



The TEN-T Core Network Corridors- Awareness, expectations and involvement

An interview-study in the Baltic Sea Region

TENTacle WP 5.2

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Abbreviations

BSR	Baltic Sea Region
BSRP	Baltic Sea Region Programme 2014-2020
CNC	Core network corridors
CPMR BSC	Conference of Peripheral Maritime Regions Baltic sea Commission
EU	European Union
ScandMed	Scandinavian-Mediterranean Core network corridor
STA	Swedish transport administration
TEN-T	Trans-European network for transports
WP	Work package

Summary

The TENTacle project aims to strengthen stakeholders' ability to benefit by the new TEN-T Core Network Corridors (CNC), currently being implemented. This interview study was initiated in the TENTacle project with the aim to investigate Baltic Sea Region (BSR) stakeholders' awareness of the CNC corridors, expectations and interests of involvement in the CNC implementation process, and expected benefits of the CNC in the context of economic, ecological and social sustainable development. This study will be part of the outcome from task 5.2 in the project examining Impacts of the CNC.

The results indicate a diverse awareness among stakeholders, depending on current involvement in the CNC implementation process, projects etc. Increased information activities supporting TEN-T are suggested to raise general awareness, but also directed information, in particular to business representatives, to inform about possibilities with the CNC. Dissemination of best practice experiences can be used in this process.

Stakeholders perceive both benefits and drawbacks with the CNC, relating to economic, ecological and social dimensions of sustainable development. An enhanced social cohesion and economic development is expected with improved transport infrastructure and services in the CNC, although there are perceived risks of the geographical areas surrounding the CNC lagging behind, thus leading to an uneven distribution of benefits. Conditions for environmentally friendly transport modes for long-distances, i.e. rail and sea transports, is expected to be strengthened in these major corridors, for instance through harmonization. This is recognized for rail transport, but sea transport is by some interviewees perceived to be less prioritized.

The results indicate a need for enhanced coordination between stakeholders, over different levels of governance, as well as to connect stakeholders across transport modes and sectors. Need of an extended inclusiveness in the process is indicated. Users, particularly business stakeholders, and regional and local stakeholders, in the corridor area, but also in the surrounding areas are identified as important stakeholders to involve in the further process.

Existing structures for working with European transport, such as the formalised structure for CNC implementation, diverse collaborative forums or projects, could be better used/expanded for this purpose, or new governance measures could be introduced. The interviewees contributed several ideas for additional governance measures. They included arrangements to involve business stakeholders in a parallel structure to the current Corridor forums - or included in the formal structure, a platform for exchange of information to support intermodal transport, hearings to involve users, national groupings to include a broader range of stakeholders, conferences to coordinate regional and local stakeholders activities, transnational arrangements for a focused harmonization, and other measures to improve processual aspects.

These ideas for additional governance measures suggested by the interviewees provide a starting point for stakeholder discussions, and for further assessment of the feasibility of these ideas. Providing arenas where integration of the economic, ecological and social dimensions of the concept can be discussed support a common knowledge base for desired outcomes.

1. Introduction

The Trans-European Network for Transport (TEN-T), a transport network encompassing rail, road, air and sea transport is being developed across EU, following the EU regulation 1315/2013. It is stated in the regulation that the TEN-T aims to “strengthen the social, economic and territorial cohesion of the Union and contribute to the creation of a single European transport area which is efficient and sustainable, increases the benefits for its users and supports inclusive growth” (Regulation (EU) No. 1315/2013, p.8). Central elements of this policy are the Core Network Corridors (CNC), nine major strategic transport corridors, serving as a primary structure.

The TENTacle project aims to enhance stakeholders’ abilities to take advantage of the new CNC in the Baltic Sea Region (BSR), encompassing three of the CNC, the Scandinavian-Mediterranean (ScanMed), Baltic-Adriatic, and North Sea-Baltic corridors. This interview study was initiated as part of the TENTacle projects’ WP 5.2 named “Impacts of the CNC”, led by the Swedish Transport Administration (STA). The aim of the interview study was to investigate Baltic Sea region (BSR) stakeholders’ awareness of the CNC, expectations and interests of involvement in the CNC implementation process, and expected benefits of the CNC in the context of economic, ecological and social sustainable development.

This interview study was performed by Maria Öberg, Luleå University of Technology for the STA, and integrated with a doctoral research project. This report will serve as input for another study to be performed in WP5.2 regarding impacts of the CNC related to diverse geographical contexts.

2. Method

The interview study was carried out with a qualitative approach, which is generally useful when complex matters with human involvement is investigated (Strauss & Corbin, 1998). Thus, the results are focused on gaining knowledge about the interviewees’ reasoning, and presents a range of views and suggestions.

The interviewees were sampled with help from the TENTacle case/task leaders. Eight case/task leaders were asked to provide contact information to a minimum of eight persons, two from each of the following categories: Public authority (national, regional, local authority), Transport administrative company or organization (port, railway, airport, road), Private company, and other organization (interest organization). From the provided names, 35 persons were invited to participate in the interviews, and 21 accepted. Two interviewees agreed to bring an additional person. In total, 23 persons participated in the interview study. The interviewees were geographically located in Denmark, Finland, Germany, Latvia, Norway, Poland, and Sweden.

The interviewees' employment within each category

- Public authority: local authority, regional authority, national transport agency
- Transport administrative company or organization: port, airport, road infrastructure management, public transport management
- Private company: cargo owner company, shipping company, transport undertaker
- Other organization: organization for regional development, business development organization, cross-border political network, regional network for improved infrastructure, and research organization

A semi-structured interview guide (Appendix 1) was used for the interview. The interview guide mainly covered information about: awareness of the CNC being implemented, and expected benefits of, the CNC; his/her organization's current and future involvement in the CNC implementation process; need for complementary governance measures for an extended involvement; and perception of the concept of sustainability.

