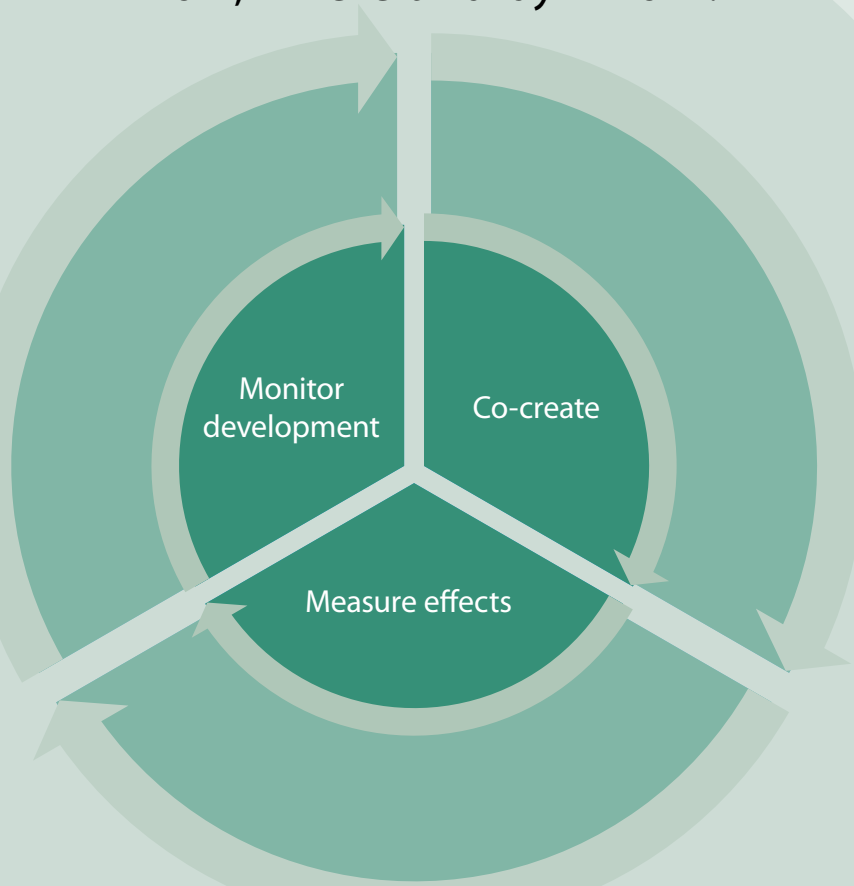
TENTacle

Realising benefits from the TEN-T Core Network Corridors

– how, where and by whom?



TENTacle Final Report

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

This report was prepared by Region Blekinge (the TENTacle Lead Partner), supported by the Swedish Transport Administration (leader of Workpackage 5), and Port of Hamburg Marketing (leader of project communication and information activities), in close collaboration with the Task Force – with representatives from all pilot cases of the project.

The Task Force members responsible for the development of this final report:
Mattias Andersson, *Region Blekinge*
Wiktor Szydarowski, *Ramboll/Region Blekinge* – lead author
Björn Hasselgren, *Swedish Transport Administration* – lead author
Maria Öberg, L*uleå University of Technology/Swedish Transport Administration* – lead author
Inga Gurries, *Port of Hamburg Marketing*
Marta Ciesielska, *Westpomeranian Region*
Laima Miliauskaitė, *Vilnius Gediminas Technical University*
Dino Keljalic, *Region Örebro*
George Panagakos, *Technical University of Denmark*
Ryszard Toczek, *Gdynia City Hall*
Michał Tuszyński, *Gdynia City Hall*
Andzejs Stepancuks, *Vidzeme Planning Region*
Alf S Johansen, *Värmland-Østfold Border Committee*
Sari Kesäniemi, *Lahti Region Development LADEC Ltd*
Matti Utriainen, *Ramboll/Lahti Region Development LADEC Ltd*

Coordinating and finalising of the text:
Maria Öberg, *Luleå University of Technology*

Proofreading:
Wiktor Szydarowski, *Ramboll*

Contents

Foreword

This final report wraps up the TENTacle experience in boosting the development opportunities generated by the CNC implementation. It presents replicable know-how enabling public and market sector stakeholders – irrespective of the geographical location – to adjust their policy actions, governance response and business strategies to fully maximise the benefits and mitigate any threats induced by the investment decisions along the corridors.

The know-how featured in this report is offered to the European Coordinators, relevant public authorities and market players managing supply chains crossing the BSR. Further, intergovernmental networks and the Coordination Group of the EUSBSR Policy Area Transport are encouraged to use this report to promote the success of CNC implementation.

As Lead Partner, we are happy with the strong commitment from all Pilot cases to follow up on the results from the project.

Region Blekinge is fully committed to work for an extension of the Baltic Adriatic Corridor and as Herald Ruijters, Director, Investment, Innovative and Sustainable Transport, DG MOVE, European Commission said in the Joint Final Conference in Brussels: "We really need to fill these corridors with life! As the cargo volumes steadily increases in our harbors more use of the railway and intermodal goods will be essential to reach the environmental goals.

Anna-Lena Cederström
Head of department Regional Development

Executive summary – key policy and action messages

This report summarises the findings and recommendations from the EU Interreg Baltic Sea Region (BSR) TENTacle project, which aimed to increase the stakeholder capacity to capitalise on the TEN-T core network corridors for prosperity, sustainable growth and territorial cohesion in the BSR. The project was carried out during the years 2016-2019 in the partnership with 23 organisations from nine countries in the BSR. The project, apart from macroregional analyses, contained nine pilot cases (showcases), displaying a variety of context-related opportunities to reap core network corridor gains in diverse geographical locations. Among these were:

- Corridor node and transit areas: Fehmarnbelt Fixed Link (DE/DK), Westpomerania – Skåne (PL/SE), Gdynia transport node (PL)
- Corridor catchment areas: Blekinge (SE), Vidzeme (LV)
- Corridor void areas: Central Scandinavia borderland (SE/NO), Lahti – North Karelia (FI)
- Corridor extension areas: Catching the goods transports from the northern regionsto CNCs (logistics hub function of the Örebro region), interactions between the CNCs and transport networks of the EU Eastern Partnership countries.

In addition, TENTacle gathered corridor governance experiences from earlier BSR Interregprojects and conducted an analysis to investigate the effects related to both the improved connectivity and the wider economic benefits of the CNC implementation. The impact analysis showed potential positive and negative impacts of the corridor infrastructure investments both geographically and by stakeholder category. Based on all these results, suitable policy and action responses were formulated, to either boost or mitigate potential effects of the CNC implementation, in the near future, but also from a long-term perspective.

The key messages based on the findings in TENTacle are:

1. **Monitor and analyse CNC implementation and the need for complementary development measures**
   Actors on different levels should continuously monitor and examine transport (flows, infrastructure capacity) and socio-economic effects of the CNCs, as well as new market opportunities, business models and supply chains triggered by the CNC implementation. The information gathered from these activities should serve as a base for capitalising on the CNCs, generating growth due to modal shifts and for initiating and adjusting complementary policy and investment measures. Needs for supplementing the current pattern of the core network corridors by additional links and extensions both within the BSR, to the other parts of the EU andthe EU neighbouring countries should also be taken into account.

2 **Support co-ownership, co-responsibility and co-creation**
   Bottom-up corridor governance initiatives should be encouraged to allow broader groups of public and market sector stakeholders to receive information about and engage in the collaboration to benefit from the corridor investments, or, if needed, to alleviate any presumed negative impacts. It should be ensured that bottom-up and top-down processes interact enabling co-creation. Intensified business contacts along the corridor and in corridor extensions should be supported. The European Coordinators are encouraged to continue their broad dialogue with stakeholders, to raise awareness, boost opportunities and overcome hindrances for development.

3. **Enhance positive and mitigate negative effects**
   Functional infrastructure connections to the CNCs should be planned in the corridor node and transit areas, as well as in

the corridor catchment and void areas. Positioning strategies and action plans for the affected cities and towns should be prepared, also including adaptation strategies for business stakeholders, preparing them for the changes induced by the completed corridor investments and ensuring they are ready for gaining from the advantages of the new realities.

Re-distributional policies, such as subsidies, tax policy measures or growth initiatives for the territories which might potentially suffer from negative corridor impacts should be considered. The development of new technologies and alternative fuels,as well as electrification infrastructure in the corridors, should be supported, including alternative financing models for infrastructure investments. Missing links in the geographical coverage of the core network corridors in the BSR and corridor extensions should be promoted, bearing in mind the expected contribution of the TEN-T network to the social, economic and territorial cohesion. This also implies a fuller integration of relevant Motorway of the Sea links as maritime legs of the core network corridors (e.g. the Gdynia – KarlskronaMoS connection). New ideas and business opportunities shaped in the co-creationbetween stakeholders and the dispersion of best practices are important elements of a successful policy response.

4. Long-term and durable implementation

The policy and action measures should be co-created in a stakeholder interaction process so that they can be influenced by the users' specific interests and expectations. In the TENTacle showcases the action-oriented outputs were delivered through multi-stakeholder and cross-sectoral interaction. For the long-term durability, a designated organisation was given responsibility forformal approval of the showcase outcomes and for inserting them in a binding document (e.g. action plan).
To achieve a capacity change also at the macroregionallevel, avast number of intergovernmental networks,e.g. CMPR Baltic Sea Commission, BSSSC (Baltic Sea States Subregional Co-operation), VASAB, BPO (Baltic Ports Organization) are expected to further process the TENTacle outcomes. An overarching role in managing and monitoring the capacity change could potentially be assumed by the Coordination Group of EUSBSR PA Transport, assisted by the BSR ACCESS project platform.

List of abbreviations

BPO	Baltic Ports Organization
BSR	Baltic Sea Region
BSSSC	Baltic Sea States Subregional Co-operation
CEF	Connecting Europe Facility
CETC-EGTC	Central European Transport Corridor – European Grouping of Territorial Cooperation
CNC	Core Network Corridor
CPMR	Conference of Peripheral Maritime Regions
EaP	Eastern Partnership
EGTC	European Grouping of Territorial Cooperation
EU	European Union
EUSBSR PA	EU Strategy for the Baltic Sea Region Policy Area
EWTC	East West Transport Corridor
FBFL	Fehmarnbelt Fixed Link
HCT	High Capacity Transport
MEGA	Metropolitan European Growth Area
MLG	Multi-Level Governance
MoS	Motorways of the Sea
NGO	Non-Governmental Organisation
SUMP	Sustainable Urban Mobility Plan
TEN-T	Trans-European Network for Transport
VASAB	Visions and Strategies Around the Baltic Sea
WEI	Wider Economic Impacts

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

1. Introduction

1.1 The TEN-T core network corridors and challenges in their implementation

The TEN-T Regulation[1] introduced a dual-layer structure in the planning of the trans-European transport network. The comprehensive network should be a Europe-wide transport network ensuring the accessibility and connectivity of all regions in the European Union. The core network should be a subset of the comprehensive network and represent the most strategically important nodes and links of the trans-European transport network to be fully implemented by 2030.

The TEN-T Regulation states that in order to implement the core network in the given timescale, a corridor approach could help coordinate different projects on a transnational basis and maximise network benefits. The instrument of core network corridors (CNCs) should help develop the infrastructure of the core network through addressing bottlenecks, enhancing cross-border connections and improving efficiency and sustainability. Also, the CNCs should contribute to cohesion through improved territorial cooperation.

In servicing the most important long-distance flows in the core network, the CNCs should offer seamless, interconnected, interoperable and smart infrastructure, which, in turn, should enable clean, efficient, sustainable and innovative mobility solutions across the EU Member States.

Implementation of the CNCs is facilitated and supported by designated European Coordinators who, in consultation with all levels of stakeholders, draw up a work plan for each corridor and monitor its implementation, examine the demand for transport services and produce annual reports on the progress achieved.

The European Coordinators, in their joint state-of-the-art report[2], underline that the CNCs have a potential to demonstrate synergies and added value from the combination of different types of projects and involvement of different actors. The Issues Papers observe that since major freight and passenger flows are concentrated on these corridors, they also promise the highest impact on decarbonisation of transport. Further, they offer vast opportunities for innovative, safer and more resource-efficient infrastructure development in combination with high-quality and new-generation services for transport and mobility.

For that reason, the CNCs are believed to support the major transformation envisaged by the White Paper[3] towards a competitive and resource-efficient transport system by 2050. Through testing new technological, legislative, organisationaland policy approaches, the CNCs can minimise environmental impacts and offer competitive operational conditions in terms of reliability, limited congestion and low administrative costs.

On the other hand, the implementation process for the CNCs faces several challenges, which may threaten the accomplishment of goals in the set time perspective (2030).

