

# TRANSPORT WITHOUT BORDERS

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INTERREG AND THE ROLE OF TRANSPORTATION PLANNING IN A  
CROSS-BORDER REGION

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## ABSTRACT

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### **Transport Without Borders: Interreg and the role of transport planning in a cross-border region**

The availability of transportation has a great impact on how we move in our everyday lives and on the larger flows of people and goods. Transport planning, then, has the potential to greatly alter levels of mobility and accessibility. Looking at transportation in a cross-border context highlights this potential even further, but also brings additional barriers and points to consider. Examining this, this thesis looks at how transport planning is perceived as a catalyst for regional development and integration in a cross-border context under the framework of the EU programme Interreg Øresund-Kattegat-Skagerrak (Interreg ØKS). This is done through a threefold theoretical framework, combining three relevant areas of study. The study is a qualitative study, and the material is collected through six semi-structured interviews with project officials under Interreg ØKS. The results indicate that transport planning is a tool to achieve regional development and integration, and that much of what the regions wish to achieve is outward oriented, towards the larger EU continent. In many ways, cross-border transportation planning in the context of Interreg ØKS facilitates for, and is a platform for, international recognition, integration and relevance as regions, individually and as the larger ØKS region.

*Key words: transport planning, cross-border, Interreg Øresund-Kattegat-Skagerrak, TEN-T, regional development, regional integration, border permeability, mobility, accessibility, sustainable transport.*

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# 1 INTRODUCTION

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Transportation allows for movement across space, be it within a city, across a region, from the north to the south in a country, or across national borders. What transportation is available and where has a huge impact on how we move in our everyday lives and on the larger flows of people and goods. Given this, it also plays a major role in shaping economic activity and structures.

Transportation shapes how we live, but it is also shaped by us. This symbiotic relationship makes it all the more important to identify specific spatial, economic and demographic contexts surrounding transportation, especially when planning for future transportation developments. In a cross-border setting, these contexts will inevitably be of a more diverse nature, adding additional barriers and points to consider. When two or more nation-states are involved, there are often several administrative and judicial frameworks which requires appeasing, as well as possible asymmetries with regards to economic structures, demographics, culture and political climate. However, cross-border transportation also brings an array of possibilities for regions. The world is becoming more and more globalised, more integrated on a global level, placing greater demands on easy and accessible cross-border mobility.

The European Union, and in particular the European Commission and The Council of Europe, has been central in promoting this ideal in Europe through its policy of cohesion and efforts towards an integrated single market in the union. In this work, regions have become increasingly more important as platforms for development and units of analysis in the past decades (Perkmann, 2003). Today, regional policy measures receive a third of the European Union's budget (European Commission, 2020a; Medeiros, 2016). Much of these efforts are directed at regional cross-border cooperation and initiatives in an attempt to integrate regions across the union's external and internal borders.

One such initiative is the Interreg programmes, a case of institutionalised cross-border cooperation in the EU (Klatt & Herrman, 2011). Starting out in the 1990s, these programmes work in cross-border settings all across Europe to facilitate learning and integration between regions. The programmes focus on a maximum of four thematic goals outlined by the European Commission, one of them being transportation. This thesis explores the role of transportation in a cross-border setting through one of these programmes, Interreg Øresund-Kattegat-Skagerrak (Interreg ØKS).

Interreg ØKS was established in 2007 as a platform for cooperation between the border regions in Norway, Sweden and Denmark surrounding the bodies of water separating these Scandinavian countries, Øresund, Kattegat and Skagerrak. The Scandinavian countries are known for their long-standing cooperation efforts and for their well-functioning bodies of government and societal planning. The countries share a similar history, linguistic roots and culture. Yet, in a cross-border context, barriers remain despite these seemingly solid grounds for cooperation. Interreg ØKS frames a cross-border region where efforts are directed across administrative borders on a regional level. The cross-border region present different demographic and geographical profiles. This includes the capital city of Copenhagen and the greater Øresund region, known for its long-standing cooperation and integration as a region, and the capital of Norway, Oslo, to the more peripheral North Jylland in Denmark and the southern county of Agder in Norway. The region as a whole is located in the northern end of the Scandinavia-Mediterranean transport corridor (ScanMed). The long-established grounds for cooperation and varied geography makes Interreg ØKS a relevant and interesting case for studying the specific impact and barriers of transportation in a cross-border regional context.



Figure 1.1: Map of Interreg Øresund-Kattegat-Skagerrak

*Source: Tønne, 2015*

## 2 AIM AND RESEARCH QUESTIONS

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The thesis aims to develop a conceptual framework built on interconnecting three strands of literature, on regional development, the role of transportation in development and the cross-border literature. This framework is empirically tested in the case of Interreg ØKS, with the aim of analysing how transportation manifests as a tool for regional integration and development in this context. This will be done through the following main research question:

In what ways is transportation framed as a catalyst for cross-border regional integration and development under the Interreg ØKS programme?

And the following sub-questions:

What are the perceived wider impacts of transportation planning under Interreg ØKS?

What motivations shape cross-border transportation planning in the regions under Interreg ØKS?

What are the perceived barriers and enablers in transportation planning in this cross-border context?

The analysis will build on, and be guided by, a theoretical framework on the main dimensions of Interreg ØKS in this context – regional development, the impact of transportation to regions, and the specificities of the cross-border perspective. The analysis will be conducted through semi-structured interviews with project officials in three transportation projects under Interreg ØKS. These interviews will build on the theoretical framework from section 5.4, with the aim of answering the sub-questions to provide a more in-depth understanding. Concludingly, the findings will be discussed in light the main research question and on the basis of the theoretical framework, exploring the manifestation of regional development through transport under Interreg ØKS.



### 3 DELIMITATIONS

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The following delimitations have been done to narrow the scope of the thesis. Firstly, the thesis has chosen to focus on Interreg, and Interreg ØKS in particular, as a framework for studying transportation in a cross-border perspective. This has been done to limit the focus of the empirical work. There are many other institutional frameworks working with cross-border perspectives even in the same geographical area, such as Scandria Alliance or the STRING network. There are also currently more than 70 other Interreg programmes across European space. In this context, Interreg as a cross-border institutional framework was chosen due to its long-standing establishment as a cooperative framework, deep-rooted connection to EU regional policy and the work with the Trans-European Transport Network (TEN-T). Interreg ØKS specifically was chosen due to its well-established status as a platform of cooperation in the region. Additionally, three projects have been chosen under Interreg ØKS which all focus on transportation. These three projects have been selected due to them reflecting three different geographical perspectives within the region of Interreg ØKS. Furthermore, they all hold a similar focus within the theme of transportation, on transport corridors and greater mobility and accessibility. This limitation of the scope to Interreg ØKS and the three projects has also been used to narrow down the empirical material.

For the empirical material, the thesis has also chosen to only include interviewees holding official positions within the selected projects. This is largely due to the time constraints of this thesis. While including interviewees with a more on-the-ground perspective on the work on transportation would provide a different perspective and insight on the issue, such as representatives from industry or users of a transport network, locating key informants from this group is considerably more challenging. Furthermore, under the present circumstances with the ongoing COVID-19 pandemic, going on site to look for respondents was out of the question, and it was important to locate respondents which could be reached over the internet. Thus, this thesis has chosen to omit this, but rather be aware of the subjectivity and standpoints of the key informants within Interreg ØKS and how this shapes the findings.

## 4 BACKGROUND

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### 4.1 REGIONALISM IN THE EU AND THE INTERREG PROGRAMMES

In order to understand the aim and scope of Interreg ØKS, placing the programme in a wider EU context is useful. The adoption and implementation of the Interreg programmes, encompassing both internal and external borders in the European Union, are deeply rooted in the union's core objectives. One of these objectives is that of cohesion, formalised under the union's Cohesion Policy. Under the cohesion policy, it is evident that territorial and regional cooperation and development have increasingly become an important part of the European Union's work.

The European Union first formalised their support for territorial cooperation as an objective in 1989 when they reserved a financial post in the revised budget plans. Later, in correspondence with the Lisbon Treaty in 2009, territorial cohesion was adopted as the third pillar in the EU Cohesion Policy. Following the first formal support in 1989, 14 pilot projects received funding to tackle structural issues in EU border areas. This was closely followed by the adoption of the first Interreg community initiative, the first period running from 1990 to 1993 (Medeiros, 2018, p. 70). The initiative was launched to strengthen and create a more efficient cooperation between border regions, partly as a response to the announcement of the EU Single Market (B-solutions project, 2020). To this date, there has been five periods of the Interreg programme, Interreg I (1990-1993), Interreg II (1994-1999), Interreg III (2000-2006), Interreg IV (2007-2013) and Interreg V (2014-2020). A new period, Interreg VI, is currently being formalised for the period 2021-2027.

The development of the Interreg programmes over the past 30 years shows a growing concern for the importance of the regional perspective in EU policy and funding (Reitel, Wassenberg & Peyrony, 2018). Today, territorial cooperation and cohesion is a major part of the European Union's work. In fact, in the budget period 2014-2020, about a third of the EU budget has been directed towards cohesion efforts, at 32.5 percent (European Commission, 2020a; Medeiros, 2016). This makes it the greatest commitment area within the EU budget (Farole, Rodríguez-Pose & Storper, 2011). Three funds work as financial instruments in directing the allocated money, the Cohesion Fund, the European Social Fund, and the European Regional Development Fund (ERDF), and it is under these funds that the Interreg programmes operate.

The Cohesion Policy has been one of the main guiding principles of the European Union since the reform of the structural funds in 1989 (Farole, Rodríguez-Pose & Storper, 2011). From the outset, the objective of cohesion was divided into two main pillars, economic cohesion and social cohesion. Goals under these two pillars aim at strengthening economic and social cohesion in the union, i. e. greater integration of social and economic matters. There is an explicit concern for reducing disparities in the level of development between regions and promoting regions' economic well-being (European Commission, 2020a). Closely linked to the emergence of regions on the agenda in Europe during the 1990s, there was also increased attention to cross-border perspectives on territorial development and cooperation (Perkmann, 2003). This eventually led to another facet being added to the cohesion policy, that of territorial cohesion (Medeiros, 2016). Today, these form the pillars of the Cohesion Policy of the European Union – economic, social and territorial cohesion.

Medeiros (2016) argues that the addition of territorial cohesion as a dimension of the policy should not be seen as the creation of a new, separate goal, but rather an enlargement of the previous two. Traditionally, a core aim of regionalism in the European Union was to create a cross-border functional space (Klatt & Herrmann, 2011). This includes unhindered cross-border mobility and access to housing, the job market, education and recreational activities. It also meant that border dwellers should have open access to institutional frameworks, such as universities and social services (Klatt & Herrmann, 2011). However, while highly ambitious and perhaps a bit unrealistic, similar aims are still reflected in many institutionalised cross-border cooperations. These aims work towards greater regional convergence, or territorial cohesion, across nation-state borders, and in many cases even separately from national top-down policy (Klatt & Herrmann, 2011).