Before starting the interviews, the interviewees were informed about the background of the study, how the results would be used and that they would be anonymous (Merriam, 2009). Furthermore, they were asked for their personal views, to support the gathering of new ideas, and to avoid a need to necessarily only confirm any statement with their organizations' official position. However, their personal views could be expected to be influenced by their experiences at work.

The interviews were performed during September – October 2016, by telephone in English and Scandinavian languages. The audio-recorded interviews were transcribed, and analysed. A content analysis was carried out of the interviewees' views of the areas described above, following a procedure based on the method described by Graneheim & Lundman (2004). Sentences in the text providing answers to a question in the semi-structured interview guide, were marked and coded to the question. Then, the coded sentences were summarized and categorized into an array of answers for each question.

Preliminary results from the interview study were discussed internally in the TENTacle project in a partner meeting for the Fehmarn Belt case and linkages to WP5 on the 20th of September 2016, and a meeting with WP5 task leaders on the 31st of October 2016. Further, results were presented and discussed on the 8th of November 2016 in the TENTacle Advisory Board meeting, including 15 policy advisors and politicians and in the BSR and 22 participants active in the TENTacle project. In addition, results were presented and discussed on the 22nd of May 2017 in a seminar arranged by TENTacle, where 10 key representatives of public and private interests in the BSR attended, together with nine TENTacle project representatives.

3. Findings

Results from the interview study are presented in this section, including citations of interviewees. If the citation is translated into English, it is mentioned in the text.

3.1 Awareness of the CNC implementation

All the interviewees had some awareness of the TEN-T and the CNC. Some were directly involved in the implementation process; one interviewee stated "I am the member of the Baltic-Adriatic corridor

forum”. Others had a more general knowledge of it, as one interviewee mentioned “I have a general knowledge about this from trade press and some informal discussions I had with some other colleague”. Since the TEN-T has been a process stretching over the last decades, some interviewees have followed the process over a number of years, related to their profession.

Sources of awareness

- Involvement in the formal implementation process
- This issue is (or was) included in the own organizations work
- Participation in projects
- Information from shareholders of the own organization
- Information from media
- Information from colleagues

The results indicate a general awareness of the TEN-T process, but with diversified sources of awareness, where some are more closely related to the implementation process.

3.2 Stakeholder expectations of the CNC

The interviewees perceived several benefits of the CNC, and added comments on perceived drawbacks. It was mentioned that the CNC were expected to strengthen the economy, supporting trade and business development. An interviewee mentioned possibilities of regional growth and new jobs “If new companies come here and make new businesses, or if existing companies can expand their businesses based on new contacts and new ideas”. Well-functioning long-distance transports were recognized to provide increased accessibility to European markets. Further, more information exchange about the goods flows in the corridor was expected, that could ease logistic planning.

An important part of the CNC implementation is improved infrastructure standards, and needs of investments were expected to be localized in the process. Possibilities for EU funding were regarded as positive, and by some interviewees, seen as crucial for progress. Extending the infrastructure standard requirements for CNC to the transport network outside the CNC was perceived as a possibility, as an interviewee recognized that, in Sweden the standard requirements for the CNC might be met in a near future. Thus, an enhanced transport capacity and quality was anticipated; an interviewee mentioned an expectation of better “access to cost-efficient transport”.

Furthermore, the importance of environmentally friendly transport was voiced, and the harmonization of infrastructure standards across nations was particularly stated as important for a competitive rail. Another mentioned perceived benefit was improved accessibility to large cities, domestic as well as cities located in other nations. It was stated by an interviewee that enhanced connections to larger cities was a political goal in the region. An additional view was an expectation of the CNC to highlight, and thus ease, cross-border planning, as explained by an interviewee; “It facilitates the planning process, as you know that the links on the other side of the Baltic Sea are ready to receive or generate a certain amount of traffic impact” (translated by the author).

However, some interviewees were concerned about the outcome of the CNC regarding sea transport, and meant that it was not sufficiently considered in the TEN-T initiative. An interviewee said, “the slogan, from road to sea, somehow is forgotten in this whole aspect”. The Motorways of the Sea (MoS) is part of the TEN-T as a key transport area, and similar as for the nine CNC a European coordinator

is appointed. MoS-projects can be utilized for funding in a start-up process for new transport routes. Therefore, an interviewee meant that MoS cannot be considered as an infrastructure, as the projects are completely relying on the interest from private companies. For rail and road infrastructure public stakeholders usually has a main responsibility.

Interviewees also expressed concerns regarding how the transport networks and regions surrounding the CNC would be affected of the CNC development, an interviewee said; “This way of thinking is still supporting the strongest regions, and strongest sea ports, strongest connections, but the deal is to develop such a transport network which can support more regions”. It was mentioned that in- and outflows to and from the connecting networks to the CNC was recognized as important for goods to reach its final destination, or for connecting to the CNC. In addition, it was expressed that a strong focus on the CNC might lead to an inflexible transport network where any other development is hampered. Another view was that surrounding networks and hubs could relieve too crowded transport routes, which may occur with increasing consolidated transport flows.

Relating these expectations to economic, ecological and social dimensions of sustainable development indicates that there can be both positive and negative effects of the CNC. The economic dimension is strongly connected to expectations such as an improved regional growth, and better transport capacity and quality. On the other hand, the mentioned risk of congestion as increased transport flows are directed to the CNC might affect economy in a negative way. From an environmental perspective the strengthened long-distance routes are expected to improve conditions for environmentally low-impact transport modes, where rail is particularly mentioned. However, if sea transport is not sufficiently attended to, as some views expressed, it could affect the environmental dimension in a negative way as sea transport is commonly seen as an environmentally friendly transport mode. The social dimension is apparent regarding the perceived risks of less engagement in the surrounding transport network, which may lead to uneven distribution of accessibility and possible benefits of the CNC. From another perspective the CNC is expected to provide better connections between cities, thus strengthen cohesion.