[1] *Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network*
[2] *Issues Papers of European Coordinators – TEN-T Corridors: Forerunners of a forward-looking European Transport System, TEN-T Days 2016, Rotterdam*
[3] *WHITE PAPER Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system (COM/2011/0144 final)*

Among them are possible implementation delays for vital infrastructure projects on the corridors caused by weak cross-border coordination of investment planning and lower priorities assigned by the Member Statesin terms of national funding. Although cross-border projects usually demonstrate a high European added value, their direct economic effects might be less obvious – compared to purely national projects.

The lack of a coherent approach in planning the corridor investments does not only manifest itself across the administrative borders. The Issues Papers[4] point at the still pre-dominant silo-thinking and low level of synergies with existing initiatives as a drawback in delivering the large infrastructure investments oncorridors. The planning approach to TEN-T is, in the view of the European Coordinators, too supply-driven, while it should take into account the actual needs of the freight transport market (demand-driven approach). This requires mobilisation, cooperation and coordination of relevant stakeholders.

1.2 The CNCs in the Baltic Sea Region do not deliver on cohesion

The Annex to the CEF Regulation[5] identifies nine core network corridors and contains a list of projects pre-identified for possible EU funding during the 2014 – 2020 period, based on their added value for TEN-T development and their maturity status. These corridors are: (1) Atlantic, (2) Baltic Adriatic, (3) Mediterranean, (4) North Sea-Baltic, (5) North Sea-Mediterranean, (6) Orient-East Mediterranean, (7) Rhine-Alpine, (8) Rhine-Danube, and (9) Scandinavian-Mediterranean. In addition, there are two horizontal priorities: (1) the European rail traffic management system (ERTMS) deployment and (2) the Motorways of the Sea.

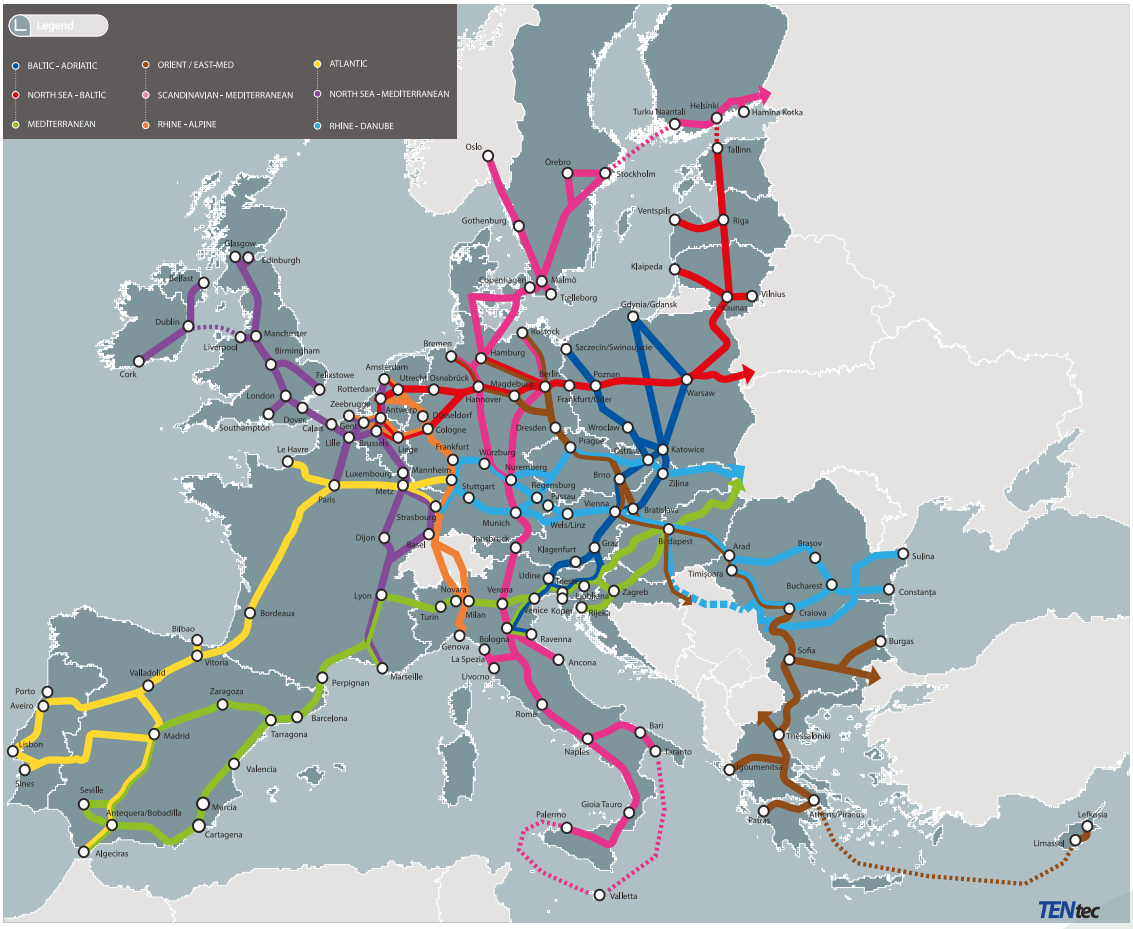


Fig. 1. Map of the nine CNCs (Source: European Commission[6])

[4] *Issues Papers [op.cit]*
[5] *Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility*
[6] *http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/en/maps.html*

The geographical alignment of these corridors follows the planning methodology adopted by the European Commission in designating the core network[7]. The corridors link nodes of highest strategic importance in the EU via multimodal connections selected from the comprehensive network. Their architecture is meant to reflect the most important long-distance flows in the core network. They shall cross at least two borders and, if possible, involve at least three transport modes, including, where appropriate, Motorways of the Sea.

The nodes on the corridors contain infrastructure and services for passenger and freight traffic. They comprise urban nodes (such as: capital cities of the Member States, all Metropolitan Growth Areas (MEGAs) and other agglomerations of at least 1 million inhabitants), main border crossing points between each Member State and its non-EU neighbours, and some selected seaports, inland ports, road-rail terminals and airports.

The planning methodology by the European Commission outlines the criterion for core seaports to be included whenever representing an annual transhipment volume of at least 1 % of the total transhipment volume of all EU seaports, based on a 'linear interpolation between bulk and non-bulk (page 5 thereof).' Such seaports may also be recognised as main nodes for passenger traffic if they have a bridgehead function for passenger ferry connections within maritime links of the core network.

Although, as stated in the TEN-T Regulation, the CNCs should contribute to the social, economic and territorial cohesion, their present alignment hardly caters to it. The corridors leave out a large territory north of the three Nordic capitals, discontinue between Oslo and Örebro and cover just one link between Scandinavia and mainland Europe, thus offering sub-optimised support to the balanced territorial development and sustainable growth in the Baltic Sea Region.

In 2018, the European Commission proposed an adjustment of the CNC alignment in the CEF Regulation by including further core network links or core nodes (e.g. ports) not located in any corridor. The Swedish and Finnish governments have proposedthat the corridors of Scandinavian-Mediterranean and North Sea-Baltic shouldbe extended in order to cover more than roughly 40% of the rail core network in the two countries, as in the present alignment. If approved by the European Parliament, the two corridors will continue northwards around the Bothnian Bay and meet at the Swedish-Finnish border (Haparanda-Tornio) – in anticipation of the growing importance of the EU Arctic policy. The Scan-Med Corridor will also see a branch leg linking to the core network port of Narvik in Norway.

Through additional adjustments,the Scan-Med Corridorwill reach the core port of Aarhus in Denmark, while a cross-border and multimodal (road, rail and inland waterway) link will connect Berlin with Szczecin/Świnoujście on the North Sea-Baltic Corridor.

However, the current discussion at European level leaves out the missing link between Oslo and Örebro, although it formed part of the previous TEN-T priority project on the so-called 'Nordic Triangle' and was included in the first proposal from the Swedish government.

A key aspect of supporting the macroregional cohesion is the positioning of Motorways of the Sea (MoS). In the EU regulative framework, they are, on the one hand, regarded as a horizontal priority and the maritime dimension of the future TEN-T. On the other hand, they are given a specific geographical reference as the 'maritime leg' of the land transport corridors meant to relieve them from excessive road traffic. Also, in the planning methodology[8] they are considered part of the core network as long as they fulfil the function of core network links – that is: they connect core network main nodes across the sea.

This geographic attribute of the Motorways of the Sea is much relevant to the specific development situation of the Baltic Sea Region. The large water basin located in the very centre of the area poses both hindrance to seamless flows and opportunity in strengthening intermodal supply chains. Untapping this potential requires connecting the 'dead ends' of the CNCs across the sea via efficient MoS links, thereby making a genuine network of CNCs over a wider than now territory of the Baltic Sea Region.

Such a position was supported by Brian Simpson, the previous European Coordinator for the MoS who – in the Detailed Implementation Plan[9] – claimed that MoS are 'functional junctions allowing the connection of different CNCs' and that 'maritime transport should be integrated into CNC.'

[7] *European Commission, Planning methodology for the trans-European transport network (TEN-T), as used for the Commission proposal made on 19 October 2011*
[8] *European Commission, Planning methodology […]*
[9] *Motorways of the Sea – Detailed Implementation Plan of the European Coordinator Brian Simpson, April 2018, https://ec.europa.eu/transport/sites/transport/files/101_web_final_ii_mos_dip_2018.pdf*

1.3 Why the TENTacle project?

Back in late 2013, the CNCs were an innovative instrument of the EU transport policy, aimed to promote the coordinated development of infrastructures and thereby to stimulate regional growth not only in their immediate neighbourhood but also in more distant geographical areas. However, as this policy instrument was very new, the roles and responsibilities of involved stakeholders, likewise the possible impacts on public policies and market behaviours, seemed fairly uncertain.

As evidenced in the first core network corridor fora[10], exploiting the development potential generated through this new corridor approach was hindered by five major capacity challenges:

- Generally low awareness of the CNCs among public and market players in the BSR and deficient understanding of the ways these players can be involved and influence the CNC implementation to make it consistent with their action priorities (e.g. management of international supply chains through the BSR);
- Too weak engagement of the stakeholders in the areas along the CNCs in converting corridor mobility boosting measures to sustainable growth and prosperity actions. In many cases, their involvement was limited to a bare consultation of bottleneck-removing investments recommended in the corridor studies and work plans;
- Insufficient ability of the stakeholders in the areas close to the CNCs to plan adequate measures and mobilise financial support for the corridor access investments as a growth and prosperity factor;
- Insufficient ability of the stakeholders in the areas located farther away from the CNCs to plan adequate measures and mobilise financial support for investments improving the connectivity of their secondary and tertiary networks to the CNCs as a growth, prosperity and cohesion agent;
- Insufficient knowledge of how to utilise the CNC cooperation gains (such as a wider territorial perspective and a multi-actor involvement) in transport planning, management and implementation activities within the BSR countries and how to synergise with the strategic cooperation framework of the EU Strategy for the Baltic Sea Region.

Twenty-two partners from nine countries around the Baltic Sea addressed these challenges through the joint transnational project TENTacle – co-financed by the Interreg Baltic Sea Region Programme and operational in the period of 2016-2019. Assisted by 66 associated organisations, which helped bring together a wide range of expertise and experience in transport, logistics and policy-making, the partnership pursued the joint aim to improve the capacity of public and market stakeholders in reaping benefits of the corridors for the prosperity, sustainable growth and territorial cohesion in the BSR.

Bearing in mind very diversified connectivity and accessibility needs within the BSR, TENTacle deployed nine pilot cases (showcases) representing the areas located in, close to and far away from the three specific TEN-T core network corridors: Scandinavian-Mediterranean, North Sea-Baltic and Baltic-Adriatic. In each of the cases, TENTacle addressed the key growth challenge (e.g. low economic competitiveness, depopulation, weak supply chains or peripheral location), that could be resolved through a better physical and functional connection to the TEN-T core network corridors. Action plans, pre-feasibility studies for key investments, new business models and transport strategies, delivered through intense interaction among the public and business stakeholders, have demonstrated how to strengthen corridor synergies in different geographic and development contexts. The TENTacle deliverables include policy and business solutions, which:

- guide the planners in how to utilise the CNC investments as atool for local/regional growth, sustainable mobility and better logistics services;
- boost smarter and greener logistics chains along the CNCs and their extensions via the MoS links;
- integrate the last mile CNC interface with the local/regional transport networks and the urban transport system;
- ensure the interoperability between the three CNCs crossing the BSR;
- contribute to reversing the existing economic decline processes through better access and connectivity to the CNCs.

Results of the pilot cases were elevated to the macroregional level to feed the debate on how to capitalise on this EU transport policy instrument. A new approach to how the corridor investments generate impacts that spread across territories, the solutions on how to interconnect the CNCs with the transport networks of the neighbouring countries and how to integrate the management of intermodal supply chains into the corridor approach have all been at the heart of TENTacle work.