Conclusively, territorial cohesion is at the core of the European Union's work for regional economic development. The Cohesion Policy holds a guiding role to the what and the how of the EU's work with regions, and one can theorise that territorial cohesion is the foundation of what constitutes regional development in an EU perspective (Medeiros, 2016). Followingly, the aims of Interreg ØKS build on the aims of the organisation from which it originates – that of the European Union and its Cohesion Policy.

## 4.2 THE TRANS-EUROPEAN TRANSPORT NETWORK (TEN-T)

Large parts of the European Union's transport goals are centred around the creation and implementation of the Trans-European Transport Network (TEN-T). This is therefore also an important component of the transportation goals within the overall Interreg programmes, and also Interreg ØKS. The TEN-T policy was implemented in the early 1990s for the development of a Europe-wide network of transportation infrastructure. This involves railway, roads, waterways, shipping routes, airports and terminals. In addition to physical infrastructure, the policy encourages the application of new technologies, innovation and digital solutions within the context of European transportation (European Commission, 2020b; Medeiros, 2019). The transport network is divided into two layers – the core network and the comprehensive network. The core network covers the most important transport corridors and nodes in Europe through nine transport corridors, to be completed by 2030 (European Commission, 2020b). Interreg ØKS is part of the northern segment of the Scandinavian-Mediterranean (ScanMed) core transport corridor.

The transport network has the overall goal of supporting the functioning of the internal market, and according to the European Commission, the ultimate aim is “to close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU” (European Commission, 2020b). TEN-T and its transport corridor greatly shape cross-border transportation developments in Europe. For the Interreg programmes in Scandinavia and the ScanMed corridor, the construction of the Øresund bridge between Copenhagen and southern Sweden has been a large success. Presently, a cross-border transport bottleneck in connecting Scandinavia and central Europe is the crossing of the Fehmarn Strait between Denmark and Germany. In response to this, the Fehmarn Belt project, the construction of a fixed link over the strait, is a central project under way, due to impact transport flows to and between Scandinavia and central Europe. According to Medeiros (2019, p. 7), TEN-T “can be seen as the most eloquent example of the EU accomplishments in connecting the EU territory”. Naturally, the transport projects under the Interreg ØKS programme are rooted in the TEN-T policy and these European-wide transport networks are central in what these projects wish to achieve regionally.

The TEN-T policy is currently being reviewed in the face of technological progress, sustainability goals and the present covid-19 pandemic. The review started in April 2019 and a full evaluation is due by the end of 2020.



Figure 4.2.1: Map of the Core Network of TEN-T

*Source: European Commission, 2020b*

### 4.3 INTERREG ØRESUND-KATTEGAT-SKAGERRAK

The framework for looking at transportation in a cross-border context is the Interreg programme Interreg ØKS. The Interreg ØKS programme was first initiated for the Interreg IV period, between 2007 and 2013 (Interreg IV report, 2011) The programme encompassed the border regions in Norway, Sweden and Denmark around the bodies of water separating them, Øresund, Skagerrak and Kattegat. The programme is further divided into sub-regions, the Øresund region and the Skagerrak-Kattegat region. A map of Interreg ØKS is presented in Figure 1.1 on page 5. Due to recent merging of counties in Norway, the counties of Buskerud, Akershus and Østfold are now the larger Viken Fylkeskommune, Vestfold and Telemark have merged to Vestfold and Telemark Fylkeskommune, and Vest- and Øst-Agder has become Agder Fylkeskommune.

Interreg ØKS was established after the Scandinavian governments in 2005 decided to evaluate a programme covering the regions in Figure 1.1. The decision was between creating two separate programmes, Kattegat-Skagerrak and Øresundsregionen, or create a larger,

coordinated programme encompassing both regions (Interreg IV report, 2011). Øresundsregionen as a region and as an Interreg programme was at the time established and working on several cross-border projects and initiatives. It was decided to incorporate the less-established region of Kattegat-Skagerrak into a wider Interreg programme with Øresundsregionen so that existing challenges for the larger region could be tackled in uniform, while still facilitating for deeper integration in the sub-regions (Interreg IV report, 2011). Here, the asymmetries of the cross-border potential of two regions with regards to their respective geographies are acknowledged. The goal became to further develop the existing cross-border structures in Øresundsregionen while at the same time exploring new opportunities for cooperation in and with Kattegat-Skagerrak (Interreg IV report, 2011). The result was the creation of Interreg Øresund-Kattegat-Skagerrak.

Interreg ØKS has four thematic focus points – innovation, green economy, transport and employment. The thematic focus point of transportation is central for the work of this thesis, and the goals of transportation under Interreg ØKS are presented in Table 4.3.1 below.

Table 4.3.1: Transportation goals under Interreg ØKS

Goal	Investment priorities
Improving access to and through the Øresund-Kattegat-Skagerrak region	Support a multi-modal, common European transport area through investment in TEN-T
Reducing transportation time with environmentally friendly modes of transportation for people and goods to the closest node in TEN-T	Promote regional mobility through connecting secondary and tertiary nodes with TEN-T infrastructure, including multi-modal nodes
Increasing the environmentally friendly transportation development in selected corridors, including the TEN-T core network and to and in surrounding areas	Develop and improve environmentally friendly (and even silent) and carbon dioxide efficient transport system, there amongst transports on inland waterways and shipping, ports, multi-modal connections and airport infrastructure to promote sustainable regional and local traffic

*Source: Interreg V ØKS, 2020*

## **5 THEORY**

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This section will develop a theoretical framework for the thesis, drawing on three areas of study – regional economic development, transportation studies and cross-border studies. For each of the areas, a brief literature review will be conducted in order to provide an overview of the previous research as well as to position the current work in the existing body of literature. Then, a selection of definitions and concepts will be drawn upon to create a specific theoretical framework for this thesis. Concludingly, these theoretical frameworks will be discussed in the specific context of Interreg and cross-border transportation.

### **5.1 REGIONAL ECONOMIC DEVELOPMENT**

Defining Regional economic development depend on many factors, and for that reason, this section wishes to build a foundation for the empirical work of the thesis to stand on with regards to regional economic development. That being said, the field study is one of scale, and due to the scope and time limitations of this thesis not all theories and concepts will be covered. Rather, the major lines and changes in thought will be presented.

#### **5.1.1 Theories on Economic Development**

Theory on economic development has seen an evolution from a linear concept to a multidimensional concept. Early economic theories on development are largely centred around economic growth, an increase in per capita GDP or economic output, as the ultimate goal (Ascani, Crescenzi & Iammarino, 2012a). For a long time, these theories dominated theory and policy work in the field. In the 1980s, the idea of technological change as the main driving force to economic growth took hold. These theories centred on the role that innovation and investments in human capital played in fuelling economic growth patterns, taking on an endogenous approach, change coming from within, to economic growth (Ascani, Crescenzi & Iammarino, 2012a). While many of these ideas still hold value in modern theories on economic development, such as for instance the role of technological spill overs, in their review on regional economic development, Ascani, Crescenzi & Iammarino (2012a) state that these ignore non-market processes and socio-institutional characteristics. As such, these theories are characterised as linear in their thought process as opposed to multidimensional.

The shift away from the linear and towards a multidimensional approach can be seen through strands of the literature such as for instance theory on innovation systems and theories within new economic geography (NEG). These theories move beyond the static cost advantages of the neo-classical models and the one-solution approach of technological progress (Pike, Rodríguez-Pose and Tomaney, 2006, p. 95). Notably, innovation, knowledge and learning rise to the stage as important determining factors to economic performance. NEG derives from the ideas of Krugman (1991), combining trade and location theory to theorise how increasing returns from economies of scale result in spatial clustering of economic activity (Aoyama, Murphy & Hanson, 2011, p. 82). This becomes visible in national and regional economic structures as concentrated areas of industry and growth. NEG has given rise to theories on industrial clustering, agglomerations and the core-periphery model, among others, conceptualising on spatial disparities in economic growth and development sub-nationally and even sub-regionally (Ascani, Crescenzi & Iammarino, 2012b).

As of late, sustainability stands out as the most relevant approach to economic development. An established definition of sustainability is meeting the needs of the present without compromising those of the future, and the push for sustainability comes from a heightened awareness on the impact from current and past patterns of resource use (Pike, Rodríguez-Pose and Tomaney, p. 112-115). According to Pike, Rodríguez-Pose and Tomaney (2006, p. 45), “sustainability questions the fundamental aims and purposes of local and regional development, particularly its focus on economic growth, and its durability, longevity and longer-term implications.” In the theoretical debate, sustainability is a prevalent approach which seeks a holistic perspective on development, and which integrates economic, social and environmental concerns in its thinking (Pike, Rodríguez-Pose and Tomaney, 2006, p. 114). More hands on, the shift of focus to sustainability is clear from initiatives such as for instance the EU’s Agenda 2030 and the adoption of the Sustainable Development Goals in 2015.

### **5.1.2 A Regional Perspective in a Global World**

These newer, multidimensional approaches have brought the region to the forefront of research on economic development. Interest in the regional level as a space of analytical importance has gained increased momentum since the 1980s (Ascani, Crescenzi & Iammarino, 2012a). This resurgence of the region in the social science mainstream took place parallel to the rise of post-Fordism, i. e after the age of mass production and the start of specialisation (Storper, 1995), and many authors align this interest in regions with the onset of globalisation (Pike, Rodríguez-



Pose and Tomaney, 2006; Storper, 1995; Amin & Thirft, 1994). Pike, Rodríguez-Pose and Tomaney (2006, p. 3-10) refers to globalisation as a deep-rooted change of greater internationalisation causing more rapid and complex changes to economies, cultures, politics and social life. These changes have resulted in a reduction of transaction costs of trade, goods and knowledge, and overall a greater integration and mobility of the global economic system. Along with great technological advances, it has also brought a shift towards knowledge as the critical commodity, aptly named the knowledge economy (Pike, Rodríguez-Pose and Tomaney, 2006, p. 97-98).

On the one hand, these changes in some theorists' eyes led to the perception of the world as flat, producing greater convergence across space, and statements such as 'the death of distance' (as per Cairncross, 1997). However, on the other hand, other theorists have noted how globalisation has shifted the spatial focus in shaping development trajectories rather than eliminating it. This is because in a more globalised world, specialisation becomes increasingly more important to economic performance. While before production and economic activity within a value chain was often grouped in a local geographical area, now a dispersion of the production chains and links can be seen on a global scale (Storper, 1995). This has given the regional processes and the role of local actors increased significance (Ascani, Crescenzi & Iammarino, 2012a). Storper (1995, p. 207) refers to regions as winners in this context due to them being "a nexus of untraded interdependencies." With this he argues that the economic success of a region is largely due to interdependencies between geographically clustered firms, which facilitate organisational and technological learning, and that these interdependencies are of greater importance to determining the where of economic growth than the geographical constraints of input-output. This allows for flexible specialisation, suited for the globalised economy. Economic organisation, then, is inherently of a regional nature due to this clustering (Storper, 1995). On this backdrop, local specificities have gained increased importance to development and economic growth in the context of accelerating globalisation and economic integration (Storper, 1995), where "development processes unfold at the local level and globalisation reinforces such patterns" (Ascani, Crescenzi & Iammarino, 2012a, p. 4).

