.g. office building, convention centres, technology parks);
- Residential and urban spaces (e.g. housing, green and public spaces);
- Tourism and cultural activities (e.g. cultural centres, shopping centres).

Transport-related developments should provide access for passengers to the HSR network and consider making the train station a destination on its own. In the specific case of a peripheral location of the new station for the HST service, the cities have the opportunity to create new 'centralities' along with a new urban transport corridor between this new station and the existing urban centre. This is the case in Kristinehamn where a new station might be built at the edge of the existing urban area. The local planning document states that sufficient space has been reserved for this purpose. In such a case, it is important to have quick and smooth connections (e.g. by bus) to the city centre and good facilities for pedestrians and bicycles. It is important for local actors to produce a clear diagnostic of the expected potential that the HST service would bring to the cities, to avoid creating urban development at an inappropriate scale, such as an oversized industrial area, which has been the case in some French cities.

With Karlstad being potentially 1 hour by train from Oslo, the new development of buildings just south of its main train station seems to be quite appropriate to host potential new commuters as well as other urban services. Evaluation reports looking at different urban developments linked to new rail infrastructure have been produced for rail nodes in Østfold along the Oslo–Gothenburg corridor. One of the main conclusions is that the combination of a well-working commuter system alongside business development aspects is important for attracting people to settle outside the urban areas of Oslo. Similar conclusions might also apply to SMS cities along the Oslo–Stockholm corridor.

Finally, it should be kept in mind that European experiences in SMS cities have highlighted that the introduction of an HST service in most cases accelerates socio-economic and territorial processes that are already under way. However, it is unlikely to introduce new processes.

REGIONAL INTEGRATION THROUGH HST FOR ASKIM AND ARVIKA?

Askim is the future regional node of the new Indre Østfold municipality as of January 2020. The development plans of the municipality have focused on fostering the establishment of a regional city since the area plans were defined in 2015. The urban and social planning connected with creating this reality has focused on housing and providing social services, industry and economic growth. With the local merger, transportation is becoming an increasingly important opportunity for expanding the local labour market from the southern parts of the Glomma region and in Østfold generally. During the workshops, it was clear that a train station located in Askim would contribute to bolstering the image of the town as a commuter destination rather than as a commuter town, acting as a buffer against larger cities nearby such as Oslo. With a connection to an HST line, the local stakeholders also expect to see an increase in competence-based jobs and an increase in housing prices; these were generally viewed as positive developments based on the possibility of attracting a population segment with a higher income, and thereby contributing to the overall well-being of the local economy.

Arvika, strategically located between Oslo and Stockholm, is already connected to the rail network, which is important for the local economy, including the forestry and machine industries. According to a local stakeholder, a connection to an HST line means that it would be easier for companies and the public sector to find the right competences, which currently represents one of their greatest challenges.

The possibility to commute from Karlstad would also make people stay in a workplace for a longer time. Such improvement in rail transport – shortening the travel time by almost 2 hours to Karlstad and by 3 hours to Oslo – would also allow inhabitants in Arvika to access a larger labour market that includes these two cities. For the housing sector, it would make the land more attractive for both the building companies to invest in and for Norwegian second homeowners. Local stakeholders see these possible developments as an opportunity for the municipality. However, that would only happen if Arvika were included with a stop on the HSR line.

CONCLUSIONS AND RECOMMENDATIONS

The following project conclusions and recommendations are the result of a literature review, two workshops and interviews. They are mainly targeted at stakeholders in SMS cities dealing with urban developments associated with the introduction of an HSR line in their municipality or region.

Identify the main rationale behind the HST project in each domestic context

Different rationales for developing HST infrastructure apply in different European contexts, ranging from territorial integration to strengthening flows between metropolitan areas. SMS cities would have a stronger case if the rationale were territorial integration than connecting capital city regions. If the main rationale is to improve the flows between two capital cities, local and regional stakeholders in SMS cities should probably not expect an HST service with many stops in their localities; hence, there would be limited impact on their urban development.

Identify the existing and future development potential of SMS cities because HST projects contribute to moving “what is already moving”

The integration of SMS cities into larger urban areas via an HSR network does not only rely on their physical connection on the railway corridor. SMS cities should also transform this improvement in accessibility and connectivity into territorial added value. A clear diagnostic of the urban area and possible future needs would contribute to identifying both the right type (economic, residential, touristic/culture and transport) and right scale of these projects. Disproportionate urban developments associated with the introduction of an HST service are far too common. Stakeholders should therefore think carefully about what they want to solve by introducing an HST stop in their municipality.

Understanding who the users of the new HSR service might be with the purpose of identifying urban development potential

It is of relevance to take into consideration the potential for commuters and future commuters living in medium-sized cities to use the HSR services to travel to other medium-sized cities or larger

metropolitan areas. The probability of them using the HST service would require specific adjustments of the urban structure of SMS cities. Furthermore, due to the relatively long time it takes for an HST project to come into use, it is also important to consider future travel needs and habits (e.g. if the need for people to commute daily might be reduced).

Create a forum for collaboration

As SMS cities might not be the territories for which an HSR project has been developed, these cities need to create an informal forum for collaboration. The forum will be used to discuss how they could best benefit from such a transport infrastructure project. It would contribute to finding the best scenario regarding how to deal with a future HSR service for these cities that might otherwise be excluded. The forum can be a quite informal entity created for this sole purpose and it should cover an extensive section of the territory crossed by the planned infrastructure.

Consider the national border and the wider regional context as an opportunity on either side of the national border and the wider regional context as an opportunity

The cross-border dimension brings complexity to an HST project due to different planning cultures and priorities between the different national contexts. However, the cross-border dimension should be seen as an opportunity for increasing cross-border flows of passengers (e.g. commuters, business-related or tourists), especially when territorial integration is a priority. Furthermore, it is important to consider such cross-border projects within a broader context, for example, by considering its integration in existing transport infrastructure as well as its possible extension for further regional integration.

ABOUT THIS POLICY BRIEF

This policy brief is part of the TRIBORDER project. It aims to analyse the potential challenges for SMS cities of planning and developing transport connections across national borders in the Nordic Region. The project activities will contribute to the work of the Nordic Thematic Group for Sustainable Cities and Urban Development (2017-2020). TRIBORDER consists of three parts: the first one being an investigation of a faster rail connection between Oslo and Stockholm, The second activity will analyse effects of the ferry connection between Umeå and Vaasa on their surrounding urban regions, and the third activity will focus on the public transport system in the cross-border region of Greater Copenhagen.

Read more: <http://www.nordregio.org/research/triborder/>

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