Into the sixth year of the CNCs implementation, the capacity challenges for successful CNC implementation have not been fully resolved. Among public and business actors in the three pre-determined geographies (corridor transit and

[10] *A coordinating function prescribed in the Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network*

node; corridor catchment and corridor void areas) there is still an insufficient understanding of roles in the corridor governance and expected benefits in the context of sustainable development (environmental, economic and social effects). To a certain extent, these shortcomings result from weak evidence available on how the CNCs help shape the multimodal transport systems of the countries concerned, and how they affect the competitiveness of hinterland areas. Finally, it is an effect of many infrastructure measures still waiting for completion.

2. Impacts of the CNCs

In this chapter, two of the horizontal knowledge generation analyses carried out in TENTacle are brought to the fore; on stakeholders' perceptions and the impacts of CNCs from a qualitative perspective.

2.1 Stakeholder expectations of CNC impacts – an interview study

To gain knowledge of stakeholders´ awareness and expectations of the CNC implementation, 23 persons from the Baltic Sea Region were interviewed. They were employed within public authorities (national, regional, local), transport administration (port, railway, airport, road), private companies, and other organisations (e.g. interest groups).

Increased and directed information

The results indicated a need for further information activities to increase the awareness about the CNCs and possible impacts of their implementation. In particular, information directed towards business stakeholders was suggested.

Positive and negative impacts

Regarding the CNC implementation, both positive and negative effects were expected. On the positive side, a strengthened transport system would support increased cross-border trade and economic prosperity while enhancing social cohesion. However, there was a perceived risk that regions and businesses located further away from the CNC would losetheir appeal in comparison to those located closer to the corridor. This would lead to an uneven distribution of benefits from the CNC implementation.

Furthermore, for longer distances, environmentally favoured transport modes (rail and sea) were expected to be positively affected through the harmonised development of transport corridors, although sea transport was by some interviewees perceived to be less positively, and even negatively, affected.

Additional governance measures for increasedstakeholder involvement

The results indicated a need for a deeper stakeholder inclusion in the CNC implementation process. Particularly business stakeholders and regional and local stakeholders, both within the corridor area and in the surrounding areas, were identified as important to involve further. Broader cooperation would support a common knowledge base and coordination of activities for the desired outcomes.

Existing structures for enhanced corridor cooperation (e.g. formalised CNC corridor fora, Interreg projects) or new governance bodies were suggested for this purpose. The interviewees provided ideas for new complementary governance measures to be further assessed. These included parallel structures to the current corridor forums for business stakeholders, a platform to exchange information for intermodal transport, hearings to collect users´ views, national groups as forums for gathering a broad range of stakeholders, regional/local conferences to coordinate measures and initiatives, and intergovernmental cooperation networks for enhanced harmonisation.

The design of complementary measures needs to be conducted together with concerned stakeholders to be able to consider stakeholders´ actual possibilities and interests in participating. This can be expected to differ between organisations depending on financial and personal resources, perception of benefits for the own organisation, etc. Another challenge for joint activities is the aspect of competition. Most business stakeholders operate in competitive conditions, which can affect the interest to cooperate and share information. Further, it must be ensured that the proposed measures do not distort competition.

More information

More information can befound inthe TENTacle report available at: http://www.tentacle.eu/downloads/

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

2.2 Analysis of longer-term impacts of CNC implementation – Territorial and stakeholder distribution

Based on two exemplary cases of large infrastructure projects on the corridors (mega-projects of Fehmarnbelt link and Rail Baltica), this analysis offers input to the evaluation of longer-term social and economic consequences of the infrastructural developments along the EU priority transport axes, also on a larger territorial scale.

The analysed impacts are divided into those that can be attributed to the performance of the CNCs as a functional system and those that are, in consequence, enabled by that functional system (so-called WEI – wider economic impacts). A geographical projection of both the positive and the negative impacts is presented in the report, with due attention given to the issue of absolute and relative projected effects to be generated by the CNCs in different geographical areas. The focus is on a qualitative assessment of impacts while recognising the additional need for quantitative measurements of effects. Further, the distribution of impacts among some pre-determined categories of stakeholders in the BSR is examined.

Improved connectivity and transportation

It is argued that the implementation of CNCs as studied for the two large infrastructure projects to be completed in the years to come, will bring a substantial impact on the modal choice and accessibility to the functional transport system. Better commuting opportunities, extended labour markets and enhanced cross-border interoperability induce changes in the modal choice for passenger transport, provided that the public transport operators, as well as freight forwarding companies, ensure an adequate service offer. The improvedreliability, reduced time and cost for freight transportation along the corridor correspondingly result in more comprehensivemode and route choice options for freight owners and forwarders in managing the supply chains.

In geographical terms, the accessibility benefits are not confined to the very region of the mega-projects but are spread along the respective corridor and permeate to all economic sectors. Transport mode options of preference to the interregional travellers and industries will vary depending on the distance from the investment sites.

Relative positive and negative effects for territories and stakeholders

The corridor nodes and regions are projected to both gain and lose on the competitiveness scale. Even though most of them gain through better connectivity, some of them may record a relative decrease in accessibility and competitiveness.

For areas located farther from the corridors, as well as for corridor cities and towns situated in-between the nodes, a relative decrease in accessibility could cause displacement effects. Losing high-skilled labour force and exporting companies to peer cities and regions may bring increased spatial polarisation, with the metropolitan areas and changeover hubs receiving an additional boost to their population numbers and economic performance. For areas most remote from the corridors, such as northern Scandinavia, such displacement effects could be insignificant.

The CNC implementation generates various effects for the stakeholders depending on their geographical location in relation to the corridor and the level they represent (national, regional, local). Again, the changes induced by the new transport infrastructure are illustrated in this analysis in relative terms as they denote the comparative shift of the stakeholder's standing as compared with the other ones impacted by the investment. The grade of assessed impacts gives valuable input for how expedient the policy and action response should be to contain the challenge for prosperity and

growth and to support a win-win situation, also for areas with foreseen negative impacts.

More information

More information can be found in the TENTacle reports available at: http://www.tentacle.eu/downloads/

- Impact analysis of the TEN-T Core Network Corridors in the Baltic Sea Region
- Impacts of the TEN-T Core Network Corridors in BSR – Think Tank

3. Capitalising on the CNCs

In this chapter, results from the TENTacle showcases are summarised, preceded by the analysis of lessons learned from the large number of earlier Interreg projects in the BSR.

3.1 Lessons learned from earlier projects

Experiences primarily on multi-level governance (MLG) in transport corridors were gathered from 12 bottom-up (i.e. non-CNC) corridor projects, and other cross-border transport initiatives, running in the Baltic Sea Region during the last decade.

The analysis was mainly dedicated to the mapping of three aspects:

- the governance models applied and the involvement/absence of relevant stakeholders,
- the engagement of businesses and 'lighter-weight players,'
- the impacts on national transport planning.

This study was based on a number of different elements:

- a review of the CNC work plans and the EUSBSR action plan,
- a selected literature search on corridor planning and governance,
- a review of the material produced by bottom-up corridor projects and cooperation initiatives,
- a survey among project managers and stakeholders to solicit their views on project design, stakeholder issues, and project impact;
- a series of interviews with selected stakeholders, and
- a stakeholder workshop on multi-level corridor governance.

The study concluded with ten lessons learned, or 'golden rules,' concerning stakeholder involvement in order to realise the vision of the CNC implementation.

10 LESSONS LEARNED
1. Different perspectives make it happen (to the EU Coordinators)
2. Regional experiences can facilitate national planning (to the national planning authorities)
3. There is no such thing as one-size-fits-all (to project developers)
4. Design stakeholder-specific communication (to project developers)
5. Consider the limited resources of lighter-weight players (to project developers)
6. Extend reach to include the general public (to project developers)
7. Do not forget the low-hanging fruit (to project developers)
8. Provide sufficient time to cope with expected and unexpected delays (to project developers)
9. Ensure sufficient organisational and personal commitment (to project developers)
10. Get the right leader on board (to project developers)

Fig. 2. Ten lessons learned from stakeholder involvement in the CNC implementation

Past corridor projects in the BSR have deployed a variety of MLG schemes.They are classified in the four categories listed in Table 1. The choice of MLG scheme depends on the context, such as the objectives pursued, the time horizon, the flexibility requirements, etc.

Tab. 1. Types of multi-level governance structures (based on Neumüller and Friedrich, 2014[11])

Type	Definition	Advantages	Disadvantages
Informal network, thematic groups	• Nonbinding network of various stakeholders without written agreement • Cooperation on demand • One stakeholder leading the process voluntarily	• Low bureaucratic effort • Fast formation and working process • Flexibility in partnership • Flexibility in setting the agenda	• Open regulations for cooperation • Risk of low obligation/ commitment of partners • Insecure financing (depending on periodically renewed partner commitment ot the aquisition of external fund
Agreement based cooperation	• Cooperation based on written internal agreement • Fixed financial contributions • Formal executive positions (e.g. board, secretary) • Action plan	• Stronger commitment of partners • Financial security • Minimum staff	• Requires partner consensus • Limited flexibility (e.g. additional tasks have to be negotiated at political level)
European Grouping of Territorial Cooperation (EGTC)	• Based on Regulation (EC) No. 1082/2006, Regulation (EU) No. 1302/2013 and national laws of head office country • Own legal personality	• Legitimate negotiation position • Enhanced visibility • Eligible for EU funding • Well defined decision making process, roles nad functions • Independence from political developments	• Considerable bureaucratic effort to set up • Difficulties in the involvement of private entities as members
Private company	• National laws of head office country • Own legal personality	• All of the EGTC advantages (see above) • Minimum effort to set up	• Only for cases of narrow scope and identical interests • Non eligible for funding from from EU territorial cooperation schemes

In general, there is limited awareness of the CNCs among public and market players in the BSR. The study identified the following 'best practices' as examples of what increased awareness and stakeholder engagement can do in terms of regional cohesion, growth and prosperity:

- The **Fehmarnbelt Business Council** is a successful example of business involvement in the promotion of a transport corridor project. With a membership of ten business associations from three countries that represent about 400,000 companies of all sizes, it was established even before the bilateral treaty on the construction of the Fehmarnbelt fixed link was signed, to strengthen the axis of growth between the metropolitan areas of Copenhagen/Malmö and Hamburg/Lübeck. This business council has succeeded, becoming a true 'voice of business' and the natural contact point for government and administration in cross-border issues along the Hamburg-Malmö axis.
- The **Öresund multilevel governance model** was a web of formal and informal networks and working groups that strengthened integration between Denmark and Sweden in the Öresund area. Consisting of a diverse group of structures (Öresund Committee, ÖresundDirekt, Örestat, Öresund Institute and Öresund Media Platform), the model successfully addressed the asymmetric responsibilities that characterised the two sides of the Sound and contributed to a substantial socio-economic return on investment.
- In 2015, the municipalities of Karlstad and Örebro, and the regions of Värmland and Örebro County established the company **Oslo-Stockholm 2.55 AB** to develop a fast and reliable railway between Oslo and Stockholm with a total travel time under three hours (two hours and 55 minutes). Since then, the company has managed to: (i) participate in the 'strategic choice of measure study' of the Swedish Transport Administration; (ii) attract the market's interest for possible construction through a successful 'request for information' procedure; and (iii) inform the general public on the merits of such endeavour.
- The **Midway Alignment** of the Bothnian Corridor aims at upgrading the existing maritime link between Vasa (FI) and Umeå (SE) by deploying a new-built, preferably LNG-driven, ferry with icebreaking capacity that would secure reliable year-round service. In 2012, the two cities formed a jointly owned company (The Kvarken Link Ltd.) for undertaking the relevant activities, which are supported by the EU Motorways of the Sea facility.

[11] *Neumüller, J. and Friedrich S. (2014). A Multilevel Governance Model in the Scandinavian-Adriatic Corridor: The Scandria®-Alliance. A BSR TransGovernance report, Potsdam*

- Focusing on their national role, transport planning authorities tend to pay little attention to cross-border territorial perspectives. The **consultation of the latest Swedish national transport plan with the Finnish, Danish and Norwegian authorities** is a promising experience.

More information
More information can be found in the TENTacle report available at: http://www.tentacle.eu/downloads/

- Best practice in multi-level cooperation for transport and growth in the Baltic Sea Region

3.2 Pilot cases in corridor node and transit areas

3.2.1 Fehmarnbelt Fixed Link

The Pilot Case investigated the forecasted effects of the future Fehmarnbelt Fixed Link (FBFL) investment for the routing of freight flows and – consequently – for the business models of the transport and logistics industries, including ports, in the impact area of the investment. The FBFL is a tunnel that connects the Danish island of Lolland with the German island of Fehmarn along the Scandinavian-Mediterranean Corridor, and it will significantly shorten the transport route between Scandinavia and central Europe. New transport options and shorter transportation times are likely to affect the patterns of how companies position their logistics facilities in Northern Germany and Scandinavia. Further, regional growth impulses and business opportunities stemming from a large infrastructural investment can initiate additional value-added services and need for better hinterland connections in the impact area.