An important consequence of this assumption on the role of the region, and which will be relevant for the further theoretical framework of this thesis, is regional competitiveness. Aoyama, Murphy & Hanson (2011, p. 96-98) notes two broad theoretical camps on the balance of economic performance between regions, the self-balance theorists and the self-imbalance theorists. While self-balance theorists believe in the self-correcting forces of an open, capitalist

market, and thus an equalisation of regional economic performance over time, the self-imbalance camp argues that disparities are an inherent part of capitalist economic growth. This idea has connections back to Marx's theories on the uneven distribution of capital in the capitalistic system (Aoyama, Murphy & Hanson, 2011, p. 96) and the idea of cumulative causation (as per Myrdal, 1957). Myrdal (1957) explains the economic transformation of regions as a consequence of the multiplier effect – where already existing social relations, industries and market ties in a geographical location further increases the attractiveness of the location, creating regional disparities when those locations attract capital and labour at the expense of other regions (Myrdal, 1957; Aoyama, Murphy & Hanson, 2011, p. 97).

In the context of the knowledge economy, assuming that regional disparities to a certain degree will be present in a capitalistic system, this suggests that knowledge externalities, spill overs from knowledge-intensive industries, contribute to creating highly localised sources of competitive advantage on a sub-national and even sub-regional level (Rodríguez-Pose & Crescenzi, 2008). Thus, the clustering nature of economic activities cause regional economic development to also be a case of regional competitiveness. Along these lines, Ascani, Crescenzi and Iammarino (2012a, p. 6) also note how a region's competitiveness depends on its ability to exploit global production networks, i. e access external knowledge and innovation while building local capacity. Developing a regional economy depends on gaining a more advantageous position in the wider economic context. This suggests that there is a strong link between the regional economic system and the global economic system and assessing a region's development and opportunities for growth will be highly contextual to the embeddedness of the local economy in the wider global framework. In other words, the economic, social, cultural, political, and ecological processes native to a local economy will have a fundamental impact on how the geography can or will develop (Pike, Rodríguez-Pose & Tomaney, 2007). More specifically, the coherence of local economies is “rooted in the view that economic interests and organisation share a collective dependence upon social and physical infrastructures, such as transportation networks, utility grids, labour markets as well as capacities and powers of local governments.” (Wood & Roberts, 2011, p. 126). The nature and relative position of this local economy will thus impact development trajectories, when for instance planning a transportation project.

On the basis of these theoretical explorations, this work assumes that the region is an important unit of analysis, and that a multidimensional approach to economic development is beneficial to gain a holistic understanding. Given this, this work considered the local regional context and

geography important. Furthermore, sustainability plays an underlying role to this holistic understanding. For sustainability to happen, it requires consideration throughout the whole development process.

## **5.2 TRANSPORTATION IN REGIONAL DEVELOPMENT**

The role of transport in development has been debated since at least the late 1800s with the construction of early railway systems, and further into the next century with the construction of highways and the popularisation of air transport (Hickman et al, 2015). For that reason, and for the purpose of this thesis, this section will therefore limit its focus to the role of transportation to economic and regional development. In particular, this section will concern itself with the wider spatial-economic impacts of transport investments.

### **5.2.1 The Impact of Transportation Investments on Economic Development**

Transportation investment is a prominent traditional axis in regional development strategy (Pike, Rodríguez-Pose & Tomaney, 2006, p. 13). Historically, transportation and infrastructure were seen as key areas of investment that generated externalities in the form of economic growth and development. In accordance, it has been given great importance and value as a component to capital creation (as per Gauthier, 1970). This has been especially true for the instances where economic growth has been viewed as the key to achieving successful development.

Overall, there is a consensus among researchers that transportation does have an impact on the economy on a macro, micro and regional level. However, the extent, magnitude and precise impacts are more ambiguous (Ivanova, 2003). On this, Ivanova (2003) highlights that since 1945, the correlation between increased mobility and traffic and economic growth has been seen as “evidence of a close link between transport infrastructure and the economy” (Ivanova, 2003, p. 4). A fundamental reason for this is that there is a connection between the need for mobility of resources, goods and people, and the need to invest in infrastructure to allow for this. These investments in the transport infrastructure allow for greater mobility, which again prompts greater economic activity (Ivanova, 2003). The more intricate global economic integration from globalisation has further put this issue of mobility on the agenda. However, while a correlation has been identified historically, it does not fully explain the cause-effect

relationship – “one cannot be sure whether increased mobility and developed transportation infrastructure is the sign of good economic performance facilitated by other factors or whether infrastructural improvements themselves facilitate economic growth” (Ivanova, 2003, p. 4). One way to assess the impact that transportation has on economic development is thus through mobility and accessibility, but the exact implications of improvements in these areas are more uncertain.

Exploring this up close, a few dimensions link the role of transportation to economic growth and development. This includes for instance changes in transportation costs, i. e changes in input and efficiency for means of transportation (Holvad & Leleur, 2015, p. 260). For example, by constructing a new road or railway, you reduce the time and cost of transporting resources and goods along the invested-in route. This will have an impact on the productivity, which again has an impact on the economic output. Further, reduced travel time might also have a direct impact on productivity and economic output (Holvad & Leleur, 2015, p. 261). This approach to the impacts of transportation investments is often assessed through a cost-benefit framework, drawing direct links between the changes from transportation investments to economic growth and development. However, newer strands of research argue for the need to also include wider economic impacts (Załoga & Milewski, 2013; Holvad & Leleur, 2015). Holvard & Leleur (2015, p. 261) argues that indirect, wider impacts might make up a significant part of the impacts on development from larger transport and infrastructure projects. Some of these effects include greater labour mobility, stronger competition and enhancement of the profitability of private investments. Their argument concerning the direct and wider political impacts from transportation investments is presented visually in Figure 5.2.1.

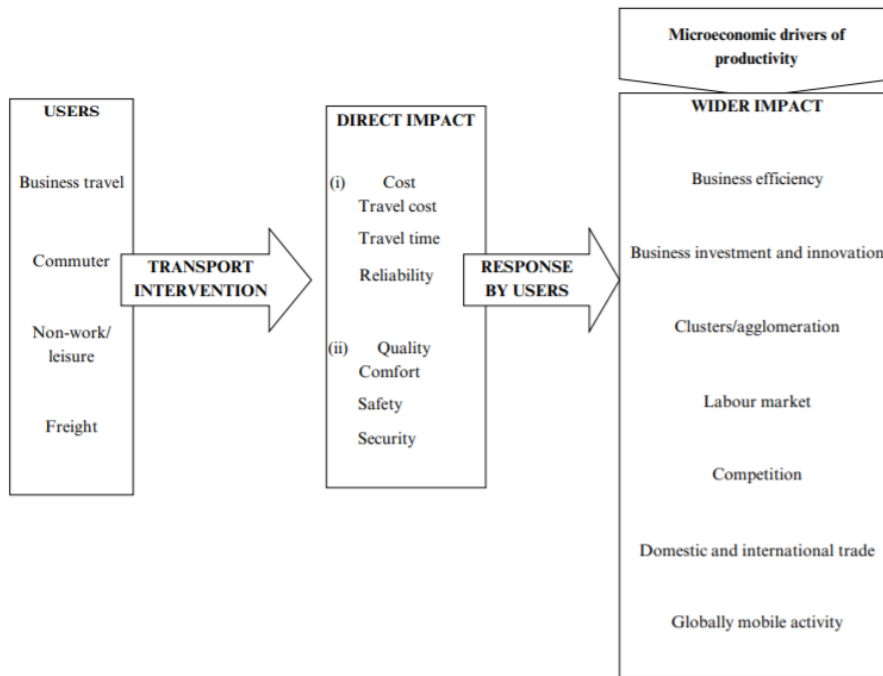


Figure 5.2.1: Links between transport and economic performance

Source: Eddington, 2006. In: Holvad & Leleur, 2015, p. 262

In order to get a holistic perspective on the role of transport to regional development, then, it is suitable to adopt this approach of looking at the wider socio-economic impacts of transport development, not just its direct effects. A good starting point is the wider impacts presented by Holvad and Leleur (2015) in Figure 5.2.1.

It's becoming increasingly more difficult to talk about transportation without mentioning sustainability. While transport systems create the premises for economic activity and mobility, developing these transport systems have many negative environmental externalities (Wang et al, 2018). For instance, increases in traffic often lead to greater emissions, construction of roads takes up space and land, and the developments might cause biological harm to water reservoirs and habitats. Due to these negative environmental impacts, sustainability has gained a lot of momentum in transport planning. Measurements on climate and air quality impact is today often a requisite to be able to plan transportation developments (Wang et al, 2018). In many cases, reducing the climate impact of transport systems is also the main reason transport systems are being upgraded or constructed at all. Thus, the sustainability aspect to transport planning has become fundamental when considering the impacts of transport, and especially the wider impacts.

## 5.2.2 Transportation in a Regional Context

When assessing the wider impacts of transportation, the regional perspective becomes central. In this context, the role of transportation investments is linked to the development within or between regional economies. As presented earlier, development of transportation infrastructure is likely to impact economic activity in its associated regions through improvements in accessibility and mobility of goods and people (Serafeim & Dimitrios, 2020; Ivanova, 2003). A prevalent historical debate here is that of transportation investments' role in the core-periphery structure of a region or nation. On the one hand, transportation is argued to help convergence between core and peripheral areas, territorially and economically, by reducing the transportation costs, thus increasing the connectivity and accessibility of these areas. On the other hand, studies on the phenomena show that this is not always the case, and that it might even cause a further divergence between the core and the peripheries (Gauthier, 1970; Medeiros, 2019). Thus, "...a transport infrastructure project linking a backward peripheral region with an advanced core region may lead to economic activity migrating from the peripheral region to the core, contrary to the intended impact of the intervention to promote the migration of activity from the core to the periphery" (Holvad & Leleur, 2015, p. 264). With regards to the Trans European Transport Network (TNT-T), studies have shown that while the intent is to narrow the differences in accessibility to regions, it might rather have widened them (Medeiros, 2019). This indicates a possible distributive effect from transportation, where instead of generating economic growth, it is merely being redistributed between or within regions.

Keeping this in mind, an important consideration is that not all regions will respond equally to transport investments. Research suggest that infrastructure in itself is unlikely to be a catalysat for economic activity, and that other socio-economic, spatial, political and historical factors to a great extent shape the impacts of transportation investments in a region (Holvad & Leleur, 2015, p. 265). Here, Serafeim & Dimitrios (2020) state that the relation between transportation and space is symbiotic, where the impacts from transportation ultimately will change spatial components such as distance and proximity, in turn affecting territorial cohesion and economic configuration, which again will impact the role that transport investments will have on a region.