3.3 Current participation in the CNC implementation process

Regarding current involvement in the TEN-T Core Network Corridor implementation, the interviewees mentioned several channels for participating and influencing the process (Table 1). Referring to Table 1, the *formalised structure* with access to EU Corridor Forums for the CNC or dedicated meetings held by a Ministry gives the participants possibilities to have a direct influence in the CNC implementation process. The *macro-regional forum* is here referred to as the Central Peripheral Maritime Regions (CPMR) in the BSR. CPMR brings regional authorities together for cooperation, for instance to make common statements and communicate with the European level (CPMR BSC website, 2017). *European forums* refer to groupings for influencing, in this case the European Shippers’ Council focusing on the interests of manufacturers, retailers and wholesalers in transport logistics (European shippers’ council website, 2015). *National, regional and local forums* refer to a governance structure for activities and exchange of information and knowledge about transport matters. Examples of regional/local forums is cooperation along The Swedish-Finnish Bothnian transport corridor, or the Norwegian-Swedish border committee “Värmland Östfold” with participants such as municipalities, regional authorities and business life. *Projects* are referring to EU-financed transport projects.

Table 1 - Interviewees' current participation in activities related to TEN-T CNC.
 Grey - mentioned participation, White – no mentioned participation.

Activity/Interviewee affiliation	Public authority	Transport adm org/company	Private company	Other (ex. association)
No formalized activity	White	Grey	Grey	Grey
Projects	Grey	Grey	Grey	Grey
Interregional/local forum	Grey	Grey	White	Grey
National level forum	White	Grey	Grey	Grey
European forum	White	Grey	Grey	White
Macro-regional forum (CPMR)	Grey	Grey	White	White
Involved in formal structure*	Grey	Grey	White	Grey

*CNC corridor forum, pre-meetings for corridor forum, support to ministry

Due to the limited number of interviewees, generalizations of differences in participation in the CNC implementation process due to type of organization is not relevant. However, examining the stated participation, two indicative reflections can be made. First, the different categories of organizations seem active in different forums, but *projects* are a form that seems to encompass all categories. Secondly, interviewees affiliated to all the stakeholder groups except private companies mentioned participation in the formalized structure.

3.4 More involvement in the CNC implementation process

Views on the need for extended involvement of the own organization included “yes”, “no” and “unclear” answers. The analysis focused on the two basic categories, yes and no (Table 2). Within each of these categories there is a range of explanations for the interviewees' positions, some of them possibly overlapping. For instance CPMR is, at the same time, an existing forum, a macro-regional forum, and might be a source for increased awareness among the participants. However, the interviewees' expressions are displayed in Table 2.

Starting with the “yes”-answers, interviewees affiliated to the category public authorities have expressed views of more involvement generally, views specifying involvement for more awareness, and views of utilizing existing structures for extended involvement. An existing structure mentioned by name is the macro-regional organization CPMR, and the Baltic Sea Commission as part of CPMR. Interviewees from the category transport administrative organization or company also mentioned a need for a generally larger involvement, as well as involvement for higher awareness. In addition, an extended involvement in projects and national forum were mentioned as desired. Involvement in the formal structure is explicitly highlighted by interviewees from the category private companies, while interviewees from the category other organization referred to more involvement in local/regional forums.

Regarding “no”-answers, there were interviewees affiliated to all four categories who commented that their organization was properly engaged in the current situation. Further, lack of capacity was mentioned as a reason for not being interested in extending the involvement. Even though answering no, the need to better utilize existing structures was recognized.

Table 2 - Interviewed stakeholders’ views on more involvement of the own organization in TEN-T CNC implementation. Grey – mentioned, White – not mentioned

Views/Interviewee affiliation	Public authority	Transport adm org/company	Private company	Other (ex. association)
Yes, in projects		Grey		
Yes, in regional/local forum				Grey
Yes, in national forum		Grey		
Yes, in macro-regional forum (CPMR)	Grey			
Yes, in formal structure			Grey	
Yes, in existing structure	Grey			
Yes, generally	Grey	Grey		
Yes, for better awareness	Grey	Grey		
<hr/>				
No, we don't have capacity	Grey			
No, but use existing structures better				Grey
No, already properly engaged	Grey	Grey	Grey	Grey

Similarly, as regarding current involvement, this information about extended involvement cannot be generalized for the categories, but is here used to relate the views of extended involvement to current participation presented in the previous section. Some indicative reflections can be made though. It seems like some stakeholders are sufficiently involved, while others would like to be more involved, and that there are potentials in utilizing existing cooperation structures better in the CNC implementation process. Another indicative reflection is that private stakeholders are interested to be more active in the in the formal CNC implementation process.

3.5 Additional governance measures

The perceived need for additional governance measures was investigated, related to the formal CNC implementation process described in EU regulation 1315/2013 including Corridor forums, European coordinators, and Work plans to report progress and further activities.

3.5.1 Ideas of additional governance measures

The interviewees were asked if there was need for additional governance structures, and they provided a number of ideas for additional governance measures. These ideas are summarized and briefly presented below.

Interviewees' ideas for additional governance measures

- *New arrangement for business stakeholders.* Similar to the Corridor forums on the European level, but a structure to gather business representatives, and be able to influence the CNC implementation process.
- *Scandinavian infrastructure commission.* A new cooperation between Finland, Norway and Sweden to harmonise the CNC implementation process, and related planning matters.
- *Add new thinking.* Ensure that new ideas and thinking is represented when future directions are decided; think outside the box in new or existing forums, academia and current research can be of help.
- *Clarified activity programme.* New ways of accomplishing the goals, stresses progress. Clarity of what to achieve, who will achieve it, and the market conditions. An enhanced market approach to public objectives.
- *Intermodality platform.* A new structure supporting business stakeholders to exchange information and plan for new concepts to provide intermodal solutions.
- *Hearings.* Foremost directed towards users like freight owners and transport undertakers, to gather their views. Suggested for regional and national levels.
- *National grouping.* Gathering stakeholders from diverse levels of governance across sectors in society, to provide a dialogue on the CNC implementation. It is suggested to be facilitated by a national agency. It should encompass stakeholders geographically located both on and beside the CNC. Important statements can be forwarded to national and macro-regional organisations.
- *National group for freight transport.* To stress the importance of freight transport, this new structure would include freight owners and transport buyers, and be organized by a national agency.
- *Involve freight owners in the formal process.* Involving representatives of freight owners in the formal CNC implementation process (i.e. Corridor forums), facilitated by the European Commission.
- *Arrange regional/local conferences.* Within a certain geographical area keep stakeholders updated and allow for coordination of measures. Administrations are suggested to be addressed in first phase, and politicians in a following phase.
- *Strengthened regional level.* Regional level infrastructure managers are suggested to have increased funding and powers, to enhance important minor investments in an area.