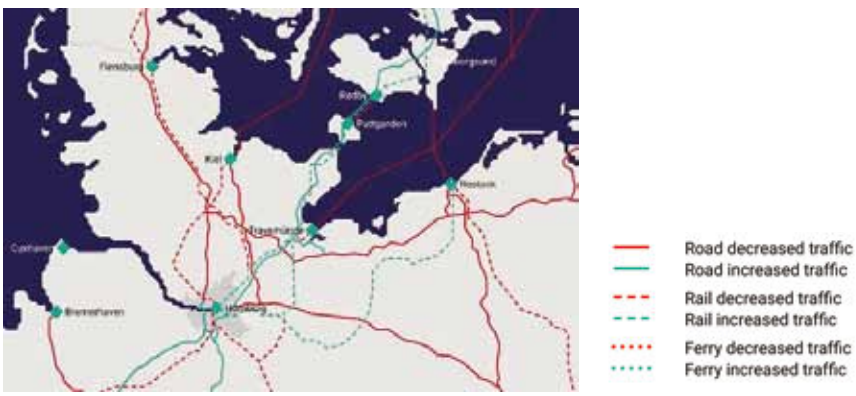


Fig. 3. Impacts of the Fehmarnbelt Fixed Link on transport flows till 2035 (Source: The TENTaclethematic report[12])

Main output
As the main output, a guidance paper of 'How to use the Fehmarnbelt Fixed Link as impulse for regional growth' was drafted.

Route calculations show that some transport routes will experience an increase in traffic while others will see a decrease, in which case the price for transport is the most relevant issue. Based on a more detailed impact analysis, it is stated that regional planners and business stakeholders need to develop strategies to benefit from the new opportunities, as well as to alleviate negative impacts. In some areas, both approaches might be required, as various stakeholder groups can be affected differently. Further, a need for more coordinated decisions from politicians and authorities on the national level is expressed regarding taxes and regulations that affect transport possibilities. Financial support to alleviate possible bottlenecks in the FBFL catchment area is important, especially to avoid stakeholders being negatively affected.

From the reviewed best practice examples in the guidance paper, it was summarised that stakeholder involvement was started at an early stage of the planning process, for increased knowledge exchange. It

[12] *'Trans-baltic transport structures up to 2035 – How the Fehmarnbelt Fixed Link will shape traffic flows (ISL III)', see the link below*

is further stated in most examples that the interaction process should continue beyond approval of the infrastructure construction.

In the near future, intensified involvement of business stakeholders is planned by the pilot case partners, as well as generation of new businesses and continued development of a safe park (safe storage for truck freight) in Guldborgsund municipality.

Stakeholder involvement

A wide group of stakeholders participated in the work process through a survey, interviews, workshops, and study visits with relevant stakeholders in the catchment area of the FBFL:

- Public administration: EU level, international networks, national level, regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers;
- Community: NGOs, interest groups.

Main stakeholder interests were identified from:

- Stakeholders already involved or interested in the development of the FBFL, especially regional authorities or business support organisations which engage in the strategic perspective of the investment;
- Stakeholders from the transport industry in traffic forecasts and studies.

Identified challenges for stakeholder interaction

There still exists a persisting gap between EU policy and regional/business development, especially in smaller communities or businesses. In particular, small- and medium-sized logistics companies were difficult to involve in the stakeholder interaction process. Even when contacted, they either did not respond at all or showed little interest in the FBFL. Usually, they have a short (max five years' ahead) planning horizon and lack the capacity to analyse impacts of the forthcoming corridor investment, except for ferry operators and port authorities who need to plan and adjust their operational and infrastructural capabilities in the long run (<20 years).

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

Analyse and communicate outcomes for different stakeholder groups

An example of activities in the pilot case is the mapped and discussed accumulated experiences on how to benefit from the FBFL for regional development in Guldborgsund Municipality. Outcomes are of importance for local/regional and business planning. As part of the process, a dialogue with key stakeholders was initiated to pursue the construction of a safe parking area, supported by a business plan, an investment prospect and a film used for communication. Another example of communicative materials in the stakeholder dialogue process could be information brochures, which exemplify business opportunities and ideas for infrastructure adaptations.

Personal interaction

Personal interaction with stakeholders proved to be the most efficient method to retrieve and exchange information.

Organise traffic forecasts and studies for a wider group of policy and business stakeholders

Providing traffic forecasts to illustrate the changed transport-patterns because of new infrastructure is a basis for discussing possible consequences. The method of assuming a regional approach to adapt to the transport changes can also be applied in other regions. This is of high interest to stakeholders from the transport industry, especially smaller companies that do not have the capacity to conduct their own studies.

Identified stakeholder actions to strengthen successful CNC implementation

The actions below address the category of stakeholders considered as the primary initiator.

Local/regional policymakers

- Reveal development opportunities stemming from the corridor investment (ways to reap benefits of the geographical location on the corridor) and initiate investment processes for supporting infrastructure (e.g. safe parking lots).

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

National and regional transport planners

- Estimate effects of a large (cross-border) infrastructural investment in the corridor on the routing of freight flows from a regional perspective.

Business developers

- Intensify business contacts in the impact area.
- Present opportunities of optimised business models for transport and logistics industries (incl. port authorities) in the impact area of an infrastructural investment on the corridor.
- Gain awareness of investment effects to identify new business areas to profit from the enhanced flows or to mitigate disadvantages of lost volumes.

European Coordinators

- Use this pilot case as a showcase on how to manage growth impulses of the large (cross-border) infrastructural investment on a corridor.

More information

- More information on this showcase can be found in the TENTacle reports available at: http://www.tentacle.eu/downloads/
- Fehmarnbelt Fixed Link: Modal Split Drivers (ISL I)
- Synergies between the Fehmarnbelt fixed link and short sea shipping in the Southwestern Baltic Sea – Adapting to changing cargo flows (ISL II)
- Trans-baltic transport structures up to 2035 – How the Fehmarnbelt Fixed Link will shape traffic flows (ISL III)
- Traffic Analysis Business Park Falster
- Impact of the Fixed Fehmarn Belt Link on the Transport of Forest Products from Northern to Central Europe
- Impact of the Fixed Fehmarn Belt Link on the Transport of Ferrous Metals and from Northern to Central Europe
- Investigation of Potentialities and Development Tendencies as well as Derivative of Recommendations for Action in the Market Segment Grain
- Analysis of potentials and stakeholders of Business Park Falster
- Dialogue with Baltic Ports and Logistics Stakeholders
- Guidance Paper "How to use the Fehmarnbelt Fixed Link as impulse for regional growth" – Final Output

3.2.2 West Pomerania – Skåne

Improved opportunities for business development along the corridors, in line with growing sustainability demands among freight owners and customers, was the focus of this pilot case. The area includes the western parts of the Polish regions of Westpomeranian and Lubuskie along the Baltic-Adriatic Corridor, with entry/exit hub in the ports of Szczecin and Swinoujscie, and its functional extension connections via MoS links to the southern parts of Skåne, via the ports of Ystad and Trelleborg, thus connecting to the Scandinavian-Mediterranean Corridor.

Fig. 4. The study areafor the pilot case Westpomerania – Skåne, showing the Baltic-Adriatic and the Scandinavian-Mediterranean CNCs (Source: European Commission[13]) and ferry links between Świnoujście and Trelleborg/Ystad (Source: Unity Line[14])

[13] *https://ec.europa.eu/transport/themes/infrastructure_en*
[14] *http://www.seatours.pl/en/ferry-companies/unity_line.html*

Main output

The main output has been the Baltic-Adriatic corridor freight transport logistics action plan, which encompasses two groups of actions:

- horizontal actions – aimed at the establishment of an organisational structure allowing the performance of direct actions;
- direct actions – directly contributing to the improvement of the attractiveness and competitiveness of the Baltic-Adriatic Corridor.

The action plan and regional reports emphasise that the most advantageous model of cooperation between the Region Skåne and the Westpomeranian Voivodship for the development of the Baltic – Adriatic Corridor is the Central European Transport Corridor – European Grouping of Territorial Cooperation (CETC-EGTC). The developed action plan will be adopted as part of the action plan for CETC –EGTC. Some of the tasks will be implemented as an element of bilateral cooperation between Westpomerania and Skåne on the basis of an agreement signed between the regions on 4 June 2013.

It was suggested that some tasks should be implemented in the short term. Among them are activities to include the Oder Waterway in the TEN-T network (from Szczecin through the Gliwice Canal to Gliwice, in the future, also with extension from Gliwice through the Oder-Danube-Elbe Canal). Another short-term activity is to initiate direct cooperation between the management of maritime ports on the Polish side (Szczecin-Świnoujście) and on the Swedish side (Trelleborg, Ystad), which is necessary for consistent implementation of the new solutions.

Stakeholder involvement

A wide group of stakeholders participated in the work process through interviews, workshops in each region, and one study visit in each region:

- Public administration: international networks, regional level, local level;
- Market: cargo owners, transport operators, infrastructure owners/managers;
- Community: universities, interest groups.

The stakeholder group also included representatives from nine other projects financed under various EU programmes, which jointly discussed the issue of implementation of smarter logistics solutions in the TEN-T corridors and urban areas.

Main stakeholder benefits from participating in the project process were identified as:

- Opportunities to talk directly with partners from the other region for the first time, which makesit possible to understand the expectations of both parties.
- Increased awareness of the ongoing work at the EU level and own impact on shaping interregional transport policy, especially for cargo owners and interest groups with low awareness, as opposed to transport operators and port authorities.

Identified challenges for stakeholder interaction

Ensuring long-term political support to raise stakeholders' awareness of the importance and benefits of international infrastructure is crucial. There is a need for active participation of stakeholders of different levels in the investment planning process and implementation. The participation of regions is especially important in creating the final shape of the project.

At the same time, there is a limited understanding of the CNC benefits for the business growth along and in the extension area of a corridor (e.g. on the other shore of the corridor entry/exit point). This leads to fragmented development priorities and strategies of public stakeholders along the corridor. In addition, there is a lack of business contacts on the cross-border scale, due to distance, practices, language barriers etc. Many cargo owners are not aware of their impact on shaping the interregional transport policy, while transport operators and port authorities tend to be better updated.

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

Corridor governance body

Facilitate access for business stakeholders to vital information about the corridor (e.g. socio-economic data, networking contacts, investment priorities etc.) via an auxiliary corridor governance body (e.g. EGTC). Further, assign the governance body with a task to keep regular stakeholder exchange meetings and workshops.

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Action plan
Streamline local and regional investment in the corridor infrastructure via a jointly agreed plan steered and supervised by the auxiliary corridor governance body (e.g. EGTC); make it a primary contact point for national transport operators (which in some countries do not prioritise dialogue with local/regional authorities).

Study visits
In addition to interviews and workshops, arrange study visits for business stakeholders along the corridor and in the functional extension area (e.g. on the other shore of the corridor entry/exit point) to raise awareness on cooperation interests and help connect companies for smarter and greener logistics chains.

Identified stakeholder actions to strengthen a successful CNC implementation
The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners
- Introduce a business dimension when developing corridor action plans to stimulate logistics development in stretches of the CNCsor connecting stretches.
- Engage in continuous cross-border cooperation.

National and regional policy makers/transport planners
- Promote missing components of the corridor infrastructure (e.g. inland waterway) to make it a genuine green and blue logistics corridor.

Business developers
- Intensify business contacts along the corridor and its functional extension over the sea, with particular emphasis on logistics centres.

European Coordinators
- Use this pilot case as a showcase on how to functionally extend the CNC across the sea (via MoS links) and facilitate business cooperation in the enlarged corridor area, also using the EGTC tool.

More information
More information on this showcasecan be found in the TENTacle reports available at: http://www.tentacle.eu/downloads/
- Cross-border freight transport between Scania and West Pomerania
- English executive summary of report "Cross-border freight transport between Scania and West Pomerania"
- A set of analyses of transport and logistic functions of the Lower and Central Oder as a part of the core network corridor TEN-T
- Baltic-Adriatic Corridor Freight Transport Logistics Action Plan – Final Output

3.2.3 Gdynia – urban transport node on the Baltic-Adriatic Corridor

In this pilot case, the growth potential of the Gdańsk/Gdynia gateway area as an integrated urban and transport node, located in a key entry/exit area of the Baltic-Adriatic CNC, was investigated.

A network of multimodal land/sea-side transport connections with the Gdynia seaport, including a MoS link Gdynia – Karlskrona, serves this transport gateway. At the same time, the Gdańsk-Gdynia node (including the regional airport in Gdańsk) forms the transport backbone of the Metropolitan European Growth Area (MEGA) Gdańsk-Gdynia-Sopot where the last mile CNC infrastructure connecting to the large sea/air-ports coincides with the infrastructure for regional, sub-regional and local traffic.