Based on this review on transport in the context of regional economic development, it is evident that the relationship between transportation and economic performance is not as simple as once assumed. Transportation is an important factor in realising the economic potential of a region,

but it does not a priori lead to economic development (Serafeim & Dimitrios, 2020; Medeiros, 2019). Furthermore, transport development can have impacts far beyond that of simply reducing travel times or the cost of transport and can be a great contributor to environmental stress. Thus, it is necessary to view the role of transportation in regional economic development holistically.

### **5.3 THE CROSS-BORDER PERSPECTIVE**

In the case of this thesis, the role of transportation in regional development will be considered in a cross-border perspective. The literature on cross-border issues is large and growing, and especially within the context of the EU, as the work for a single market and regional integration has provided grounds for many studies on specific cross-border cases (Perkmann, 2003). The cross-border dimension brings its own set of opportunities, barriers and factors to consider, as for instance when considering the role of transportation.

First off, it is useful to define what is meant by cross-border regions. Perkmann (2003) defines cross-border regions as a construct from organisational cooperation across borders. This is explained as “a bounded territorial unit composed of the territories of authorities participating in a [cross-border cooperation] CBC initiative [...]. This implies that a [cross-border region] CBR is not only understood as a functional space, but as a socio-territorial unit equipped with a certain degree of strategic capacity on the basis of certain organizational arrangements.” (Perkmann, 2003, p. 157). In other words, a cross-border region becomes a region due to the social construct of cross-border cooperation. In the specific context of this thesis, this definition will be applied. This enables us to think of the territory covered under Interreg ØKS as one, and also define cross-border sub-regions under the projects analysed.

The goal of the European Commission is for borders to not be barriers to cross-border cooperation and mobility. There is a general consensus in the EU that in order to achieve a more integrated and cohesive territory, it is necessary to introduce concrete measures to reduce the barriers from administrative boundaries (Medeiros, 2019). For the 25<sup>th</sup> anniversary of the Interreg Community Initiative in 2015, the European Commission sought to identify the main perceived barriers to cross-border mobility through an online public consultation. The main perceived barriers are summaries in Figure 5.3.1.

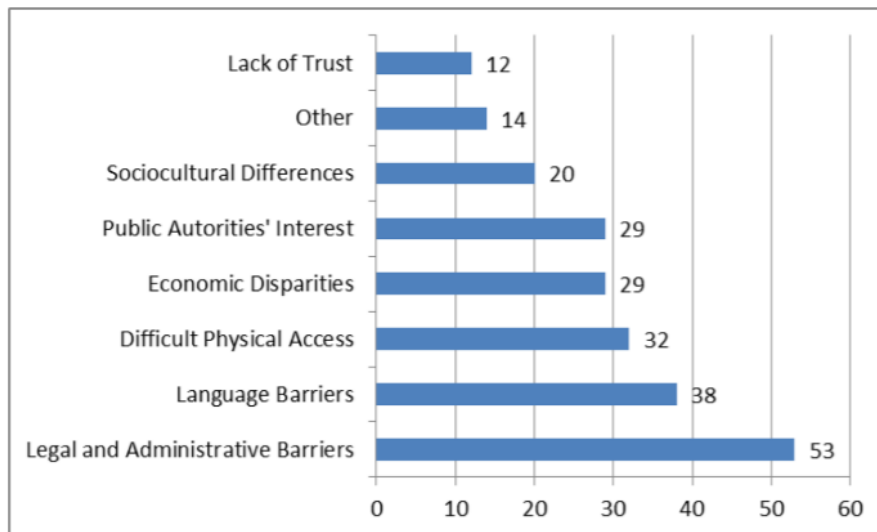


Figure 5.3.1: Relevance and frequency of barriers to cross-border mobility.

*Source: Medeiros, 2019, p. 2.*

Here, physical access ranks as the third most frequent barrier obstacle. It is important to note that the relative perception of barriers is bound to vary depending on the specific geographical location. Medeiros (2019) uses this data for an in-depth reflection on the role of cross-border transportation and cross-border mobility in the EU at the present time. He states that the persistence of cross-border transport-related barriers are rooted in “complex legal, regulatory, technical and institutional frameworks; the degree of local-regional political will; and relations to engage in solving this specific issue, as the solution should be formulated at the local-regional level” (Medeiros, 2019, p. 9). Furthermore, these barriers might have an impact on each other, for instance administrative barriers hindering efficient cross-border transportation planning. Overall, he identifies cross-border transports as a persistent barrier to cross-border mobility and regional integration in the EU (Medeiros, 2019).

Accessibility is the most direct consequence of transportation (Holvad & Leleu, 2015; Medeiros, 2019), also true in a cross-border context. Often, borders present an accessibility-type barrier (Medeiros, 2019). Without the necessary transportation infrastructure, access becomes limited. Historically in cross-border areas, the transportation infrastructure is often underdeveloped or not well connected (Lundén, 2018). That being said, in the EU, continuous attention and investment into this issue through for instance the Interreg programmes and the



common transport goal of TNT-T have succeeded in increasing cross-border flows (Medeiros, 2019). This increasing border permeability also highlight barriers to further integration. Thus, the acknowledgement of barriers might indicate that there indeed is an ongoing process of cross-border integration (Medeiros, 2019). However, even with recent efforts to increase the scope of cross-border infrastructure, the connectivity between adjacent regions across borders often lag behind. On a basic level, greater accessibility means greater opportunity for mobility. However, in a cross-border context, the additional barriers it presents might hinder the facilitation of the accessibility that improved transport infrastructure could provide. This includes for instance physical barriers, such as the lack of infrastructure, as well as more indirect barriers such as differing legal frameworks and socio-economic differences.

Cross-border regionalisation is a complex phenomenon (Lundquist & Trippel, 2013). Thus, there might also be other forces than the lack or existence of barriers impacting integration, and also integration not relating to transport and accessibility. Lundquist & Trippel (2013) talks about this as complementarities and synergies between regions, pushing for or working against cross-border regionalisation. For instance, businesses might cooperate across borders independent of government incentives, due to perhaps an unexploited potential or a history of cooperation. Contrarily, cross-border cooperation might not occur on the grounds that there is no reason to do so. Thereby, when considering cross-border integration and transport, it is also important to keep in mind that there might be other factors that play into the process of regionalisation.

## **5.4 THEORETICAL FRAMEWORK**

In order to answer the main research question, a framework for assessing the role of transportation to cross-border regional development will be adopted:

In what ways are transportation framed as a catalyst for cross-border regional development in Interreg ØKS?

The framework will be based on the reflections above, and the framework be threefold. Firstly, the role of greater accessibility will be assessed through looking at the wider impacts from transportation investments and planning. Here, Holvad and Leleur's (2015) reflections on what constitutes wider impacts will be utilised, as presented in Figure 5.2.1 earlier. The underlying

assumption is that transportation projects are undertaken in order to provide accessibility, be it for goods, people, knowledge or otherwise. This accessibility then has the potential to have wider direct and indirect impacts on the space it encompasses. Thereby, this angle looks at how the projects chosen for analysis aim to impact the regions under Interreg ØKS. This is addressed through the following sub-question:

What are the perceived wider impacts of transportation planning under Interreg ØKS?

Another aspect will be the role of the regional context. The regional geography, the socio-economic, geographical, industrial and legal structures make up the local context for which the transportation projects are being implemented. As explored, the local context is central in determining the correct strategies for regional economic development as well as transportation planning (Rodríguez-Pose & Crescenzi, 2008; Ivanova, 2003). Each geography presents its own unique circumstances. This might include things such as its relative geographic location or demographic profile, historical industrial structure, relative position in the national context and the presently constructed infrastructure. The local context might also provide grounds for possible inter-regional competition and asymmetries, which can cause regional disparities and be a determinant of a distributive or generative impact from the transportation development (Holvad & Leleur, 2015, p. 264). It also has the potential to provide new complementarities, resulting in growth and development on both sides of the border (Lundquist & Trippel, 2013). Thereby, identifying the key aspects of the regional context is central to determine how transportation is framed as a catalyst for cross-border regional development. This is addressed through the following sub-question:

What motivations shape cross-border transportation planning in the regions under Interreg ØKS?

The third aspect concerns the specific impacts that the cross-border context brings. Working with transportation across borders will bring barriers, but also opportunities, that wouldn't exist within a singular national framework. It also adds to the importance of the previous aspect – the role of the regional context. This often intensifies when working across national borders, as additional and deeper differences or similarities between regions might be present on an

international level. In order to assess this, the idea of border permeability will be applied, identified through the specific cross-border context, and in particular the barriers and enablers to cross-border transportation planning. This is addressed through the following sub-question:

What are the perceived barriers and enablers in transportation planning in this cross-border context?

The presented framework is illustrated below in Figure 5.3.

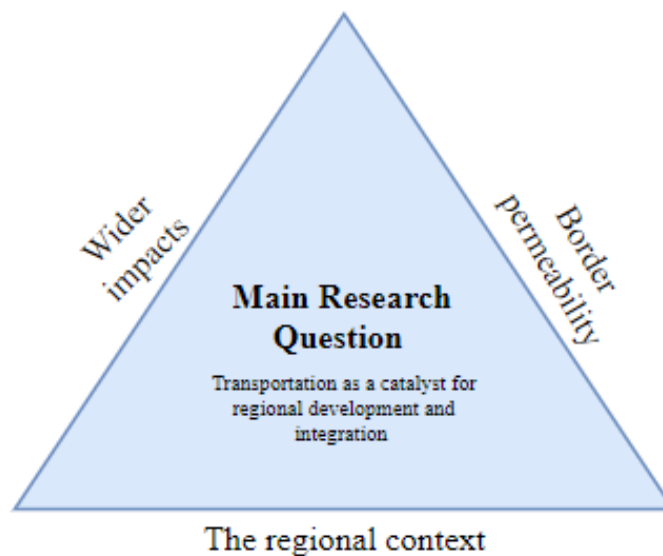


Figure 5.3: A visualisation of the theoretical framework for the thesis.

## 6 METHOD AND METHODOLOGY

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The thesis aims to answer the research questions through a qualitative study. The study has collected qualitative data in the form of semi-structured interviews. All informants who participated in interviews gave their permission for the interviews to be recorded and were

informed about the purpose of the study and the interviews and given the interview guide in advance. Furthermore, the interviewees have been asked whether identification by their professional role was alright by them.

## 6.1 SELECTION

The informants for the semi-structured interviews were selected based on their roles within the three projects in question, *Jyllandskorridoren*, *The Scandinavian 8 Million City* and *Greater Copenhagen*. This framework for selection was chosen due to the focus of the thesis on these three projects as examples of how transport works as a catalyst and a tool to regional development. This ensures that the data collected, and thus results, align with the scope and focus of the thesis. A choice was also taken to limit the interviews to only key informants in official roles within Interreg ØKS or the three projects.