These ideas include measures to increase involvement of stakeholders in the CNC implementation process, and measures focused on improving the implementation process. Involving a larger number of business stakeholders is an aim of the ideas of *New arrangement for business stakeholders*, *Intermodality platform*, *Hearings*, *National group for freight transport*, and *Involve freight owners in the formal process*. Similarly, an aim for *Arranging regional/local conferences* is to involve a larger number of stakeholders at regional and local levels. The idea of *National grouping* is directed to a wider range of stakeholders, for a cross-level and cross-sectorial dialogue. An increased involvement

by national level stakeholders is advocated in the idea of an *Scandinavian infrastructure commission*. Ideas focusing on adjustment of the implementation process were *Add new thinking*, having a *Clear activity programme*, and a *Strengthened regional level*.

3.5.2 Additional governance measures or cooperation activities in pre-defined areas

The need for additional governance or cooperation activities for strengthening the implementation of the CNC in pre-identified areas was investigated. Regarding these areas, the interviewees provided answers of “yes”, “no”, or “unclear”. The range of the summarized views for each pre-identified area is presented in Appendix 2.

For the area *communication between CNC coordinators, Baltic Sea strategy coordinators and stakeholders at diverse levels of governance* there were views indicating a need of increased information broadly to a diversity of stakeholders. An increased awareness and involvement of regional and local level stakeholders was called for, to improve coordinated planning between levels of governance. An interviewee commented “I believe the awareness is very low at local and regional levels” (translated by the author). Another interviewee meant that the communication is too fragmented today. More contacts with the European coordinator were desired, and the interest of cargo owners to be involved in the formal CNC process was voiced. The need of coordination between the European corridor coordinators assigned to different corridors also was commented, as the CNC implementation is a complex process covering several countries. Other interviewees meant that they were already enough involved, and that the ongoing process worked sufficiently.

Regarding *Regional/local communication concerning CNC nodes* interviewees’ comments stressed the need of coordination of the CNC and its connections to the cities in the corridor, as well as the surrounding transport network and cities. The surrounding network serves both transport in- and outflows from the CNC connecting nearby cities and production areas. Nearby cities were proposed to form strategies to include the CNC in their activities. Increased dialogue with business representatives was suggested, and an interviewee stated “We should have...meetings with them [a large company] also, not only the cities”. Connections between long-distance and urban transport is considered to be a complex but important matter, to be given further attention. The larger cities, serving as hubs for transports, are expected to be active in the process. There were also other views stating that the process was currently well functioning, and there was no need for additional measures.

In the area *Terminal cooperation* the difficulty of cooperation and competition was raised, since terminals generally operate on competitive market conditions. Instead of cooperation some interviewees suggested coexisting and complementing activities (which actually can be considered as a sort of coordination). An idea of an overall terminal structure was proposed as a way to find relevant complementary measures between terminals. A national forum was another idea, providing an arena for discussion between terminals. Interviewees mentioned a need for increased exchange of information in the entire transport chain. Such exchange was expected to improve knowledge of the goods flows, thus ease the terminal planning. Further, terminal cooperation was mentioned as a way to strengthen development of intermodal transports, particularly the environmentally low-impact transport modes rail and sea. Similarly as in the previously described areas, there were also interviewees expressing low interest in terminal cooperation, one did not perceive it as a prioritized matter. Another interviewee, recognized the need for terminals to extend their involvement in the CNC

process, although not in the form of terminal cooperation, and stated, “they [terminals] should be also more involved in making the work plan for the corridors for example”.

In the area *Strengthened multi-level infrastructure planning* interviewees commented that there is a need for increased cooperation or coordination between levels of governance, representative bodies for diverse transport modes, between nations, and between transport and the society as a whole. An interviewee stated, “It is very important that the nations cooperate along the corridor, and this is poorly done today, foremost regarding functional technical standards” (translated by the author). The statements that were unclear if additional governance or cooperation measures were needed, also stressed the importance of planning across borders, and including an EU-perspective in planning. However, the risk of neglecting the surrounding transport networks, while focusing heavily on the CNC was commented. Further, more discussion to increase an understanding of stakeholders’ positions, restraints and possibilities was asked for. The complexity of transport corridors stretching across several nations was recognized, and subsequently the need of additional activities were expected to differ between nations. Some interviewees expressed no need of additional activities.

Regarding the area of *Enhanced stakeholders’ interest in the corridor* some interviewees expressed a need for increased awareness among stakeholders, in general, as well as specifically for regional and local stakeholders, and stakeholders geographically located beside the CNC. Directed and customized information was called for, to provide knowledge to stakeholders, where business stakeholders and users were particularly mentioned. Conferences and workshops for this purpose were suggested, and an interviewee provided the idea of allocating funding for information activities towards the business stakeholders, “one recommendation could be that the European Union can put some programs, especially for marketing information towards the private businesses which might use this corridor as part of the infrastructure plans and programmes”. Users, particularly business stakeholders, and politicians were suggested to be more involved in the implementation process. Further, meetings between representatives from diverse transport modes were encouraged. From those who expressed an unclear view, some comments concerned the importance of the regions’ role in the process. Another matter was recognition of a differentiated need of awareness between diverse stakeholders. Comments expressing no need for additional activity, anyway stressed the importance of political acceptance.