As it was found out in the Baltic-Adriatic Study/BAC Work Plan, crucial seaport, road and rail investments are still missing to ensure seamless interoperability and interconnections. The current last mile access networks to the seaport in Gdynia are not able to carry the flows, both freight and passenger, forecasted to almost double in 2027, and nearly triple in a 2045 perspective. This threatens the port's capability to serve supply chains both in the global and in the cross-Baltic dimensions. The aim for this work was both to advance preparatory work for mitigating key bottlenecks as well as to develop measures to ensure better traffic management in the transport/urban node area.

Fig. 5. The Baltic Adriatic CNC with a MoS extension across the Baltic Sea Gdynia – Karlskrona, and further land-based extension to Gothenburg (Source: Gdynia City Hall)

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Main output

The 'Pilot Action Plan: Gdynia CNC urban/transport node' was the main outcome of the pilot case. The plan demonstrates how to reconcile the aim of growth, accessibility, intermodality, interoperability and sustainable urban mobility in international, macro-regional (Baltic/Central Europe) and regional/local dimensions. It comprises components resulting from the 'Last mile study for integrated CNC-urban node focusing on investments complementary to the BAC Work Plan,' solutions for better management of port-bound traffic, monitoring and marketing of the CNC-relevant measures and statistics, multi-level governance cooperation, political impulses and promotion aspects. As a result, guidelines for the fulfilment of recommended projects and actions are presented.

The main political statement features the need for extending the Baltic-Adriatic CNC by the MoS link Gdynia-Karlskrona, and further to Gothenburg, thus connecting it to the Scandinavian-Mediterranean CNC. Another essential measure included the developmentof an intelligent system of road truck traffic management for the Port of Gdynia, to ensure smooth road access to the port and deliveries on time. For enhanced cooperation, a 'road map' for multi-level governance schemes for the Gdynia urban/transport CNC node facilitated the establishment of a national and sub-regional Baltic-Adriatic corridor forum.

Some of the results have already served as input in the consultation phase of vital strategic documents: revision of the Baltic-Adriatic corridor work plan, Polish transport development strategy 2020 (with the 2030perspective), Gdynia city development strategy 2030 and strategic operational program for transport, and Gdynia sustainable urban mobility plan (SUMP) 2016.

Stakeholder involvement

Over 60 stakeholder organisations, including European Coordinators for BAC and MoS, participated in the pilot case implementation through workshops, seminars, study visits, and dissemination of information. These include the organisations formally associated withTENTacle (pilot case 2.3) as well as:

- Public administration: EU level, international networks, national level, regional level, local level;
- Market: cargo owners, tour operators, logistics companies, transport operators (incl. public transport), transport infrastructure owners/managers – particularly Port of Gdynia Authority;
- Community: NGOs, universities, research centres, business development organisations.

The showcase facilitated the national and metropolitan Baltic-Adriatic Forum – as permanent cooperation structure for future joint transport initiatives. As the CNC is a new and vital component of TEN-T, the general awareness of this instrument was substantially increased by the produced information and promotion tools (e.g. Gdynia Urban Node Atlas and Gdynia CNC Node Statistics Data Yearbook).

Identified challenges for stakeholder interaction

There is a lack of EU and/or national guidance on how to combine a number of diverse development goals conveyed by the policies of transport, regional development and urban mobility at all levels (from EU to local) for sustainable growth. Consequently, there is a lack of cooperation structures for synchronisation of development and design of a CNC complementary transport system within the corridor urban nodes.Such structures/common platforms are in an initial stage (e.g., Vital Nodes Forum).

The main challenge for stakeholder involvement in this pilot case was gaining a clear perspective on the elimination of missing links and bottlenecks in the national infrastructure and enabling multimodality through a dense network of rail-road terminals and well-functioning seaports. This requires a broader involvement of urban node stakeholder in the CNC co-creation process.

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

Combine investments, operation, and organisation

Organise a three-layer approach to developing a corridor urban and transport node, consisting of: hardware (last mile infrastructural investments), software (traffic management measures) and orgware (governance scheme). The metropolitan approach to the implementation of interventions in the urban node Gdańsk-Gdynia was strongly recommended.

Joint digital resource
Provide the stakeholders (larger port and urban node community) with an updated digitalised resource (e.g. Gdynia Urban Node Atlas and Gdynia CNC Node Statistics Data Yearbook) on the corridor urban node development and last mile investments in the corridor infrastructure (preparatory status, implementation progress, implications for business strategies etc.).

Provide a regular meeting place
Provide a regular meeting place for the stakeholders (larger port and urban node community) to allow continuous information and involvement.

Identified stakeholder actions to strengthen a successful CNC implementation
The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners
- Propose measures to match the goals of growth, accessibility, intermodality, interoperability and sustainable urban mobility in international (global supply chains), Baltic (transport flows via the MoS links) and local/regional (hinterland and metropolitan) dimensions.
- Be actively involved in the coming CNC revision to highlight the need for corridor extensions, especially through the MoS connections across the Baltic Sea, to provide a genuine CNC transport network.

National and regional policy makers/transport planners
- Promote future CNC investments which respond to the traffic growth forecasts by 2050 in order to allow efficient service of global and cross-Baltic supply chains.
- Apply efficient tools for transforming the silo mentality into the spirit of co-creation.
- Support wider involvement of seaports in designing efficient logistics chains (including inland waterway ports).

Business developers
- Provide a meeting place for the port community stakeholders to obtain first-hand information for the purpose of adjusting their supply chain models to the planned investments in last mile access infrastructure and traffic management.

European Coordinators
- Use this pilot case as a showcase on how to develop an integrated urban and transport node on the CNC (port-city gateway) to (1) match the anticipated transport volumes in a longer perspective, 2050, and (2) to show how to functionally extend CNCs in the BSR via MoS links.

More information
More information on this showcase can be found in the TENTacle reports available at: http://www.tentacle.eu/downloads/
- The last mile study for the Gdynia TEN-T core network transport node, corresponding to the investments coherent with the Baltic-Adriatic Corridor (Polish with English summary)
- Road map multi-level governance schemes for Gdynia urbantransport CNC node (Polish)
  - English Summary
- Gdynia CNC node statistics data atlas – 2016 (Polish/English)
- The stakeholders' tendency (suppliers, clients, employees) of the back-up facilities of the Port of Gdynia to co-operate for the benefit of logistics efficiency of the transport / urban junction within the TEN-T core network in Gdynia (Polish with English summary)
- Gdynia Urban Node Atlas (Polish)
  - English Summary
- Pilot action plan: Gdynia CNC urban/transport node – 2019 (Polish-English Summary)

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

3.3 Pilot cases in corridor catchment areas

3.3.1 Blekinge – in between three CNCs

The Blekinge region is located in the south of Sweden, in-between the stretches of three CNCs. In this pilot case, the potential to trigger sustainable growth and better competitiveness based on this advantageous location was explored.

The area faces several development challenges. At present, it has one of the lowest road and rail accessibility among Swedish territories south of Stockholm. While transit flows are steadily increasing, the infrastructure stretches handling these flows are not included in the TEN-T core network. Further, there are scarce resources to address both regional mobility and international transport and insufficient knowledge on TEN-T opportunities among decision-makers.

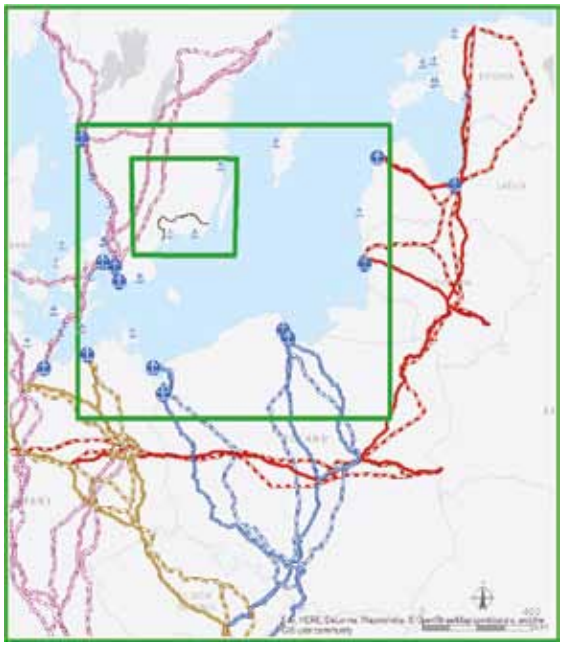


Fig. 6. The Blekinge area is shown by a black contour in the smaller green square. The larger green square shows the south Baltic Sea Region. The CNCs in the area are marked in pink, blue, red and brown. (Source: The TENTacle thematic report[15])

Main output

A document titled 'Extension of the Baltic-Adriatic Corridor from Gdynia to Gothenburg, via MoS Gdynia-Karlskrona, Roadmap' was put together as an output, underlining the focus of extending the Baltic-Adriatic CNC northwards in the context of TEN-T core network revision process in 2023 – thus, compliant with the political priority in Blekinge. The output will be a guiding document for the initiators (Baltic-Link Association, Region Blekinge, Stena Line, City of Gdynia, Port of Gdynia, Pomorskie region, Association of the Polish Regions on the Baltic-Adriatic Corridor and the Amber Road Cities Association) and the expected followers, including large manufacturing and forwarding companies in Sweden and Poland. The output will guide the work to accomplish the CNC corridor extension, from Gdynia via MoS link to Karlskrona and further to Gothenburg connecting to the Scandinavian-Mediterranean CNC, and more dynamic business operations alongthe entire corridor, including the extension.

The document comprises solutions on how to make investment planning and decision-making in Blekinge more internationalised and consistent with the implementation of the three CNCs. The functional connections of Blekinge

[15] *'Analys och rekommendationer för Blekinges koppling till TEN-T', see the link below*

to the urban/transport hubs on the three CNCs: Malmö/Copenhagen (through land transport) and Gdynia and Klaipeda (through MoS connections) are central. Recommendations stemming from the analyses focus on the need for capacity improvement in the rail and road networks within Blekinge region as well as for connectivity through other regions in southern Sweden and cross-border MoS links to Gdynia and Klaipeda. As a geographical extension of the CNCs is vital to Blekinge region, similarly port hinterland connections in Gdynia and Klaipeda are essential for smooth transport flows. Further, an expanded regional dialogue with, and among, business stakeholders, is suggested. Providing network activities and land access could generate new and expanding businesses.

The aim of influencing the regional transport plan for Blekinge 2018-2029 was accomplished through the report 'Analys och rekommendationer för Blekinges koppling till TEN-T' (only available in Swedish, see link below). The regional transport plan now contains several references to the project work and conclusive statements on the strategic priorities of Blekinge to be better connected to the CNCs, including the Baltic-Adriatic corridor through the MoS ferry link between Karlskrona and Gdynia.

Stakeholder involvement

A large numberof public and market stakeholders participated in the work process through interview, seminars and a study trip:

- Public administration: EU level, international networks, national level, regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers.

A study trip was arranged for two of the European Coordinators, Kurt Bodewig and Brian Simpson, to Gdynia and Karlskrona in June 2018.

Community stakeholders, such as interest groups and NGOs, were not addressed at this stage due to the focus on providing a more international context of the regional planning process. These stakeholder categories will be subject to action in the continued process during and after this project.

Likewise, the extended involvement of cargo owners and logistics companies in the corridor extension initiative is expected.

Stakeholder involvement was beneficial mainly to:

- Better understand the development at the European level and the way the local/regional stakeholders can be part of the process;
- Set the corridor access context in the regional planning and the dialogue on national infrastructure planning;
- Increase awareness of the infrastructural development in northern Poland as the exit point for the Baltic-Adriatic Corridor, and its impact on the sustainable growth in Blekinge;
- Better understand the importance of developing cross-border alliances, enabling a common perception of development needs and action priorities.

Identified challenges for stakeholder interaction

There is insufficient knowledge of the EU/TEN-T context of the regional competitiveness among public and business decision-makers in the BSR, and it is difficult to engage the latter in long-term planning of transport investments to eliminate missing links and alleviate bottlenecks. Previous transport projects indicate that business stakeholders are more set on short-term planning than public stakeholders, as determined by the continuous need for profits. Another reason is a deficient understanding of how they can be involved and influence the CNC implementation so that it conforms to their action priorities (e.g. management of international supply chains).

At the same time, there is lack of readymade action proposals on how to utilise the region's proximity to as many as three TEN-T core network corridors to improve its competitive position both within the country and in the EU and international context, and how to overcome the disadvantageous accessibility indices of the region. Scarce resources to improve the regional transport infrastructure to serve the growing transit and regional mobility (traffic volumes) accentuate this. Further, at a national level, the CNC access context is still missing in the planning argumentation.