Initial informants were contacted based on information on the projects' websites, and from there, other informants were contacted based on a snowballing effect (Valentine, 2005, p. 117) from these initial informants. This allowed for more focused interviews with the subsequent informants, as the snowballing allowed for a more guided selection. During the contact with the initial informants, people with further knowledge on the topic were often suggested and subsequently contacted. Due to the time limits and to stay within the scope of the thesis, not all suggested informants were contacted, but rather a selection was made based on the relevance of the suggested informants' role and competence. In total, five interviews were conducted, and a sixth respondent answered the questions in written form.

Table 6.1: Overview of the respondents and their role.

Region represented	Role of respondent
Region Skåne	Project manager for the Interreg project A Connected Transportation System in Greater Copenhagen.

Region Nordjylland	Lead partner in the Jyllandskorridoren Interreg project.
Vestfold and Telemark Fylkeskommune	Advisor for strategy and transport, and responsible for international projects.
Agder Fylkeskommune	International advisor and advisor for the North Sea Commission's transport group, involved in the Jyllandskorridoren Interreg project.
Oslo municipality	Public servant at the international office at Oslo Municipality. Contact person and coordinator for the municipality's involvement in Interreg projects.
Viken Fylkeskommune	International advisor.

## 6.2 DATA COLLECTION AND DATA PROCESSING

Ahead of the interviews, an interview guide was created based on the research questions and the conceptual framework outlined in the previous section. This interview guide also includes a short description of the aim of the thesis. The interview guide was written in both Norwegian and Swedish, and the respective version was sent out to the informants a few days ahead of the interviews. This was done both because many of the informants wished to be prepared for the interview and because it made it easier for both interviewer and interviewee to structure the conversation. An English translation of the interview guide can be found in Appendix 1.

The schedule for the interviews was set up over the span of two weeks to allow for flexibility and to be able to schedule around the informants' other commitments. The interviews were conducted over Zoom and were recorded through the software's recording function. This was done due to the geographical spread of the informants, as well as due to the current COVID-19 pandemic, making it appropriate to meet online rather than in person. The recording was done in order to make the analysis of the material easier and more accessible, and to allow for coding. It also made it easier for the interviewer to be present in the conversation instead of focusing on taking notes. This made it possible to follow up on interesting comments made and to engage fully in the conversation (Valentine, 2005, p. 123).

The recordings were also transcribed according to professional standards of non-verbatim transcription, using the software Express Scribe. This means that the transcription omits unnecessary speech and verbal expressions without editing or changing the structure or meaning of the content. This makes the transcript easier to read and to analyse. Furthermore, parts of the conversation that falls completely outside the context of the thesis has also been left out, such as introductory chit-chat and goodbyes. This makes the transcript more focused and easier to analyse. The transcripts are available upon request granted consent is given by the respondents.

### **6.3 ANALYSIS**

Analysis of the data was conducted by coding the interviews according to the three axes identified in the theoretical framework in section 5.4, Figure 5.3. This was done manually on printed versions of the transcripts, and the coding was done by colour coding sections which answered the three sub-questions. After the coding, a document was created where all responses coded in each colour were collected and organised. From this, overarching themes were identified. Lastly, the findings under each thematic category were presented in the results section of this study, section 7. The visual guide used during the manual coding can be found in Appendix 2.

### **6.4 LIMITATIONS AND VALIDITY**

A strength of qualitative studies is the in-depth and detailed information that it creates. However, this is also one of the aspects that needs to be taken into consideration when working qualitatively. When respondents are being interviewed, they will give answers based on their own perspective and subjectivity, and thus the responses will always be coloured by this. Furthermore, in semi-structured interviews, questions and dialogue will be shaped by the direction that both the respondents and the interviewer lead it. Lastly, the interviewer will also have their own perspective and preconceptions of the topic under question, and this will also shape the interviews, and thus also the results (Valentine, 2005, p. 122-123).

For this particular study, this becomes especially relevant in the selection of respondents, as all the respondents hold similar positions within regional authorities. Thus, they all come from a similar background and with similar motivations for doing cross-border transportation planning. This factor has been taken into account, and as the study wishes to research the issue

of cross-border transportation from a regional perspective, this selection has also been a conscious choice.

## 7 RESULTS

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This section will analyse the findings from the material based on the theoretical framework in Section 5.4, illustrated in Figure 5.3. Like the theoretical framework, the results will be presented in three sections, each section answering a sub-question. A brief overview of the chosen projects can be found prior to this in order to give the reader context for the results.

### 7.1 CHOSEN TRANSPORTATION PROJECTS UNDER INTERREG ØKS

#### 7.1.1 The Scandinavian 8 Million City & the STRING network

The Scandinavian 8 Million City was a transportation project under the Interreg IV period (2007-2013) and was formally concluded in 2014. The project involved the transport corridor between Oslo-Gothenburg-Copenhagen, specifically focused on cooperation surrounding an upgraded and efficient railway line (STRING network, 2014). The project mapped how cross-border transportation investments could be directed to create a more efficient railway, what effects this might have, and how this would connect the region to the TEN-T network (STRING network, 2014). The efforts from The Scandinavian 8 Million City have continued, and the project is part of a string of projects surrounding the transport corridor Oslo-Gothenburg-Copenhagen, its predecessor being an Interreg project called COINCO (Corridor of Innovation and Cooperation). After the conclusion of The Scandinavian 8 Million City, the cooperation partners in the project have put their efforts into the STRING network – an expanded network of regions along a more extensive transport corridor, stretching down to Hamburg and Schleswig-Holstein in Germany. The STRING network continues to work on areas of interest of The Scandinavian 8 Million City, such as upgrading of the railway line between Oslo and Gothenburg (STRING network, 2014).



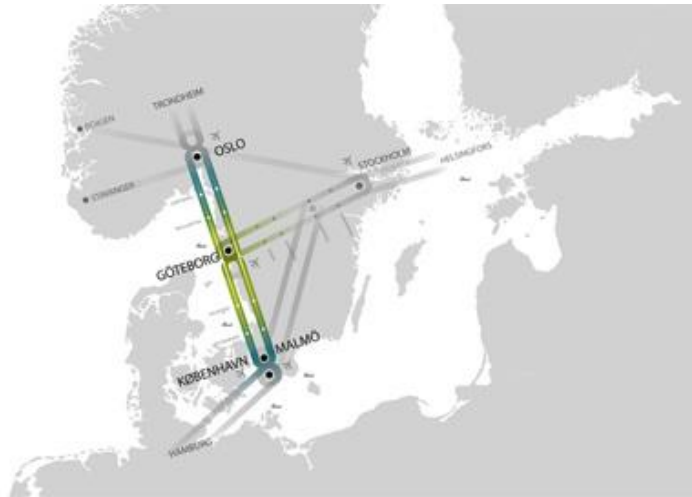


Figure 7.1.1: A map of the 8 million city project transport corridor.

*Source: STRING network, 2014.*

### **7.1.2 A Connected Transportation System in Greater Copenhagen**

A Connected Transportation System in Greater Copenhagen is an ongoing project under Interreg V, due to be concluded at the end of 2020. The project is run by the Greater Copenhagen committee, which includes Region Skåne and Region Halland in Sweden and Region Hovedstaden and Region Sjælland in Denmark as well as the municipalities in these regions. The scope of the project thus also covers this geography. The background for the project is Greater Copenhagen's traffic charter, outlining common goals in the cross-border region, which focuses on a fixed link between the cities of Helsingborg and Helsingør, today connected by ferry, but also on other areas which require attention and infrastructure investments to facilitate greater mobility and access to and within the region (Greater Copenhagen, 2020a). The project A Connected Transportation System in Greater Copenhagen grew out of this charter and specifically focuses on how the transportation system in Greater Copenhagen can be developed to become more homogenous and sustainable in order to promote a green transport system and access from and within TEN-T (Interreg ØKS, 2018). The project has a long-term goal of connecting also the secondary and tertiary nodes in the transport network, more peripheral parts of the regions, to both Malmö and Copenhagen, in effect creating a wider and more integrated labour market and increasing mobility (Greater Copenhagen, 2020b).

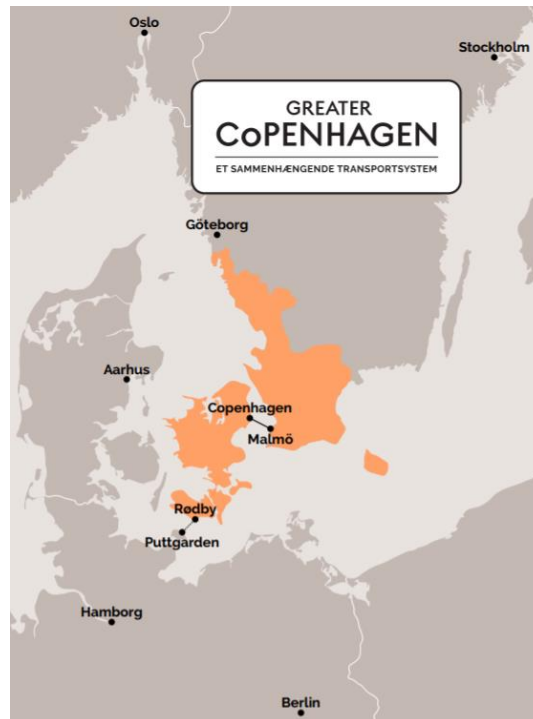


Figure 7.1.2: Map of “A Connected Transport System in Greater Copenhagen.”

*Source: Greater Copenhagen, 2020b*

### 7.1.3 The Jylland Corridor

The Jylland Corridor project is currently in a pre-project stage. Under Interreg, the project aims to map the interest and potential for an expanded and greener transport corridor between the regions of Vestfold and Telemark, Agder in Norway and Jylland in Denmark. It wishes to consult involved actors on what, where and how there is a need for updated infrastructure and transport possibilities (Agder Fylkeskommune, 2020). The mapping of transportation investments is focused on increasing or redirecting goods from road to railways and on ships over Skagerrak, which involves potentially adapting existing rail infrastructure and supporting infrastructure for transportation by sea, as well as expanding where necessary. Overarchingly, the project aims to focus and coordinate the cooperation efforts cross-border between the regions in southern Norway and northern Denmark in order to create a more efficient and green transport corridor and considers the need to work cross-border in order to achieve these goals (Agder Fylkeskommune, 2020). A clear initial aim of the project is to put the Jylland Corridor on the map as an established part of the ScanMed transport corridor under TEN-T.