For *Best practice exchange* some interviewees expressed that more can be done to support this exchange, from finding the examples to benchmark, to disseminate information about them, and for stakeholders to gather the information. An interviewee stated, “The more are being presented, the more awareness of the corridor and its possibilities are available to others, to the public, to the possible actors”. The Interreg-projects were mentioned as well-functioning arenas for this exchange. An interviewee, particularly for sea transport, advocated additional arenas for this exchange, while another interviewee meant that existing arenas for territorial cooperation provide enough possibilities. An interviewee stressed the need of processing the gathered information, which the organization might not have capacity for.

In the area *Innovation/new logistic solutions/business concepts* the interviewees provided several suggestions for development. Mentioned areas were the use of new technologies, adjusted transport flows, more environmentally friendly transports, and strengthened intermodality. A need of better focus on users’ needs, here cargo owners, was mentioned by an interviewee. Another interviewee meant that there is a lot of ongoing work within the companies finding new business models and logistic concepts, and the focus should be to support this work. The difficulty of bringing the new

ideas from desk to practice was voiced; "Taking them [the innovations] from the 'valley of death' to become reality is connected with large business risks". Then projects, cooperation and governmental support were brought forward as valuable tools for implementation of such innovations. An interviewee stated that some innovative ideas need to be developed in a project first, and in a second stage be applied to a corridor, as the ideas are not always fitted to a corridor approach. Additional cooperation between universities, as well as cross-sectorial cooperation in society and research was called for. An interviewee expressed a wish for exploring fundamentally new solutions and not only to focus on adjustment of existing directions.

For *Influencing policy* additional activities were mentioned for greater awareness, and coordination of views among stakeholders. A national group was suggested for this purpose, and to provide information exchange between national, regional and local levels. A more rapid national incorporation of transnational decisions would support the policy implementation. Those who voiced an unclear point of view expressed a need for policy influence regarding matters such as climate impact and harmonization, but not if additional activities are needed for that. Further, an interviewee meant that the overarching goals become too fragmented at national levels when they are divided into sub-goals. Another interviewee raised concerns about CNC measures leading to unwanted relocation of transport flows towards road instead of rail and sea transports. Other interviewees meant that additional activities are not needed as this is already part of their work, and the existing structures are enough. Harmonization of transport infrastructure is addressed in the ongoing CNC implementation, as expressed by an interviewee, "I think it's enough at the moment, because the corridors are there and we are talking about those kind of things [harmonization]".

The matter of *Financing* is recognized to be of high importance for implementation. The EU funding possibilities are stated to be important, both strategically and for the amount of money. This might differ between nations, depending on possibilities for EU funding. An interviewee thought the CEF funding worked well, while another thought there should be more than one call per year to apply to project time frames. From a strategical perspective it is stated that "In some locations in the core networks there is need for grants instead of loans, because these are not feasible in a national perspective" (translated by the author). An interviewee mentioned a need for more cooperation to find new solutions, for instance in a national grouping. Another interviewee advocated the users-pay principle. There were several ideas for new solutions, governmental loans, allocating money from governmental funds, optimize existing EU programs, relocate funding from the agricultural sector in EU, and more subsidizes for the CNC implementation. On the other hand, some interviewees stated that they are already involved in financing schemes and can manage.

3.6 Perceptions of sustainability

The interviewees' were asked what a sustainable transport system meant to them, if they thought a corridor approach was an effective instrument for sustainability, and how the economic, ecological and social dimensions of sustainability can be integrated. Describing sustainability, the economic, ecological and social dimensions of sustainability were mentioned by some interviewees. An interviewee stated "It should be balanced in terms of economic and social, as well as functioning in harmony with environment". These dimensions can be labelled differently, but with a corresponding meaning. An interviewee said that "It is something, which is being developed continuously and also with the observation of the real requirements of the market, of the natural environment, of the communities". However, sometimes, one or two of the dimensions were not fully included in the

reasoning, an example is: “I am thinking about sustainability both regarding economic, ecological and social dimensions. And all these things I have touched upon, perhaps not so much the social dimension, but it might not be important here”(translated by the author). Another example is an interviewee commenting that it is about being “clean and secure”, focusing on the environmental and social dimensions.

Other views included the aspect of a long-term perspective. Some interviewees mention this perspective as part of the sustainability concept, while another interviewee stated “sustainability is long-term perspective” (translated by the author). Inclusiveness is also recognized by some interviewees as an aspect of sustainability, to provide good solutions for all stakeholders. An interviewee stated; “It has to be win-win-win solutions, for society, the stakeholders and everyone” (translated by the author).

Describing what a sustainable transport system would consist of, the relocation of transport flows from road to rail and sea is commented. There are views of desired transport modes to provide low emissions and low energy use. An interviewee stated ”It is important to prioritize the transport solutions with the lowest energy use, and that is sea transport...and rail” (translated by the author). A need to move away from fossil fuels was commented.

The status of the transport system is also commented, including views of need for a stable system with high capacity. An interviewee meant that combining transport modes and available nodes, would ease the optimization of transport flows for a sustainable transport system. Some interviewees thought sustainable was an unclear concept and could not answer.

A corridor approach for sustainability was perceived by some interviewees as positive, and by some interviewees as negative, while some where unable to determine whether. It was perceived as an opportunity to canalize efforts and funding to achieve results. An interviewee voiced: “You gather resources, planning and long-term thinking. And that is good, I think, because it strengthens the transport systems” (translated by the author). Environmentally friendly transport modes for long-distance transport (i.e. on rail and sea) were expected to be enhanced, particularly rail transport. Further, it was mentioned that the CNC should be forerunners also for sustainable development. An interviewee commented that it is a way to increase awareness across administrative borders, thus gaining focus on a common functional system. As expressed by an interviewee; ”Working with corridors can be a way to create a better consensus in these matters, in all levels”, and the political commitment was mentioned as important. An interviewee commented that a corridor approach is more appropriate for regional and larger scales, not for the local level.