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Increased cross-border perspective
It is essential to align with counterpart organisations in neighbouring countries to elevate the dialogue with national authorities on a CNC access for the region to the EU-level, thus showing a common interest with countries along the transport corridors which carry transit volumes across the region.

Arrange study visits and seminars
Improve the understanding of infrastructure developments at the European level and in the neighbouring countries along the transport corridor among national, regional and local decision-makers by organising exchange study visits and seminars.

Engage business stakeholders with immediate interest
Map business players who generate and manage traffic volumes along the corridor to understand their prerequisites for organising intermodal supply chains; present those with immediate interest for the infrastructural developments as inspiring examples for others to generate a critical mass for intermodal supply chains and to achieve a 'living corridor.'

Identified stakeholder actions to strengthen a successful CNC implementation
The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners
- Add new knowledge of international traffic volumes crossing the geographical area to the reference basis for decisions on infrastructure investments in the development plan for the coming years to achievebetter accessibility.

National and regional policy makers/transport planners
- Provide road, rail and port investments to help connect the regional infrastructure with an international transport system and accommodate both the growing transit traffic and the traffic resulting from regional mobility (e.g. daily commuting).
- Support consistency with the CNC implementation directions in local and regional transport plans.

Business developers
- Provide inspiration and documented evidence for adjusting business strategies and supply chain models to the bridging role of the region in-between the CNCs.

European Coordinators
- Use this pilot case as a showcase (1) on how to ensure accessibility to the CNCs by adopting an EU and international planning perspective, and (2) on how to ensure interoperability between the three CNCs crossing the BSR (e.g. via the MoS links).

More information
More information on this showcase can be found inthe TENTacle reports available at: http://www.tentacle.eu/downloads/

- Analys och rekommendationer för Blekinges koppling till TEN-T (Swedish with English summary)
- http://tentacle.eu/a/uploads/dokument/Final_Roadmap_Blekinge_case.pdf – Final Output

3.3.2 Vidzeme – connecting to the North Sea-Baltic Corridor

Better infrastructural and functional connection of the region to the CNC, with integrated transport and land use planning solutions, was addressed in this pilot case, to counteract economic decline and negative business development trends. The predominantly rural and remote area of Vidzeme in Latvia, and its adjacent area of Valga in Estonia, is facing challenges of low birth rates, out-migration, shrinking local markets, and difficulties in commuting. This is accompanied by negative business development trends, with companies relocating to urban centres with better accessibility, lower logistics cost and effective supply chains.

Fig. 7. Regional train traffic is key to regional development in the Vidzemearea(Source: TENTacle report[16])

Main output

The main output from this case is the 'Vidzeme regional mobility investment plan 2030.'This mobility plan will serve as a guideline for transport policy makers, planners, entrepreneurs, and residents in Vidzeme region. For the planning of transport infrastructure development at the local level, it is recommended to align local priorities with the long-term development priorities and perspectives of the region in the transportation sector, including connection to the TEN-T network. The mobility plan will be useful for planning the investment programme for roads, railways, and related infrastructures to ensure that the transport policy is coherent with the priorities of the region. Similar recommendations are provided for the planning of public transportation and its investment programme.

In the near future, a continued work process with policy developers is planned to ensure that the mobility plan is taken into account. This is expected in the process of developing public transport on demand in Latvia, and more significantly, during the preparation of the next transport development guidelines on the national scale. Involvement of local municipalities in the process will motivate and empower them to develop local mobility plans.

Stakeholder involvement

A variety of stakeholders participated in the work process through surveys, interviews, workshops, seminars, study visits, and electronic dissemination to inform about the latest developments. Included stakeholders were:

- Public administration: international network, national level, regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers;
- Community: NGOs.

The EU level public administration stakeholder group was not approached directly in this case as the national authorities, such as the Ministry of Transport, could share up-to-date information on the most recent EU level developments during the stakeholder interaction. NGOs were approached but not smaller interest groups. In that regard, it should be noted that neither NGOs nor more insignificant interest groups are actively present in the sectors related to transportation and mobility in the Vidzeme region.

Stakeholder benefits derived from the involvement were assumed to be:

- For public stakeholders, the opportunity to learn about other stakeholders' needs and main obstacles and the guidance for aligning the work with national level policies.
- For business stakeholders, to voice their position on different matters to national ministries and local authorities.

[16] *'Vidzeme regional mobility investment plan 2030', see the link below*

Identified challenges for stakeholder interaction

There is, generally, low awareness and deficient understanding among both public and market stakeholders of how to involve in and influence the CNC implementation as well as on how to align it to their own activities and priorities. Information exchange and involvement of planning regions, local governments and local business players in the CNC governance is very limited. Especially at local levels (architects, planners, engineers, decision-makers) the routines to include mobility needs of residents and businesses in traffic planning are insufficient.

Engaging business stakeholders was a challenge. Common reasons for not participating stated by this group of stakeholders are lack of time and capacity and that routines for working together between public and business stakeholders are still novel. Moreover, it is hard to encourage companies to long-term benefits as they tend to focus more on short-term gains. All this was known beforehand, and it was managed to overcome these obstacles in some cases.

Another challenge was data gathering, as it can be very time consuming and relies on cooperation. One uncooperative data owning public organisation is enough to cause significant delays or white spots in the current situation analysis, reducing the total value of the developed analysis.

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

Regional mobility plan

Connecting the public and market stakeholders through self-initiated regional mobility plans which help scale needs and obstacles in planning and operations and visualise them to the national transport authorities.

Close and personal dissemination

Providing close and personal dissemination for a more detailed TEN-T information downwards the governance levels and on framework requirements for market operations upwards.

Continuous stakeholder engagement

Strengthen the feeling of ownership for joint work products among the involved stakeholders to ensure the durability of mobility plans beyond the project lifetime – as guidance for transport policy makers, planners, entrepreneurs and residents.

Identified stakeholder actions to strengthen a successful CNC implementation

• The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners

- Promote a better understanding of the CNC implementation process for a more vigorous local and regional growth.
- Use the CNC implementation opportunities as an additional driving force for inter-municipal cooperation and integration between various administrative levels.
- Provide solutions on how to – in the TEN-T context – combine multimodal transport solutions with land-use planning and how to integrate the supply chain management and logistics in planning transport investments.

National and regional policy makers/transport planners

- Include recommendations from the developed regional mobility plan in the national transport planning documents.

Business developers

- Provide guidance to potential investors for their decisions to start or expand business through suggestions on sites for logistics centres.

European Coordinators

- Use this pilot case as a showcase of how to use the CNC process for tackling socio-economic and demographic decline trends in CNC catchment areas.

More information

More information on this showcase can be found inthe TENTacle reports available at: http://www.tentacle.eu/downloads/

- Vidzeme regional mobility investment plan 2030 (Latvian) – Final Output
- Vidzeme regional mobility investment plan 2030 – Current situation analysis (Latvian)
- Vidzeme regional mobility investment plan 2030 – Executive Summary (English)
- Valga Mobility Report (Estonian with English Summary)

3.4 Pilot cases in corridor void areas

3.4.1 Central Scandinavia borderland

This pilot case addresses improved socio-economic development in a borderland area between two capital cities, Oslo and Stockholm. Current infrastructure standards and transport services in this area are insufficient for the realisation of the potential of freight and passenger flows.

The public transport connections across the southern parts of the border between Sweden and Norway, which also is a central part of the 'Nordic Triangle' (in particular the triangle between Oslo-Stockholm and Copenhagen), is not sufficient. The cross-border commuting is significant, but most travelling is by road. The railways are not competitive to road traffic, and the bus connections across the border are unsatisfactory. This has resulted in an increase of traffic on the roads in the area. Between the capitals, air travelis most convenient and competitive. Integration of governance, public planning and regional strategies is weak across the national border. The unemployment and depopulation are more significant in the Swedish part of the area. In the Norwegian part, the Oslo city´s economic gravity, together with a strong national economy, leads to a general growth of the small and medium-sized towns between Oslo and the national border. Swedish towns close to the border are experiencing a better situation than those further away. They are, on the contrary, facing decline and low score at socio-economic measurements.

This pilot case investigated how better public and private cooperation, and an aligned cross-border strategy, may lead to better and more sustainable solutions. Key measures are to improve the railway infrastructure and include the full Oslo-Stockholm corridor (E18 axis) in the TEN-T core network corridors.

Fig. 8. Central Scandinavian borderland area between Norway and Sweden are indicated in the green circle. The Scandinavian-Mediterranean CNC is marked in pink, including rail-road terminals, ports and airports (Source: adjusted,based on the European Commission[17]).

Main output

The main output is the 'Sustainable growth strategy for the Central Scandinavian Borderland with better connections to the TEN-T CNCs.' Several sub-reports will serve as background documents and attachments to the final report.

[17] *European Commission, Mobility and Transport, TENTec interactive map viewer. Available at: http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/map/maps.html*

This strategy will affect the work of the Värmland – Østfold Border Committee, which is an organisation for continuous cooperation between the municipalities in the two border regions of Värmland and Østfold. It will also serve as a reference document for dialogue with other regional, local, national and transnational bodies.

In a short-term perspective, further discussion and analysis are anticipated on the proposed strategic direction of ensuring funding and ownership of the railway infrastructure by means of PPP or a pure commercial model. Reasons that motivate the proposal are, firstly, that global climate change brings an urgent need for decisions on transport infrastructure to facilitate the shift of transport modes from air and road towards rail and sea. If not resolved by the governments, this shift might be facilitated by other actors willing to risk and invest in infrastructure, such as better railways.

Secondly, the full potential of constructing and running large railway infrastructure on a commercial basis has not been exploited. The analysis undertaken by this pilot case shows that there could be market potential, and consequently an opportunity to construct and operate high- speed railways with commercial support should be further investigated. This conclusion is contextual and depends on geography, demography, labour market, alternative costs for transportation, tourism potential, political and legislative framework, etc., in the area.

Stakeholder involvement

Large variety of stakeholders participated in the work process through surveys, interviews, workshops, seminars, study visits, and electronic dissemination to inform about the latest developments. The public debate in the media (newspapers/radio) and social media also created public interest in the challenges addressed by the pilot case. The pilot case facilitated a dialogue with all groups mentioned below:

- Public administration: EU level, international networks, national level, regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers;
- Community: NGOs, interest groups.

A meeting with one of the European Coordinators, Pat Cox, was arranged by the pilot case.

Stakeholder benefits derived from the involvement were mainly attributed to the acquisition of new and relevant information for increased knowledge of the CNCs and connecting transport investments.

Identified challenges for stakeholder interaction

There is a lack of experience in mobilising stakeholders for growth and prosperity actions. This might explain the slow response from the EU and national decision-makers when it comes to accelerating transport infrastructure investments. The cross-border coordination on a regional and local level is not developed enough, contributing to the insufficient ability of the stakeholders in the area to plan adequate measures and mobilise financial support for the corridor access investments.

Another challenge is lack of know-how on methods to sustain prosperity and growth in the territory suffering from socio-economic polarisation and growing territorial disparitiesin the borderland area as well as on how to utilise multi-level governance and leadership in that context.

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

Facilitate creativity

Unlock creative ideas for sustainable and commercially viable transport solutions (e.g. high-speed trains) to improve the area's accessibility through cooperation with think-tanks and business representatives.Search for complementary partners that are needed in order to make progress. Arrange new partnerships, and work across administrative borders and levels of governance.

Align activities for sustainable growth

Reconsider local and regional strategies for the primary transport infrastructure by connecting the lobbying activities towards the national governments with own actions to ensure sustainable growth (e.g. support for business clusters involving local research and university centres).

Identified stakeholder actions to strengthen a successful CNC implementation
The actions below address the category of stakeholders considered as the main initiator.

For all stakeholders, it is important to:
- Keep an open mind for new cooperation and collaboration opportunities.

Local and regional policymakers/transport planners
- Support higher awareness of the TEN-T policies and new opportunities for improved connections.
- Promote a better understanding of the growth challenges and opportunities for the borderland area in the international context.
- Provide a solid foundation for cross-border planning and implementation of efficient and sustainable investments in the access infrastructure and auxiliary growth and prosperity measures.
- Investigate alternative financial solutions for transport infrastructure.

National and regional policy makers/transport planners
- Develop arguments to reintroduce the Oslo-Stockholm connection on the map of the prioritised CNC corridors.
- Investigate alternative financial solutions for transport infrastructure.

Business developers
- Provide guidance for potential investors to make decisions to start or expand businesses through recommendations for the land use, traffic and industrial plans.

European Coordinators
- Use this pilot case as showcase how to organise bottom-up growth and prosperity processes to argue for and support infrastructure investments in the CNCs.