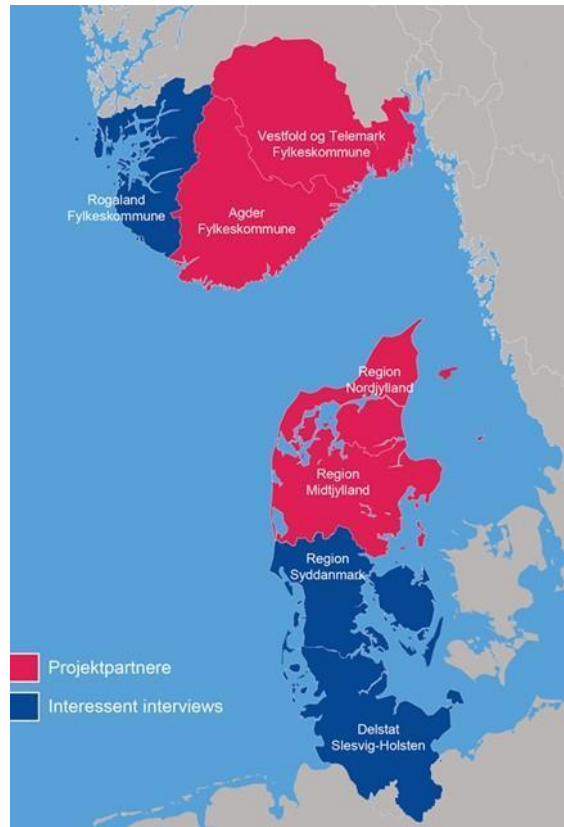


Figure 7.1.3: Map over the partners in the Jyllandskorridoren project.

*Source: Agder Fylkeskommune, 2020*

## 7.2 RESULTS FROM THE MATERIAL

### 7.2.1 What are the perceived wider impacts of transportation planning under Interreg ØKS?

Many of the perceived wider impacts from transportation planning under Interreg ØKS were shared by the respondents. A common sentiment around the wider impacts of transportation planning is that transportation is a tool for development, not the development itself. In conjunction with this, some overall goals of the projects were brought up, including increasing the capacity and accessibility of the transportation systems in and between regions, develop the connection to the TEN-T network, promoting regional integration and creating a cross-border region, as well as addressing environmental concerns related to transportation. One respondent concluded the interview by saying that overarchingly, transport is meant as a tool to create competitiveness and sustainable development.

A returning theme among the respondents was that the creation of more efficient and greener transport systems jointly allows for greater mobility as well as a chance to have a positive impact on climate issues. The respondent from Oslo municipality said that:

*So, the overall goal is that this region gives its inhabitants increased quality of life, but that this process at the same time contributes to solving the climatic challenges. So, we want increased mobility, but it must be done in a sustainable way.*

In the case of the Oslo-Gothenburg transport corridor and the 8 million city project, this manifests as improving the quality and use of the railway along the corridor, from Copenhagen to Oslo, for transporting goods. The respondent from Viken Fylkeskommune in Norway pointed out that the transport challenges along this corridor are of both an environmental and spatial nature. Transport by road takes up much more space than transport by rail, causes greater congestion in city areas, and have a higher polluting effect.

A similar thought was given by respondents working with Jyllandskorridoren, where the promotion of this alternative transport corridor has the potential to direct more goods to sea and rail, decreasing emissions and congestion. Furthermore, potential greater access to and from the involved regions was said to allow for greater competitiveness for markets, making it cheaper and quicker to use the transport system as a long-term consequence. A respondent from Region Nordjylland in Denmark stated that for them, working cross-border with transportation

brought possibility of support general regional development as well as to develop the regional mobility in a sustainable way.

For the Greater Copenhagen project, it was similarly highlighted that green transport options were central to the project by the respondent from Region Skåne:

*We're not working towards development so that you can drive more diesel cars, but we're looking towards the greener transport alternatives.*

More efficient transport systems were said to provide regions with greater cross-border mobility and greater connectedness. This was said to have a wider impact of greater relevance and connectedness to continental Europe. In the wider Interreg perspective, cross-border transportation planning opens up the possibility of enhancing the regional competitiveness by forging a greater connectedness of the region to continental Europe. It was said several times that developing the transport systems in the ØKS region is not important in isolation but becomes highly relevant in a wider European context. For instance, the respondent from Viken Fylkeskommune said that:

*If we are to be able to be globally competitive in this corner of the map, as you said, we have to cooperate better, because the actors we compete against are so incredibly much larger than us.*

An example is how Nordjylland, Agder, and Vestfold and Telemark work for Jyllandskorridoren to be included in the ScanMed transport corridor, connecting the regions to Europe and putting them on the map in terms of EU transport policy. This is said to be important in order to increase the access of the regions to and from the continent, as well as in the long-run increase opportunities for the transport of goods and the attractiveness of the region. This was reflected in the other projects as well, the respondent from Viken Fylkeskommune, working with the Oslo-Gothenburg corridor, stating that:

*The competitiveness of a region depends on larger connections, and transport is a tool to accomplish this. Transport solutions is one of the most important premises for well-functioning and efficient cooperation, not least for the business side.*

Along these lines, cross-border transportation planning through Interreg facilitates for continued and deepened cooperation between the regions in the future. A couple of the respondents drew lines to current cooperations that grew out of similar projects, such as the

STRING network and the Scandria Alliance. There were also reflections on how the cross-border efforts aid in forming a “mega region”, both in terms of physical connectedness and how the inhabitants view and use the region at large. In relation to the Greater Copenhagen project, the possibility to travel further faster enhances the attractiveness of a region, and also contributes to “shrinking the region” in people’s minds. This again contributes to greater cross-border integration and greater mobility in the labour market:

*If you reduce travel times, you shrink the region, you ... then you expand the labour market, it becomes possible to travel further, and that is positive, and it is positive for everyone, really, and for growth, and it gives the attraction ... makes the region attractive.*

*- The respondent from Region Skåne*

In relation to Jyllandskorridoren, respondents shared a hope that the project might provide a framework for continued work on the cross-border region on transport as well as non-transport issues, such as for instance increasing the attractiveness of the region or building shared digital infrastructure. A shared sentiment between respondents was that an Interreg cross-border project gives political leverage on a national and regional level to push for continued cooperation and physical realisations of the project results. Transportation planning under the Interreg ØKS framework is thus seen as providing credibility to transport projects, aiding them in continued work and cooperation.

Thus, the wider impacts of transportation planning under Interreg ØKS are multidimensional and intertwined. A few overarching themes could be found in the material from the respondents:

- Transportation planning facilitates greater accessibility to regions, and mobility within and between regions, enhancing the attractiveness and competitiveness of regions;
- It is an opportunity to mitigate climatic issues;
- It sets regions up for a greater competitive advantage by being well connected to continental Europe;
- It provides grounds for continued and deepened cooperation between the regions in the future on similar and other cross-border issues, facilitating greater integration.

### **7.2.2 What motivations shape cross-border transportation planning in the regions under Interreg ØKS?**

While the perceived impacts of transportation planning were similar across projects, the motivations shaping cross-border transportation planning were more varied. This was often on the basis of different regional contexts – geographical location, economic structure, relative placement and pre-existing infrastructure and cooperation.

For the Greater Copenhagen project, both internal and external motivations were highlighted. There was an underlying wish to create a more integrated Øresund region as a whole, including Copenhagen and Malmö as well as less densely populated areas on both the Swedish and Danish side. This would “shrink” the region for its inhabitants, making cross-border travel more accessible and thus increasing regional mobility as a whole. Another motivation was that of the Øresund region as a transit region and preparing the transport systems for the possible impacts from the completion of the Fehmarn Belt project. The Øresund region has the Øresund bridge as the only fixed link across the strait between Sweden and Denmark. The respondent from Region Skåne explains that:

*We have a lot of both rail and road traffic passing through that are going to the rest of Sweden, and part ... in part to Norway as well. And everything passes through Skåne and Greater Copenhagen [...] We also see that when you build in Fehmarn Belt our region will become a bottleneck instead and the capacity that is coming.*

The 8 million city project focused on the transport corridor from Copenhagen through Gothenburg to Oslo and is similarly motivated by both internal and external factors. Geographically, the regions involved are transit regions, or “gate regions” to their respective countries. For example, a large part of the goods to Sweden come over the Øresund bridge from Copenhagen or via boat to the ports in Skåne, such as Trelleborg. Furthermore, Oslo is a gate in terms of transport to the rest of Norway. Here, most of the traffic passes through a terminal at Alnabru before it’s distributed out. Thus, an efficient, well-functioning and green transport corridor was highlighted as important not just for the regions involved, but also for the countries at large. Additionally, due to the large volumes of traffic that goes through this corridor, both people and goods, improving it will have large positive externalities.

Along these lines, the respondent from Viken Fylkeskommune also pointed out the importance of Norway being a net importer – establishing an efficient transport system is as, if not more, important for securing the importing of goods as the exporting. Thus, for Norway, this is a motivation for working cross-border with transportation planning. Similarly, the respondent from Oslo municipality remarks that there are infrastructural challenges that cannot be solved locally:

*[...] Oslo municipality has extremely ambitious climate goals, and this is imperative to reach them. And then it's the context that involves partly a strong growth in population and traffic, and that is persistent locally and regionally, and that there's clear infrastructure challenges that cannot be solved locally.*

A motivation to work cross-border on solving such transport issues is bound to the fact that transport in one region and country is dependent on an efficient and working transport system in adjacent ones. This is connected to the location of the ØKS region at large – in the northern part of the European continent, a “corner region.” Here, a few respondents pointed out that this means that securing good transport systems and connectedness for the region is dependent on cross-border cooperation, especially pertinent for Norway who is not a part of the EU and thus is not part of EU transportation planning to the same extent.

Of the chosen projects, Jyllandskorridoren differs the most in its motivations. The project wishes to establish a transport corridor through the southern part of Norway over to northern Denmark and Jylland, an additional and alternative route for the transportation of goods to and from Europe. While the Oslo-Gothenburg transport corridor is well established, Jyllandskorridoren is working to gain recognition. The respondents working with this project pointed out that the regions involved, both Jylland, Agder and Vestfold and Telemark, has industrial clusters which would potentially benefit from having a more direct transport route to the continent.

*Jyllandskorridoren is the shortest way to Europe from Vestfold and Telemark, Grenland, Agder, instead of driving goods up and around Oslo with, yeah, full capacity at Alnabru and ... Yes, it is just a lot further, and, yes, it must be more expensive, and it generates more emissions and so forth, so ... No, Jyllandskorridoren should be a very attractive alternative for goods, yes, both from the west coast and the south coast [of Norway], Grenland.*

*-The respondent from Vestfold and Telemark Fylkeskommune*



Thus, while the other projects involve more well-established cross-border cooperations, Jyllandskorridoren is driven by a motivation for establishing a new and closer cooperation between regions which previously have not been coordinated in the same way. In addition to this, the location of the regions plays a role in what the project wishes to achieve. Jylland is a “region on the outskirts” in the danish context, and the importance for the region to showcase that the possibilities and connections doesn’t end when you reach northern Jylland was brought up. Similarly, the regions on the Norwegian side are “facing” the capital of Oslo, but also the European continent over the Skagerrak strait. It is these locational factors that the project aims to change, improve and build on, making the regions more connected, accessible and relevant in the wider European context.

Despite differing regional contexts impacting motivations for participating in cross-border transport planning, a few overarching motivations can be identified:

- Regions are motivated by their relative geographical location – to each other, to capital and larger cities, and to continental Europe;
- By ensuring that they’re not bottlenecks in their respective cross-border transport systems, or by creating new and more efficient transport systems;
- By a wish to put their regions on the map and make or keep them relevant in a wider context;
- By a wish to create and provide more sustainable transport systems and options.