Some interviewees had doubts about the corridor approach. A corridor is depending on in- and outflows from the surrounding network, and an interviewee mentioned ”If the result is that the big corridors will suppress the smaller transport network it is not good”. Another interviewee commented the risk of focusing only on the corridors, that it might lead to regions not on the corridor lagging behind, resulting in less cohesion. Further, the aims for a sustainable development of the corridors were challenged by an interviewee, as an ongoing infrastructure project in the corridor was perceived to support road transport over rail and sea solutions.

As most activities more or less affect all three economic, ecological and social dimensions of sustainability, an integration of the dimensions is important to clarify impacts. The interviewees commented on how such integration can be carried out. Some interviewees meant that assessment,

and integration of, these dimensions are already part of the process. Some interviewees stated that it is easier to do this integration in strategies than in concrete activities, so assessment of actual activities is necessary. Concerning the dimensions, an interviewee thought that the social part is more difficult to integrate as it has a more local character. Another interviewee stated that the social aspect was most important as “we are planning for people”. Another comment was that the social dimension is least considered, while another view expressed that the economic perspective was easy to forget, in the process. Sometimes too much focus on the environmental dimension was another perception. Presenting the dimensions of sustainability so that it supports the own project was also recognized.

To facilitate sustainability, taxes and regulations were mentioned as tools to steer the market, as well as research for new technological solutions. Sustainability was expected to be prioritized in transport politics as a part of society. To be accepted by society this integration was seen as important. Further, the importance of decision-making society representatives ensuring an integration of the economic, ecological and social dimensions of sustainability was expressed. The need of putting transport in a holistic society perspective was advocated, to avoid contradictory measures affecting sustainability negatively. Furthermore, educated societies was expressed as crucial, to be able to consider sustainability.

3.7 Discussion of results in TENTacle meetings/seminar

Early indicative results were presented and discussed in Hamburg (160920) at an internal TENTacle meeting for WP5 and Fehmarn Belt case and any other connected to the project. The meeting had ten participants. Comments from the discussion were that the further results would be of interest. Hopefully it would give input to the TENTacle project regarding stakeholders’ awareness and involvement in the CNC implementation process, and if there was a need for mitigating measures for regions not involved in the process. It was highlighted that the results would need to be heavily summarized before presentation. This was followed by an internal meeting with WP5 task leaders (161031) where the results so far were commented and the need of summarizing was again highlighted.

Preliminary results were presented in the TENTacle Advisory Board meeting in Stockholm (161108). For the meeting 15 politicians and policy advisors located in the BSR were invited, and additional 22 attendants represented the TENTacle project. The discussion, among other things, supported the findings to extend the involvement of users (including business stakeholders), and stakeholders outside the corridor.

Results were also presented in a TENTacle seminar in Malmö (170522), wherein 19 persons participated. Ten were representatives of authorities, organisations and business involvement in the BSR. Additional nine attendants represented the TENTacle project. The results were discussed related to a number of questions regarding lack of stakeholder representation in the CNC implementation process, stakeholders’ interest to be involved in the process, and how to involve stakeholders. Each of the participants contributed a main message they thought was of high importance for the future CNC implementation. These messages concerned increased business stakeholder involvement, a systematic stakeholder involvement, strengthened cooperation between national and regional levels, enhanced information about stakeholders’ added values with the CNC, and connections to non-EU nations.

4 Conclusions

The investigation indicates a diverse awareness among stakeholders, depending on current involvement in the CNC implementation process, projects etc. Increased information is called for to increase awareness broadly about the ongoing activities. Simplified, directed information to stakeholder groups was suggested, especially users, and in particular business representatives to inform about possibilities. Dissemination of best practices experiences can be useful in this process.

The interviewees perceived both benefits and drawbacks with the CNC, relating to economic, ecological and social dimensions of sustainable development. Economy is expected to be boosted with consolidated transports in these corridors, expecting more cargo and business opportunities. Further, an improved infrastructure and transport services is expected to enhance connections between cities and strengthen a social cohesion. On the other hand, there are perceived risks of the areas surrounding the CNC lagging behind, and a situation where some regions are strengthened, while others might be declining. Another aspect is the risk of potential lack of capacity in the corridors, which could affect economic outcome. Conditions for environmentally friendly transports for long-distances, i.e. rail and sea transports, can be strengthened in these major corridors, for instance through harmonization. This is recognized for rail transport, but sea transport is by some interviewees perceived to be less prioritized.

The results indicate a need for enhanced coordination, between nations, between stakeholders at national, regional, and local levels of governance, for intermodality, for connections between long-distance and urban traffic, for connections between surrounding areas and the CNC, and for communication with other sectors in society. This calls for an extended inclusiveness in the process. Users, particularly business stakeholders, and regional and local stakeholders, in the corridor area, but also in the surrounding areas are identified as important stakeholders to involve further on.

Existing structures for working with European transport could be better used/expanded for this purpose, or new governance measures could be introduced. The interviewees contributed several ideas for additional and new structures. . They included arrangements to involve business stakeholders in a parallel structure to the current Corridor forums - or included in the formal structure, a platform for exchange of information to support intermodal transport, hearings to involve users, national groupings to include a broader range of stakeholders, conferences to coordinate regional and local stakeholders activities, transnational arrangements for a focused harmonization, and other measures to improve processual aspects. Additional governance measures to include an extended number of stakeholders in the process need to be created together with the stakeholders to be effective and gain their commitment (Öberg, 2014). The ideas for additional governance measures suggested by the interviewees provide a starting point for such discussions, and for further assessment of the feasibility of these ideas.

A sustainable development of the CNC is an objective in the implementation process. However, the concept of sustainability is ambiguous. How the economic, ecological and social dimensions are interpreted and emphasized differ between stakeholders. Thus, providing arenas where integration of the economic, ecological and social dimensions of the concept can be discussed supports a common knowledge base for desired outcomes.