More information
More information on this showcase can be found in the TENTacle reports, available at: http://www.tentacle.eu/downloads/
- Prosperity and Growth Strategy Karlstad Region – Basic Report
- Prosperity and Growth Strategy Karlstad Region – Strategy Proposals
- Final Output

3.4.2 Päijät-Häme-North Karelia

This pilot case investigated improved access to the CNC hubs through better infrastructure connections, transport network interoperability, and new low-emission transport solutions. Another objective was to achieve a better alignment of regional strategies in the Baltic Sea region. Both regions of Päijät-Häme and North Karelia suffer from a decline in socio-economic development. Negative market trends in paper and timber industries, as well as the loss of export to Russia, have contributed to falling business confidence, its low investment rate in manufacturing and service industry, weak sales and dropping employment. Both regions have included transport in their development strategies as a base for sustainable growth. However, the areas'current transport system does not match user demands for mobility and international access.

To counteract the negative growth tendencies, studies were conducted to strengthen the business and market opportunities in the case area, based on public and private stakeholder information exchange and understanding of the CNC implications in the regions. Similar to the work approach in the Scan-Med Corridor, so-called 'idea laboratories' were organised to gather regional and local stakeholders. The idea labs discussed and outlined solutions for better multimodal options, infrastructural connections to the CNC port/airport hubs, expanded regional labour markets, and technological and system innovations in transport and logistics to reduce carbon footprint, cut transport cost and attract new businesses.

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

Fig. 9. Päijät-Häme and North Karelia and important connection to Kouvola, ports and Russia. (Source: Ramboll)

Main output

The main output was several feasibility studies which – combined – confirmed the role of the city of Kouvola and its logistics hub, including the rail and road terminal, as a key connecting point to the TEN-T CNCs.

It was concluded that multimodal connections to the TEN-T network are vital for development.The most urgent needs in North Karelia include the improvement in road and railway connections for increased transport capacity to the Kouvola rail and road terminal, connectivity to the Joensuu airport and for the inland waterways – investments in the Saimaa canal. In the Päijät-Häme region, highway 12 is of central importance, being a logistics axis connecting western and eastern Finland with ports in the south and further to Russia and China. In the near future, the studies and activities conducted during the project will lead to improvements along this road, focused on the Lahti-Kouvola bottleneck.The first step was taken already when the Finnish government assigned a budget for planning highway 12 between Lahti and Tillola. This was partly a result of the work done during the TENTacle project. Furthermore, other road connections, also on the secondary road network, are vital for the local industry. The road transport connection between Helsinki and Päijät-Häme plays a crucial role in business development.

The goal of reduced emissions from transport in these connecting stretches was targeted through a strategy paper as an input for regional land-use planning in North Karelia. Moreover, High Capacity Transport (HCT) using longer and heavier trucks and truck platooning will be further considered in the future. Developed co-operation with the Kouvola rail-road terminal is expected.

Stakeholder involvement

A variety of stakeholders participated in the work process through a digital survey, interviews, workshops and study visits:

- Public administration: EU level, international network, national level, regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers.

NGOs and interest groups have not been involved at this stage, as the pilot case focused on key stakeholders related to transport and infrastructure.

In general, the stakeholders´ benefits from the involvement in the dialogue process were the increased awareness of CNC impacts, along with the possibility of influencing the outcomes.

Identified challenges for stakeholder interaction

Due to the distant geographical location to the CNCs, there is no direct influence by the regional decision-makers on the CNC implementation process. In addition, there is limited knowledge on how to use the CNC implementation process for the planning of regional infrastructure in a distance to the CNC hubs.

Another challenge is to raise sufficient financial support for infrastructure investments, especially in a national perspective, as the regions compete with each other for government funding.

Know-how solutions for stakeholder interaction

The following measures have been central in the pilot case to support a successful stakeholder interaction:

Regional idea labs

Arranging regional idea laboratories inspired by the ones in the CNC process gathered the stakeholders and served as an arena to work out joint public-private solutions and ideas for a better regional infrastructure connected to the CNCs. Additional transport and logistics measures to provide low-emission solutions were also prepared.

Cooperation with a system perspective

Approaching logistic services as a larger system and organising cooperation across regional borders allowed for a coordinated and therebystronger argumentation. The investments in such logistic sites benefit a larger geographical areaand can gain political support fromthere which is more meaningful than competinginvestment projects in each region. It makes more sense to collaborateand to align regional strategies in a cross-regional and Baltic Sea Region perspective.

Identified stakeholder actions to strengthen a successful CNC implementation

The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners

- Provide arenas for more effective information exchange and understanding of the CNC implications for the development of regional transport infrastructure and as a base for sustainable growth measures.
- Develop proposals for investments in the regional infrastructure that would better connect the case area to the global markets via the CNC port/airport hubs.
- Investigate operational solutions for transport technologies, organisation of transport services and alternative fuel infrastructure as additional measures in smart transport to attract investors to the region.

National and regional policy makers/transport planners

- Develop evidence for investments needed in road and railway infrastructure from the CNC hubs towards the regions to achieve efficient logistics services for the purpose of regional growth.

Business developers

- Establish open cooperation platforms to enable smarter and greener transport solutions and other technological and system innovations that could improve export opportunities and links to global supply chains.
- Provide guidance to assist potential investors in making decisions to start or expand businesses through the harmonised planning approaches.

European Coordinators

- Use the pilot case as a showcase on how to organise the regional level 'idea laboratories' to match the CNC implementation process and generate bottom-up growth processes to better connect the given territory to the CNC port/airport hubs.

More information

More information on this showcase can be found in the TENTacle reports available at: http://www.tentacle.eu/downloads/

- TR 12 Lahti-Kouvola Impacts on the community structure and employment
- Finnish transport policies at the national and regional level
- Current accessibility and improvement possibilities of North Karelia in the EU

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

- TEN-T transport strategy (Finnish with English summary)
- Summary report TENTacle idea laboratories
- Blue Prints and Implementation Plan
- Political Paper (Finnish with English summary)

3.5 Cases in corridor extension areas

3.5.1 Catching the goods transports from the northern areas to CNCs

In this study, a functional extension of the CNCs to the northernmost BSR areas was explored, with the Örebro transport hub as a key gateway area. A streamlined CNC implementation with supply chain management supporting a modal shift from road to rail transport was investigated.

There are multiple challenges in moving freight from road to rail. Higher costs and lower reliability are two specific reasons in this area for choosing other modes than rail. Further, companies with consumer goods often cannot gather enough volume to have their own dedicated system trains. Coordination with other companies is needed, preferably with similar destinations and timetables. Another challenge is technical incompatibilities regarding the use of loading units fordifferent types of freight.

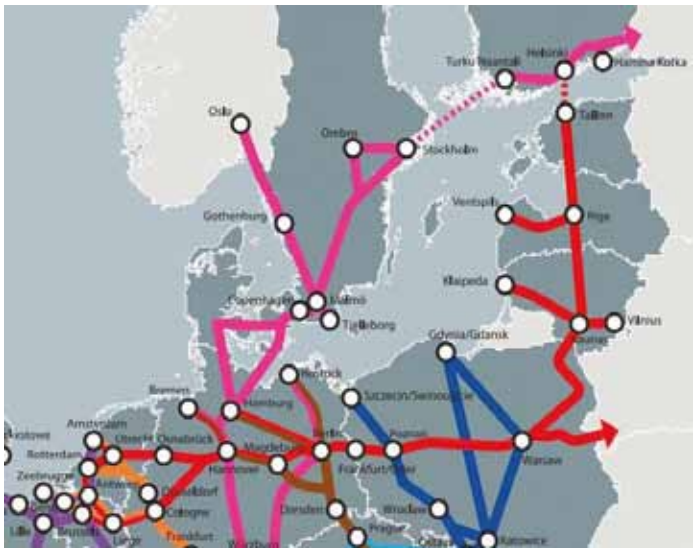


Fig. 10. Örebro in the TEN-T Core Network (Source: European Commission[18])

The main output was a report on 'Strengthening Örebro as an entry/exit hub to the northern Baltic Sea Region corridor: A generalised solution to support regions in shifting freight from road to rail'. Extensive mapping of current freight flows and potential for the modal shift was conducted in the Örebro area and in a future-anticipated extended CNC corridor towards northern Sweden, Norway and Finland. The report suggests measures to develop further cooperation on how to support the modal shift of freight from road to rail through the Örebro intermodal hub. The main recommendation is to create a brokerage service for rail transport, matching the customer needs with a train service. The brokerage service would support stakeholders to identify possible rail freight flows and interact to develop competitive joint transport solutions.

Through this activity, an important step was taken towards a public-private cooperation strategy for corridor-bound supply chains transiting the Örebro area. Four steps were considered for developing this strategy: (1) facilitate dialogue between stakeholders; (2) reach mutual understanding between stakeholders on challenges; (3)

[18] *European Commission, Mobility and Transport, TENTec interactive map viewer. Available at: http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/map/maps.html*

cooperate on joint activities or projects; and finally (4) sign a cooperation agreement with a common aim. In the process of gathering information about possibilities for the modal shift from road to rail, relevant stakeholders in the Örebro region were identified, which resulted in an extensive network of transport-related companies. However, reaching a common understanding, coordination of activities and the following cooperation agreement will need the continued focus. To achieve engagement in further activities, it is essential to have a long-term perspective, clarify stakeholders´ roles and benefits, and involve officials and private sector representatives working on a strategic level from the start.

Stakeholder involvement

The stakeholder participation was focused on the most relevant public and private stakeholders for the set aim and was managed through data collection, interviews, and matchmaking between companies:

- Public administration: regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers.

Identified challenges for stakeholder interaction

There isan insufficient understanding among business stakeholders of the CNC value-added for their market strategies, although access to CNC hubs is of vital importance in developing and maintaining supply chains. Generally, there is little awareness about the roles of public and private stakeholders in realising benefits and sustainable growth from the CNC implementation. This leads to difficulties in finding cooperation models for streamlining development activities between manufacturing, transport and logistics companiesand priorities of the public authorities.

Another challenge is related to the management of data for freight flows. Data can be confidential, leading to restrictions, and some data needs to be anonymised before sharing. Even if there are available data, they might be irrelevant, redundant or organised and structured differently between stakeholders and therefore hard to compile. Moreover, data need to be regularly updated because they quickly become out-of-date.

Know-how solutions for stakeholder interaction

The following measures have been central in the macro-regional case to support a successful stakeholder interaction:

Build a logistic contact network

The landscape of logistics stakeholders in the functional catchment area of the corridor hub was identified, with the aim to support their matchmaking and cooperation to achieve a modal shift.The contact network consists of private companies with inbound and outbound flows to and from the Örebro area transport hub, as well as freight forwarders, terminal operators, etc.

Develop a cooperation strategy

Developing and implementing a cooperation strategy, including both public and market stakeholders, was a key measure for building long-term trust and cooperation among the networking stakeholders. The cooperation strategy should be based on good practice models for collaboration (business model approach), advanced management of data for freight flows and include right competencies.

Identified stakeholder actions to strengthen a successful CNC implementation

The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners

- Gain a better understanding of how the supply chains are organised and how to facilitate the cooperation between logistics companies to streamline motivations and aims.
- Develop proposals for strategic actions on how to harmonise short-term business strategies with long-term public policies for the efficient feeding of freight volumes into the CNC through the corridor hubs.
- Map company behaviour and logistics practices of key business players involved in managing supply chains transiting the areaand analyse modal shift opportunities.

National and regional policy makers/transport planners

- Further and analyse how enhanced hub interoperability attracts investors to the regions.

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

- Support a more effective modal shift from road to rail by allocating financial resources and influencing legislation for that purpose.

Business developers

- Increase understanding of how long-term public policies may help create effective business models for efficient intermodal supply chains, withbroader use of rail transport.
- Facilitate horizontal cooperation between the manufacturing, transport and logistics companies in the area for enhanced opportunities for joint logistic solutions.

European Coordinators

- Use these findings as a showcase on how to extend an operational/geographic range of a core network corridor by a strengthened gateway function of the hubs for freight transport.

More information

More information on this showcase can be found in theTENTacle reports available at: http://www.tentacle.eu/downloads/

Railway standard – Possible extension of the ScanMed Corridor from the Mälardalen
Potential of Örebro area to funnel flows between the northernmost BSR territories and the ScanMed Corridor
Strengthening Örebro as an entry/exit hub to the northern Baltic Sea Region corridor – Main Output

3.5.2 Interactions between the CNCs and transport networks of the EU Eastern Partnership countries

This study focused on solutions to support the interoperability of the TEN-T core network corridors with transport networks of the EU neighbouring countries, particularly the Eastern Partnership countries (EaP). The EaP includes the countries of Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.

The globalisation of the world economy has caused huge challenges for trade and transnational transport services. The rapid growth of international trade calls for efficient transport links to serve the demands. In a European context, the EU enlargement and its related effect on the rapid growth of economies in the Baltic States make a modern transport network development necessary in the entire BSR. A harmonised backbone transport network supports the development of global transport corridors such as the East-West Transport Corridor (EWTC), connecting Europe and the BSR with the Black Sea, China and the Far East.