### **7.2.3 What are the perceived barriers and enablers in transportation planning in this cross-border context?**

In trying to identify barriers and enablers to transportation planning from the material, it became clear that the two often coincide. What is an enabler for some is a barrier for others, and a barrier might become an enabler if addressed. A clear example of this is the role of pre-existing infrastructure and cross-border cooperations. From responses on Jyllandskorridoren and the Oslo-Gothenburg corridor, including the 8 million city project, it becomes evident that these two factors play differing roles in the two transport corridors. For instance, the 8 million city project is built on previous cross-border cooperations on transport and other issues, acting as an enabling factor to transport planning along the corridor. A long-running and established cooperation on the transport corridor between Copenhagen and Oslo, among them the 8 million city project, was pointed out as an enabling factor for current cooperation efforts, as for

example the STRING network. Stating that the issue of cross-border cooperation has been on the agenda for a long time, the respondent from Oslo municipality said that:

*And the fact that so many from the Oslo-Gothenburg cooperation have now joined STRING, that shows that there is still a great involvement, this is an unsolved challenge, but which is still on the agenda.*

Similarly, the Greater Copenhagen project benefits from a well-established cross-border cooperation in the Øresund region, providing a foundation for the project to work from. For Jyllandskorridoren, on the other hand, the challenge is to establish that cooperation. There are less established platforms for cooperation across the border and along the transport corridor, acting as a barrier to transport planning, and is also part of what the project wishes to address.

Here, Interreg and transport planning were also said to complement each other. As the respondent from Oslo municipality puts it:

*If we want to develop this region to a green hub, which we want, then we have to cooperate better [cross-border], and an important element in that kind of cooperation is an agile, quick, good, efficient and sustainable transport solutions.*

Pre-existing cooperation enables efficient cross-border transport planning, and transport planning facilitates for cooperation on cross-border issues.

A respondent from Jylland adds to this, stating that for them, it is important to show that it's not only Jylland which finds the corridor important, but also the Norwegian adjacent regions and Interreg ØKS. This sentiment of a need for cross-border cooperation in order to realise the potential of the project is also shared by the Norwegian counterparts:

*Jylland might not be able to boost Jyllandskorridoren alone, but if we, Agder ... we along the whole corridor stand together, then of course, then it becomes ... and we work systematically towards boosting it and contribute to the realisation of that possibility, then it can gain some importance.*

Along these lines, several respondents brought up that for regions, Interreg is a platform and a tool for starting and strengthening cooperation across borders - Interreg itself is an enabler to cross-border transportation planning. The respondent working with Jyllandskorridoren points out that Interreg is a framework for initiating cooperation on transport planning between southern Norway and northern Denmark, regions with a shorter history of cross-border cooperation with each other.

Inherent to this is that cross-border transportation planning is of a political nature. This is an issue that gets repeatedly brought up by all the respondents on different levels of cross-border transport planning. The respondents explain that political and public awareness and recognition of the projects and why they're important is imperative to be able to continue and actualise the projects. In relation to the issues brought up above, pre-existing cooperations and acknowledged cross-border transport systems makes it easier for the projects to gain political recognition, and thus also financial and political support. Here, Interreg is also mentioned as something which "gives weight to" the argumentation behind cross-border transport projects, as framed by the respondent from Vestfold and Telemark Fylkeskommune:

*I see that when we have that [an Interreg project] as a foundation, then all of a sudden, I'm allotted time to speak at seminars for everyone working internationally in the regional government, or we get access. It is a lot easier to work with Jyllandskorridoren when we have this Interreg project.*

However, despite the benefits that an established cooperation provides, convincing political authorities of the relevance and importance of cross-border transport planning is recognised as a central barrier of all respondents. For example, a respondent explains that often, the political focus is mainly directed at connecting the country to the capital, not across national borders. As explained by one of the respondents – in the end, it is not the regional planners that make decisions, it's the politicians.

A point here that is brought up by several respondents across projects to achieve this is the need to create a narrative for the projects, and for the transport systems they are working for. The respondent from Oslo municipality states that:

*We look at it as a challenge, a part of the work is exactly this thing about the narrative and a common vision [...] A lot of it is also about getting the people onboard with the way of thinking, it's about travel patterns, it's about, yes, how individuals want to travel in the future, or about what needs society has then for infrastructure.*

The respondent from Vestfold and Telemark Fylkeskommune also talks about this narrative explicitly, stating that:

*We have to be able to present a case, a business case, a convincing case for why you should go for and invest in Jyllandskorridoren, both for Norwegian authorities and EU authorities. I see how hard Oslo-Stockholm work on building that case and that narrative about why this [transport corridor] is so important.*

Another repeating theme is that on multiple levels, the border itself is a barrier. As the respondent from Region Skåne puts it:

*The challenges stem from the fact that we're two different countries, really.*

Despite many enabling factors for cross-border transportation planning, there are many administrative barriers which derive from the fact that there are multiple nations involved. Some challenges that were brought up are non-coordinated transport plans between countries, different national priorities and interests, non-compatible ticket systems, and the difference and range of actors involved in cross-border projects. For instance, in the Greater Copenhagen project, how many and what actors that were involved was said to differ greatly between Sweden and Denmark, making close communication both challenging and absolutely necessary. Furthermore, national priorities often vary greatly, and this can make it a challenge to integrate cross-border and international cooperation projects in the day-to-day work. A much brought up issue was also the status of Norway as a non-EU member to the continuation of projects. While EU members can receive funding from the programme Connecting Europe Facility (CEF), Norway cannot, making the political argument even more important when working cross-border in the case of Interreg ØKS.

*When you have these policy projects, which Interreg often is, there is a challenge that we [Norway] cannot proceed in a CEF project, that we have to get national funding.*

*- The respondent from Vestfold and Telemark Fylkeskommune*

Thus, while cooperation over time and platforms such as Interreg work towards regional cross-border integration, all projects investigated still bring up the border, and what it entails, as a clear barrier.

In identifying enabling factors and barriers to cross-border transportation planning, then, some overarching themes are present:

- What are enablers for some might be barriers for others, and vice versa;
- Interreg is an enabling platform for initiating and strengthening cross-border cooperation on transport planning;
- Cross-border transportation planning is inherently political in nature, and many enabling factors and barriers stems from this;
- The border is a persistent barrier in itself.

## 8 DISCUSSION AND CONCLUSION

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The work in this thesis departs from the main research question:

In what ways is transportation framed as a catalyst for cross-border regional integration and development under the Interreg ØKS programme?

From the results presented above in section 7.2, a few overarching conclusions can be drawn. First and foremost, in the case of Interreg ØKS, transport is framed as a catalyst for cross-border regional development and integration as a tool to facilitate direct and indirect impacts. Of the direct sort, the most prominent impact is a reduction in travel times and increased mobility and accessibility of people and goods, often through more sustainable and efficient transport corridors and/or systems. Indirectly, greater international competitiveness as a region stands out as important, achieved through greater regional attractiveness and relevance, closer cross-border cooperation and easier transport to and from the region as consequences of cross-border transport planning.

Furthermore, why and how regions participate in cross-border transport planning is highly dependent on the local context, the regions' relative location to each other, the larger European continent and other infrastructures stands out as core motivations. In many cases, regions want to avoid being bottlenecks in larger transport systems. Here, the regions are also motivated by a wish to put themselves on the map, both locally and in a wider, international context, and they wish to achieve this through a sustainability focus. Similarly, many of the enablers and barriers brought up relate to political decision-making and being able to showcase the relevance of these cross-border transport projects in order to receive funding and interest from both relevant authorities and the public. This is important to achieving the desired impacts from such cross-border transport projects, and the answers to the three sub-questions are therefore highly intertwined.

In the results, many of the respondents' perspectives corresponded to a great extent, and it is important to mention that if people from other sectors, arenas or in other positions had been interviewed, the results might have been less conforming. For instance, as explored in the theory on cross-border contexts, business owners might have reasons to cooperate on cross-border transport of goods independent of programmes such as Interreg, or there might be no

will in the public to cooperate – a lack of complementarities. However, as mentioned, this is one thing you wish to address through an Interreg project, facilitating closer cooperation and laying the grounds for easier transport, making it more accessible. Future studies might look like the role of cross-border transport planning from another perspective entirely and complement the findings of this study.

As mentioned, talks of competitiveness were also largely directed outwards, as competitiveness between the regions and in a global context. As explored theoretically in section 5.1.2 and 5.2.2, competitiveness can also lead to greater divergence within a region. For instance, developing a railway system might positively impact the places which have a train stop, but not provide any benefits to those who don't. This theme was not mentioned by any of the respondents, and thus also not explored in greater detail. Had other respondents' been asked, this might have come up. However, in the context of this study, regional competitiveness was mostly oriented outwards.

None the less, for this study, one can conclude that cross-border cooperation in transport planning is perceived as a catalyst for regional development and integration in a wider context – especially from the EU perspective. In all the three sub-questions, the respondents related the impacts, motivations, enablers and barriers to this. Tying this back to the theory in section 5.1.2, this shows the great importance of the globalisation process in transport planning today, and particularly to cross-border planning. In many ways, cross-border transportation planning in the context of Interreg ØKS facilitates for, and is a platform for, international recognition, integration and relevance as regions, individually and as the larger ØKS region, through its indirect impacts. Transportation is a means to an end, not necessarily the end itself.