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Appendix 1 – Interview guide

INTRODUCTION

This interview focuses on how various stakeholders can participate in the development of the trans-European transport network TEN-T, and particularly the identified major Core Network Corridors

- For these major Core Network Corridors a map was included in the mail regarding their localisation, and there was also brief information of the existing structures for implementation (For each corridor a Coordinator is appointed, Corridor Forums are organised, and a Work plan was made).
- This interview is conducted in connection with the TENTacle project, which aims to support the various actors to take advantage of the corridors. The project is financed by the EU Baltic Sea Programme which aim to strengthen cooperation across borders.
- In this interview I want you to give your personal opinions, not your organisations/company's.
- Your opinions will be used in the process of discussing with the EU Commission and other stakeholders, to give recommendations from the TENTacle project, and as part of a research project
- Personally you will be anonymous –no names of the interviewees will be presented, but the professional roles of the interviewees in general terms will be included.
- I will make audio recordings, which I hope is OK
- The interview is expected to take 30-60 min depending on the discussion

A. THE INTERVIEWEE AND HIS/HER ORGANISATION

A1. Which type of organisation/company do you work for? What is your role?

B. AWARENESS/EXPECTED BENEFITS/PARTICIPATION TODAY

B1. How much were you aware of the development of the European TEN-T and the Core Network Corridors before this interview?

B2. For your organisation/company, what do you think would be the greatest benefits of a developed Scandinavian-Mediterranean/North Sea-Baltic/Baltic-Adriatic corridor/MoS (corridor depending on interviewees' geography)?

B3. Are you or your organisation currently involved in any activities for implementing the Core Network Corridors on a European, transnational, national, regional or local level?

If yes:

B4. Which activities? (Corridor Forum, Work plan; Interreg projects; Macro-regional cooperation; Other cooperation/planning).

B5. How is it organised? (facilitating organisation/s, represented organisations, meetings on regular basis or ad hoc, part of ordinary planning)

C. ADDITIONAL PARTICIPATION (NEED OF COMPLEMENTARY GOVERNANCE STRUCTURES)

C1. Would it be useful for your organisation to be more involved in the current implementation of the CNC corridors?

C2. If so, how? (Existing/new structure)

C3. Is there need for additional governance structures?

C4. For a new structure:

- C5. What would be the aim of this structure?
- C6. How should it be organised?
- C7. Participating stakeholders? (Which organisations; Geographically-on the corridor, immediate area of influence, peripheral area of influence; Levels of governance - European, national, regional, local)
- C8. What type of structure would be needed? (Network, partnership, forum, other)
- C9. The structure would be defined by? (Geographical area, topic, other)
- C10. Who would facilitate the structure?
- C11. Regularity? (Regular meetings, ad hoc)
- C12. How do you think it should be bridged to the European level [if needed]? (Information exchange events, a permanent information channel for dialogue with the European Coordinators, connection to Corridor Forums, macroregional structures, other)
- C13. How do you think your organisation can be involved in this activity?

C14. I would also like to ask if you think there is need for other additional governance or cooperation activities for strengthening the implementation of the Scandinavian-Mediterranean/North Sea-Baltic/Baltic-Adriatic corridor concerning (corridor depending on interviewees' geography) regarding?

- C14. Communication between CNC coordinators, Baltic sea strategy coordinators and stakeholders on diverse levels of governance
- C15. Regional/local communication concerning CNC nodes
- C16. Terminal cooperation
- C17. Strengthened multi-level infrastructure planning
- C18. Enhanced stakeholders' interest in the corridor
- C19. Best practice exchange
- C20. Innovation
- C21. New logistic solutions/business concepts
- C22. Influencing policy
- C23. Financing

D. SUSTAINABILITY

- D1. What does a sustainable transport system mean to you?
- D2. Do you think that a corridor approach is an effective instrument in advancing sustainability of transport?
- D3. Why or why not?
- D4. In your opinion, how can ecologic, economic and social sustainable development of transports be integrated in a balanced way?

E. OTHER

- E1. Is there anything else you would like to add to this interview that I haven't asked about?

Thank you for your participation!

Appendix 2 – Range of summarized views on the pre-identified areas

Pre-identified areas

1. Communication between CNC coordinators, Baltic Sea strategy coordinators and stakeholders on diverse levels of governance
2. Regional/local communication concerning CNC nodes
3. Terminal cooperation
4. Strengthened multi-level infrastructure planning
5. Enhanced stakeholders' interest in the corridor
6. Best practice exchange
7. Innovation/new logistic solutions/business concepts
8. Influencing policy
9. Financing

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 1.

Area/ Comments	Yes	Unclear	No
1. Communication between CNC coordinators, Baltic Sea strategy coordinators and stakeholders on diverse levels of governance	<p>More information to diverse stakeholders.</p> <p>Better awareness on regional and local levels.</p> <p>Direct contact with coordinator.</p> <p>Dialogue between coordinators.</p> <p>Inclusion of specific stakeholders in CNC process.</p> <p>Better coordination towards EU.</p>	<p>Do not know how it works today.</p> <p>Increased needs of cooperation is recognized in the ongoing process.</p> <p>Cost-efficiency important.</p>	<p>Already enough involved.</p> <p>The on-going process is enough.</p> <p>The on-going Interreg projects are enough.</p> <p>Do not have the capacity for more involvement.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 2.

Area/ Comments	Yes	Unclear	No
2. Regional/local communication concerning CNC nodes	<p>The big cities should be in the forefront.</p> <p>Better communication with business actors.</p> <p>Better connections to production areas.</p> <p>Cities outside TEN-T corridors need to develop strategy.</p> <p>More communication between corridor cities and nearby cities.</p> <p>More cooperation between stakeholders.</p> <p>Ease connection between urban transport and long-distance.</p> <p>Plan sufficiently for future needs.</p>	<p>Do not know how it works today.</p> <p>Node function needs clarification.</p> <p>The European perspective should be widely present.</p> <p>Connection to surrounding network important.</p> <p>Important to connect areas for employment.</p> <p>Important to ease connection urban transport to long-distance.</p>	<p>It works fine now. CNC is more important for the regional and national levels, than local level.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 3.