## 9 REFERENCES

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- Agder Fylkeskommune, 2020 [online]. *Agder fylkeskommune deltar i utviklingsinitiativ for Jyllandskorridoren*. Available at: <https://agderfk.no/aktuelt/agder-fylkeskommune-deltar-i-utviklingsinitiativ-for-jyllandskorridoren.26614.aspx> [Accessed 10/02/2021].
- Aoyama, Yuko, Murphy, James T. & Hanson, Susan, 2011. *Key Concepts in Economic Geography*. SAGE: London.
- Ascani, Andrea, Crescenzi, Riccardo & Iammarino, Simona, 2012a. *Regional Economic Development: A Review*. WP1/03 Search Working Paper.
- Ascani, Andrea, Crescenzi, Riccardo & Iammarino, Simona, 2012b. *New Economic Geography and Economic Integration: A Review*. WP1/02 Search Working Paper.
- B-solutions project, report, 2020 [online]. *B-solutions: Solving Border Obstacles – A compendium of 43 cases*. Available at: <https://www.b-solutionsproject.com/> [retrieved 17/11/2020]
- Cairncross, Frances, 1997. *The death of distance*. Cambridge, MA: Harvard Business School Press.
- European Commission, 2020a [online]. *Cohesion Policy*. Available at: [https://ec.europa.eu/regional\\_policy/en/policy/what/glossary/c/cohesion-policy](https://ec.europa.eu/regional_policy/en/policy/what/glossary/c/cohesion-policy) [retrieved 16/11/2020]
- European Commission, 2020b [online] *Trans-European Transport Network (TEN-T)*. Available at: [https://ec.europa.eu/transport/themes/infrastructure/ten-t\\_en](https://ec.europa.eu/transport/themes/infrastructure/ten-t_en) [retrieved 13/12/2020]
- Farole, Thomas, Rodríguez-Pose, Andrés & Storper, Michael, 2011. Cohesion Policy in the European Union: Growth, Geography, Institutions. *Journal of Common Market Studies*, Vol 49, No 5, p. 1089-1111.
- Gauthier, Howard L., 1970. Geography, Transportation, and Regional Development. *Economic Geography*, Vol 46, No 4, p. 612-619.
- Greater Copenhagen, 2020a [online]. *Infrastruktur - Greater Copenhagen Traffic Charter*. Available at: [https://cdn.copcap.com/hubfs/greater-copenhagen/Website%20DK\\_SE/PDF/Charters/GreaterCopenhagen\\_TrafikCharter\\_Folder\\_210x297\\_SE\\_2311\\_Singlepage\\_Final.pdf?\\_hstc=186448118.e2f1466dbc075f4d056c37e6a6119413.1608133019080.1608384205089.1610300458127.3&\\_hssc=186448118.1.1610300458127&\\_hsfp=501280351](https://cdn.copcap.com/hubfs/greater-copenhagen/Website%20DK_SE/PDF/Charters/GreaterCopenhagen_TrafikCharter_Folder_210x297_SE_2311_Singlepage_Final.pdf?_hstc=186448118.e2f1466dbc075f4d056c37e6a6119413.1608133019080.1608384205089.1610300458127.3&_hssc=186448118.1.1610300458127&_hsfp=501280351) [Accessed 10/01/2021]
- Greater Copenhagen, 2020b [online]. *Transportsystem*. Available at: <https://www.greatercph.dk/transportsystem> [Accessed 22/12/2020].
- Hickman, Robin, Givoni, Moshe, Bonilla, David & Banister, David, 2015. The Transport and Development Relationship. In: Hickman, Robin, Givoni, Moshe, Bonilla, David & Banister, David, 2015 [ed]. *Handbook on Transport and Development*. Cheltenham: Edward Elgar Publishing Ltd.
- Holvad, Torben & Leleur, Steen, 2015. Transport Projects and Wider Economic Impacts. In: Hickman, Robin, Givoni, Moshe, Bonilla, David & Banister, David, 2015 [ed]. *Handbook on Transport and Development*. Cheltenham: Edward Elgar Publishing Ltd.
- Interreg IV ØKS report, 2011 [online]. *Program for europeisk territorialt samarbeid - Interreg IV A Öresund-Kattegat-Skagerrak 2007-2013*. Available from: <https://interreg-oks.eu/webdav/files/gamla-projektbanken/se/Menu/Om+perioden+2007-2013.html> [Accessed 13/12/2020]

- Interreg V ØKS, 2020 [online]. *Programmets insatsområden och mål*. Available at: <https://interreg-oks.eu/omoss/programmetsinsatsomradenochmal.4.1945eb0b148e579efa643138.html> [Accessed 13/12/2020]
- Interreg ØKS, 2018 [online]. *Et sammenhengende transportsystem i Greater Copenhagen*. Available at: <https://interreg-oks.eu/projektbank/projekt/etsammenhangendetransportsystemigreatercopenhagen.5.5073e01b16020d08de93d1aa.html> [retrieved 19/12/2020]
- Ivanova, Olga, 2003. *The Role of Transport Infrastructure in Regional Economic Development*. TØI Report 671/2003. PhD dissertation. Institute of Transport Economics.
- Klatt, Martin & Herrmann, Hayo, 2011. Half Empty or Half Full? Over 30 Years of Regional Cross-Border Cooperation Within the EU: Experiences at the Dutch–German and Danish–German Border. *Journal of Borderland Studies*, Vol 26, No 1, p. 65-87.
- Krugman, 1991. Increasing Returns and Economic Geography. *Journal of Political Economy*, Vol 99, No 3, p. 483-499.
- Lundén, Thomas, 2018. Border Regions and Cross-Border Cooperation in Europe. A Theoretical and Historical Approach. In: Medeiros, Eduardo [ed], 2018. *European Territorial Cooperation: Theoretical and Empirical Approaches to the Process and Impacts of Cross-Border and Transnational Cooperation in Europe*. The Urban Book Series. Springer: Lisbon.
- Lundquist, Karl-Johan & Tripl, Michaela, 2013. Distance, Proximity and Types of Cross-Border Innovation Systems: A Conceptual Analysis. *Regional Studies*, Vol 47, No 3, p. 450-460.
- Medeiros, Eduardo, 2016 [online]. Territorial Cohesion: An EU concept. *European Journal of Spatial Development*, Vol 60. Available from: <http://www.nordregio.se/Global/EJSD/Refereed/articles/refereed60.pdf> [retrieved 15/11/2020]
- Medeiros, Eduardo, 2018. The Role of European Territorial Cooperation (ETC) in EU Cohesion Policy. In: Medeiros, Eduardo [ed], 2018. *European Territorial Cooperation: Theoretical and Empirical Approaches to the Process and Impacts of Cross-Border and Transnational Cooperation in Europe*. The Urban Book Series. Springer: Lisbon.
- Medeiros, Eduardo, 2019. Cross-Border Transports and Cross-Border Mobility in EU Border Regions. *Case Studies on Transport Policy*, Vol 7, p. 1-12.
- Myrdal, 1957. *Economic Theory and Underdeveloped Regions*. London: Gerald Duckworth
- Perkmann, Markus, 2003. Cross-Border Regions in Europe: Significance and Drivers of Regional Cross-Border Co-operation. *European Urban and Regional Studies*, Vol 10, No 2, p 153-171.
- Pike, Andy, Rodríguez-Pose, Andrés & Tomaney, John, 2006. *Local and Regional Development*. Routledge: London.
- Pike, Andy, Rodríguez-Pose, Andrés & Tomaney, John, 2007. What Kind of Local and Regional Development and for Whom? *Regional Studies*, Vol 41, No 9, p 1253–1269.
- Polyzos, Serafeim & Tsiotas, Dimitrios, 2020. The Contribution of Transport Infrastructures to the Economic and Regional Development. *Theoretical and Empirical Researches in Urban Management*, Vol 15, No 1, p. 5-23.
- Reitel, Bernard, Wassenberg, Birte & Peyrony, Jean, 2018. The INTERREG Experience in Bridging European Territories. A 30-Year Summary. In: Medeiros, Eduardo [ed], 2018. *European Territorial*



*Cooperation: Theoretical and Empirical Approaches to the Process and Impacts of Cross-Border and Transnational Cooperation in Europe*. Springer: Lisbon.

Rodríguez-Pose, André & Crescenzi, Riccardo, 2008. Mountains in a flat world: why proximity still matters for the location of economic activity. *Cambridge Journal of Regions, Economy and Society*, Vol 1, p. 371-388.

Storper, Michael, 1995. The resurgence of regional economies, ten years later: The region as a nexus of untraded interdependencies. *European Urban and Regional Studies*, Vol 2, p. 191-221.

STRING network, 2014 [online]. *The Scandinavian 8 Million City*. Available at: <https://stringnetwork.org/the-scandinavian-8-million-city/> [Accessed 10/01/2021].

Tønne, Anne S. L., 2015. ØKS-kart. Available at: <https://interreg.no/2013/10/historier-og-drommer-fra-oks/oks-kart-6/> [retrieved 13/12/2020]

Valentine, Gill, 2005. Tell Me About ...: Using Interviews as a Research Methodology. In: Flowerdew, Robin & Martin, David, 2005 [ed]. *Methods in Human Geography: A Guide for Students Doing a Research Project*. Routledge: London.

Wang, Luqi, Xue, Xiaolong, Zhao, Zebin & Wang, Zeyu, 2018. The Impacts of Transportation Infrastructure on Sustainable Development: Emerging Trends and Challenges. *International Journal of Environmental Research and Public Health*, vol 15, p. 1172-1196.

Wood, Andrew & Roberts, Susan, 2011. *Economic Geography: Places, Networks and Flows*. Routledge: London.

Załoga, Elżbieta & Milewski, Dariusz, 2013. The Impact of Transport on Regional Development. *Research Papers of Wrocław University of Economics: Regional Economy in Theory and Practice*, No 286, p. 71-18.

## **APPENDIX 1 – INTERVIEW GUIDE**

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### **Questions for interviews regarding a thesis project about cross-border transportation projects**

#### Aim of the thesis project:

The project wishes to see how transport impacts and is being used as a tool for regional development in a cross-border perspective. To investigate this, I have chosen to look at chosen transport projects under Interreg Øresund-Kattegat-Skagerrak programme.

#### Questions:

Who are you, and what is/have been your role to the project?

Explain shortly about the project – what is it that one wants to achieve, who is involved, and what are the goals in a wider EU context?

What do you gain from working with transportation in this context?

How does one perceive that this project will impact the regions in the future?

What is the local context to why one has chosen to start this transport project at this location and between the involved regions?

What has been the biggest challenges and possibilities by working with transport over regional and national borders?

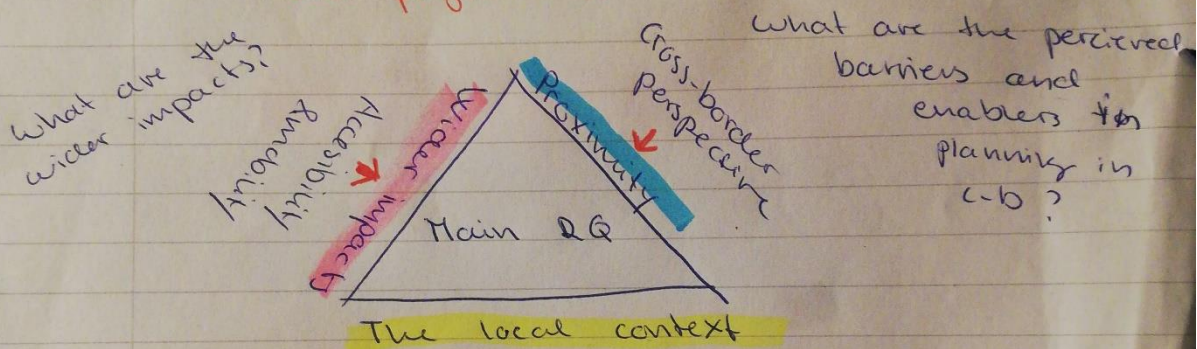
Is there anything you'd like to add that you think is important, or that I have forgotten to ask about?

## APPENDIX 2 – VISUAL GUIDE TO THE CODING

### Ideas from transcripts

Keep theoretical framework & RQ in mind

regional  
integration  
In what ways are transportation  
framed as a catalyst for cross-border  
regional development <sup>under</sup> the Interreg  
OKS programme?



Regional geography

→ what geographic  
dimensions of the  
regions shape  
c-b trans. planning?

= Impacts

= C-B perspective - barriers and enablers

= Geographic dimensions

= Green infrastructure