Area/ Comments	Yes	Unclear	No
3. Terminal cooperation	<p>To increase knowledge about goods flows.</p> <p>Better information transparency although competition.</p> <p>For intermodal transports.</p> <p>To support rail-sea transports.</p> <p>Cooperation although competition - perhaps in national corridor forums.</p>	<p>Do not know how it works today.</p> <p>Complement each other instead of competing.</p> <p>Focus on coexisting rather than cooperation.</p> <p>Maybe if there is an idea of terminal structure.</p> <p>A regional perspective is needed for how hubs can complement each other.</p>	<p>No, but terminals should be more involved in CNC work.</p> <p>It is not a priority.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 4.

Area/ Comments	Yes	Unclear	No
4. Strengthened multi-level infrastructure planning	<p>The nations should cooperate better along the corridor (i.e. standards). Better coordination EU and national planning. Better coordination EU-national-regional-local levels. Better coordination between different modes of transport (responsible bodies). Better cooperation between transport and other areas, such as land use planning.</p>	<p>I do not know. Differs between countries. Lack of attention for CNC in the national debate. European and international perspectives should be broadly represented. Risk of too much focus on the TEN-T core corridors. More discussion for better understanding of mutual interests needed (all levels). Important to plan across administrative borders.</p>	<p>Planning works fine. No, but national and international focus for railway needed.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 5.

Area/ Comments	Yes	Unclear	No
5. Enhanced stakeholders' interest in the corridor	<p>For a generally higher knowledge. For a generally higher local-regional awareness. Many regions and cities are not aware of the CNC process. For a higher awareness- stakeholders aside the immediate corridor. Political and business representatives should be more present in the process. More cooperation with users to consider their needs. More information to private stakeholders. More information about the corridor qualities. Allocate funds for information about corridor quality to private users. More cooperation to address relevant information to different stakeholder. Need of more short and simplified information. Important that representatives from different modes meet.</p>	<p>I don't know. Unsure, but more interest in transport from regional government is positive. Information to/from stakeholders is the regions role. Not all need to know about CNC. Stakeholders are already involved in project planning. Stakeholders need of awareness of CNC depends on their businesses. Users should know about CNC, international operators probably do.</p>	<p>No, but create political understanding is important.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 6.

Area/ Comments	Yes	Unclear	No
6. Best practice exchange	<p>Good examples are always important.</p> <p>We need to travel and gather information.</p> <p>Finding good examples to benchmark is important.</p> <p>Use best practices as a part of the information to stakeholders.</p> <p>Especially corridor related best practice.</p> <p>Gather more information in early stages of infra-structure projects.</p> <p>More arenas for cooperation is positive, particularly in sea transport.</p> <p>It's important to learn from other other infrastructure projects.</p> <p>Yes, and the on-going interregprojects is a well-working tool.</p>	<p>I don't know.</p> <p>There are new things in every forum/project.</p> <p>The arenas are enough, its just a matter of organizing it.</p> <p>More knowledge is good, but we don't have the capacity to process the knowledge.</p>	<p>The European territorial cooperation takes care of this.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 7.

Area/ Comments	Yes	Unclear	No
7. Innovation /new logistic solutions/ business concepts	<p>To bring innovations into practice.</p> <p>To adjust to a changing world.</p> <p>To improve transport quality.</p> <p>For smart solutions and new logistic concepts.</p> <p>For use of new technologies.</p> <p>For environmentally low-impact transport.</p> <p>For exchange between transport companies/ modes of transport.</p> <p>More focus on cargo owners needs.</p> <p>Innovative ideas should first be developed in a project, then transferred to TEN-T.</p> <p>Deeper cooperation between research institutions.</p> <p>More NEW thinking.</p> <p>Connect diverse research fields, and cultures in societies.</p> <p>Important to know what you want to accomplish.</p> <p>Make it easier for those who already work with this.</p>	<p>I don't know.</p> <p>It's a possibility for development.</p> <p>I think so.</p>	

Range of summarized views concerning need of complementary governance or cooperation in pre-identified areas 8.

Area/ Comments	Yes	Unclear	No
8. Influencing policy	<p>More awareness is needed. Regional and local stakeholders should coordinate their views. A national group is needed to give input to the government. For faster incorporation of international decisions at a national and regional level.</p>	<p>I don't know It is part of ordinary work. Harmonization is important. Climate impact is important. More holistic focus on overarching goals. Some CNC measures might affect EU policy negative.</p>	<p>There are existing well-functioning structures for this. We are enough involved. We are on the way with harmonization and the corridors.</p>

Range of summarized views concerning need of complementary governance or cooperation in pre-identified area 9.

Area/ Comments	Yes	Unclear	No
9. Financing	<p>All new financing is welcome. New financing solutions are needed. National group to discuss also financing. We need a system where users pay. Governmental funds or project shares. Only one EU call per year, difficult time frame. Think financing over for new cooperation. Synchronize available money and planning processes in Europe, on all levels of governance. On EU level relocate funding from agriculture. Governmental loans with good conditions. It might be possible to allocate more national capital. Perhaps governmental funds. Projects need to handle business risks to be implemented. Difficult for nation if EU funding not lasting. Raise political will for national funding. Optimize existing EU programs to support corridors. A more subsidized program for corridors. Not enough efficient corridor project applications</p>	<p>EU funding is important. EU funding works well. We are satisfied with the percentage of EU funding. Very little EU money for old member states. EU funding moved away from classical infrastructure. Financing is important for implementation. Connected Europe Facility fund quite good. Wise to combine private and public funding. EU grants are needed – international importance not the same as national importance.</p>	<p>I don't think so. We are well involved in cohesion funds, Interreg, Juncker plan, EIB. We work with financing ourselves.</p>