The transport networks of the EaP countries were mapped in this case to identify priority action areas for the public and private stakeholders representing the EU BSR and the EU EaP countries, to achieve a reduction of time and resources in transport operations, thus opening up new business opportunities further stimulating the trade exchange along the CNCs.

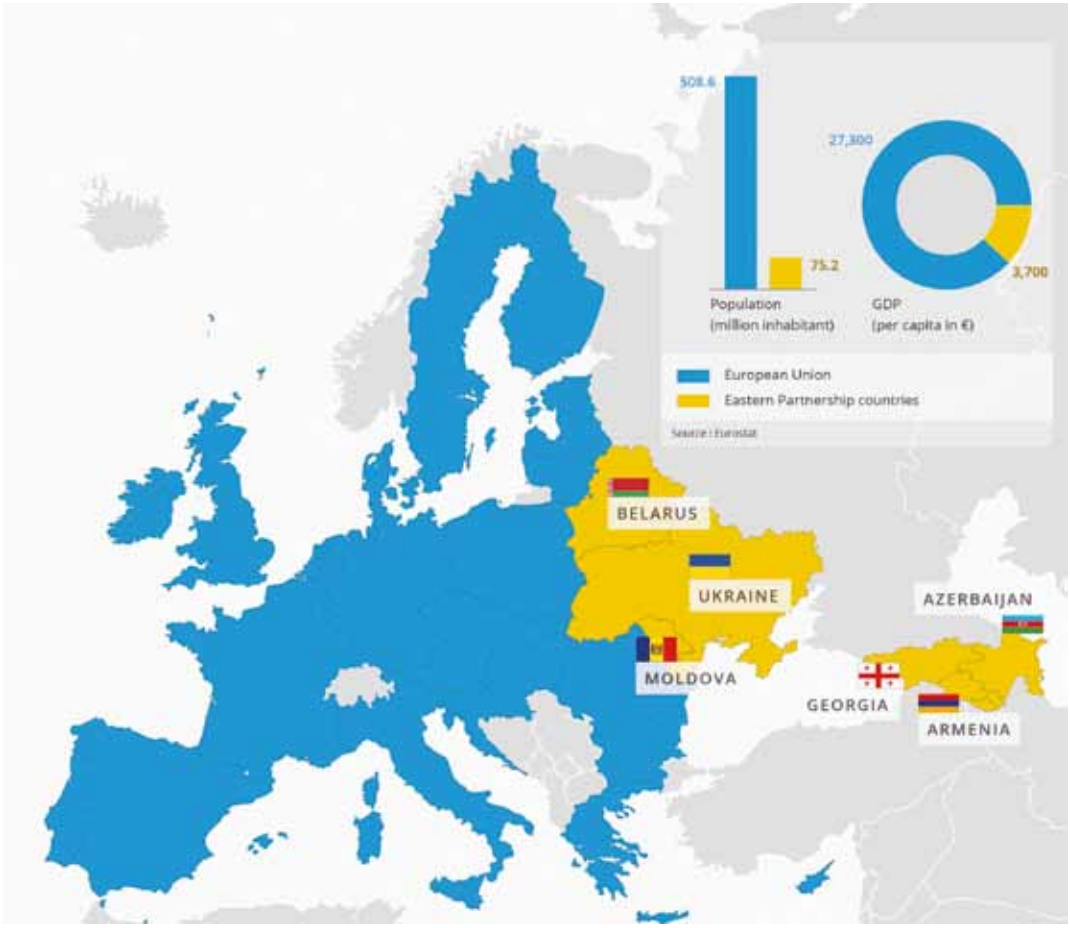


Fig. 11. EaP countries are shown in yellow (Source: Council of the European Union, 2017[19])

Main output

The main output was a 'Thematic study: Closer transport networks of the EU Eastern Partnership Countries.' The study delivers results of the mapping and assessment on the quality and interoperability between the CNCs and the transport networks of the six EU EaP countries, resulting in suggested measures for further harmonisation and interoperability.

The markets between the Black Sea and the BSR depend on the development of multimodal transport systems, supported by modern logistics facilities and services and are strongly focused on containerised cargo. Improved service quality is the most important indicator affecting synchromodality.[20] In that context, harmonisation of legal and operational rules, especially simplification of customs procedures, is crucial.

A strategic suggestion is to focus on strengthening the interoperability of the CNC nodes close to the borders. Improving competitiveness requires raising awareness of the private sector about new services and the current and planned infrastructure development. An improved cooperation platform was suggested to provide an interoperability model suitable for all stakeholders.

The EWTC Association works for further development in this directionand will encourage implementation of the results from this case.

[19] *Council of the European Union (2017).Infographic – Towards a stronger Eastern Partnership. Available at: https://www.consilium.europa.eu/en/infographics/towards-stronger-eastern-partnership/*

[20] *Synchromodalitymeans the optimisation of logistic chains through the efficient combination of transport modes, the allocation of freight to various modes according to available capacities, possible time and cost savings, including the re-planning of the transport and the booking of alternative capacities/modes in case of events, while alerting electronically supply chain partners about the changes.*

Stakeholder involvement

Broad stakeholder participation was accomplished through surveys, interviews and workshops:

- Public administration: EU level, international networks, national level, regional level, local level;
- Market: cargo owners, logistics companies, transport operators, infrastructure owners/managers;
- Community: NGOs, interest groups.

Generally, involvement in transnational interaction processes was indicated by the stakeholders to be of importance for the removal of political frictions. Most of the countries are aware of the benefits they can reap from attracting transit cargo flows through their territories, in terms of investments, employment and revenues. However, the transit needs to be supported by trade facilitation through international cooperation.

Identified challenges for stakeholder interaction

There is a lack of experience on how to connect the CNCs with transport networks of the EU neighbouring countries. Due to problems with streamlining the CNC implementation approaches with supply chain management models, there is a low uptake of the CNC policy instrument among the business players along Eurasian transport corridors. Continued and intensified cooperation between EU and EaP countries is needed to extend the operational and geographical range of the CNC and unlock business opportunities in the influenced areas.

Know-how solutions for stakeholder interaction

The following measures have been central in the macroregional case to support a successful stakeholder interaction:

Collaborate with existing networks

By interacting with the EWTC Association activities and its existing network of infrastructure and logistics stakeholders, the results from the case were broadly displayed. Stakeholders were informed about the current situation and the need for activity and investments to improve interoperability along a Eurasian transport corridor to facilitate trade exchange and revenue benefits.

Identify main factors influencing synchromodality

The service quality was identified as the most important and evidence-based factor for achieving synchromodality in a transport corridor. Synchromodal transport planning is intermodal transport planning with the possibility of real-time switching between the modes. Service quality consists of transport time, service and waiting time, handling time, working hours, reliability, frequency of service, cargo safety and security. Promotingservice quality – as a primary factor to be targeted for developing synchromodal transport solutions – supports activities in this direction.

Identified stakeholder actions to strengthen a successful CNC implementation

The actions below address the category of stakeholders considered as the main initiator.

Local and regional policymakers/transport planners

- Consider connections to the international transport corridor networks in local and regional transport planning, especially in border regions.

National and regional policy makers/transport planners

- Deliver, for the purpose of synchromodal development of transport services, an inventory of key bottlenecks in transport infrastructure, linking the trade origin/destination areas in the six EU EaP countries to the EU-BSR countries via the CNCs.

Business developers

- Identify major stakeholders involved in the transportation of passengers and the management of freight supply chains between the EU-BSR countries and EU EaP countries.
- Present ideas for new business opportunities stimulating the trade exchange between the EU-BSR countries and EU EaP countries based on the time reduction and fewer resources in transport operations.

European Coordinators

- Use this study as a showcase on how to improve the interoperability between the CNCs and the transport networks of neighbouring countries (the EaP countries) and to provide better access for companies to an enlarged transport market.

More information

More information on this showcase can be found in theTENTacle report available at: http://www.tentacle.eu/downloads/

- Closer transport/logistics market integration through interoperability between the TEN-T Core Network Corridors and the transport networksof the EU Eastern Partnership Countries – Main Output

4. Recommended policy and activity measures

In summary of the findings in the pilot cases,the cases in corridor extension areas, as well as of the outcomes of specific TENTacle analyses in WP5, the following recommendations are presented.

4.1 Supporting winners and losers

The analysis of the CNC implementation in TENTacle has given rise to additional and enhanced knowledge of the possible outcome of the strengthened transport market, following infrastructure expansion.

In general, the economy is expected to gain from lower transport costs, measured both in direct terms from shorter and faster transport and in terms of better accessibility both for passengers and freight transport. At the same time, new distribution patterns of wealth effects might become a reality – with winners and losers located in new geographical locations.

Public authorities on different geographical levels will be facing a new situation where enabling and supporting activities will have to be designed simultaneously. On the one hand, reaping the positive effects of better connectivity makes it necessary to support market and public sector actors with proper physical planning measures and actions as regards locations for new terminals and stations to be constructed. Housing policies might also have to be adjusted to a situation where housing will be demanded in new locations, e.g. in areas close to railwaystations.

The smooth functioning of intermodal shifts for both passenger and freight transportis another area where public sector actors have to be aware of major challenges ahead, e.g. connecting long-distance transport terminals to local public transport and distribution centres. Often these measures have extended lead times, while the planning activities have to be initiated at an early stage to avoid 'bridges to nowhere' situations.

Even if the economy at large is expected to grow at a faster pace than earlier, some regions might, instead of experiencing the positive effects, face a situationof major transport routes passing the area without a connection point, known as the 'tunnel effect.' Even if connectivity in distance or time has been increased, the perception might well be that the relative situation has been worsened. Here, countering measures might have to be implemented to support these areas with projects that can alleviate the reduced attractivity. This could be accomplished with supporting development in other than transport-related sectors of the economy.

Redistributive measures might have to be decided by the authorities to support households or business actors that are struck by adverse effects of the CNCs. Such policies would have to be based on thorough monitoring of the development in the different geographies, something that can be challenging. For the sake of cohesion, it might be of the highest priority to actually show that the diversity of all areas of a country is of importance for politics.

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

More specified activities in this relation have been analysed and recommended in the Impact analysis report. A summary of the most important measures will follow in the next section.

4.2 Recommended policy and action measures

The implementation of the CNCs aims to provide a resource-efficient European multimodal transport network. Through cross-border cooperation for harmonised and developed infrastructure, the CNCs should help improve cross-border interoperability and thereby to contribute to cohesion.

When considering suitable policy and action measures, it is important to be aware of the necessary balance between measures and structures that foster enhanced coordination and the need for adherence to regulation on competition. Not only is it that single business sector actors are in general less interested in revealing their internal business strategies;too close cooperation between competing firms may lead to breaching the competition regulation both on the EU and on the national level.

Monitor and analyse CNC implementation and the need for complementary development measures
Understanding the possible impact of the CNCs is crucial to clarify the policy response needed. Both the presumed negative and positive impactis important to analyse, monitor and follow continuously during and after the CNC implementation. A central part of that process is to examine changes in traffic flows at a regional and local level and needs for extension of the CNCs.

Support co-ownership, co-responsibility and co-creation
A vast number of private and public stakeholders are operating in different geographies of the CNCs (within the corridor or further away from the corridor). These stakeholders have diverse responsibilities in the implementation process, as well as diverse possibilities to utilise the CNCs. To enhance and capitalise on the CNC implementation, stakeholders should be involved in the process as its co-owners, with a role allowing to steer and influence the directions and outcomes. Such a joint process provides opportunities for creative solutions with added value for the stakeholders, where single stakeholders would not manage on their own. For example, in some countries re-balancing of the national, regional and local ownership of ports and terminals could be an option. It is generally challenging to attract interest from business stakeholders to be involved in these processes. Focusing on stakeholder benefits when designing collaborative structures for public, business, and other stakeholders is crucial for attracting interest. In this joint process, public policy measures are required to accomplish these settings for co-ownership, co-responsibility, and co-creation.

The results of impact analyses should be communicated to raise awareness of these impacts, both in general and related to specific stakeholder groups. Such information exchange is fundamentalas a basis for stakeholder activities. Building stakeholder networks and facilitating auxiliary platforms or forums for joint activities should be promoted at the international, national or regional/local scale. Structures with a certain continuity, such as EGTCs,are an example of a corridor governance body for such regular exchange. The organised macro-regional idea labs serve as another example.

Enhance positive and mitigate negative effects
Stemming from the impact analyses and the stakeholder cooperation are measures that need to be planned and effectuated to strengthen positive impacts as well as alleviate negative consequences of the CNCs. For this purpose, an action plan or cooperation strategy can serve as an instrument for the agreement and prioritisation of shared-measures between the involved stakeholders. Alignment between regional/local, national and cross-border dimensions of activities for sustainable transport and logistics needs to be supported.

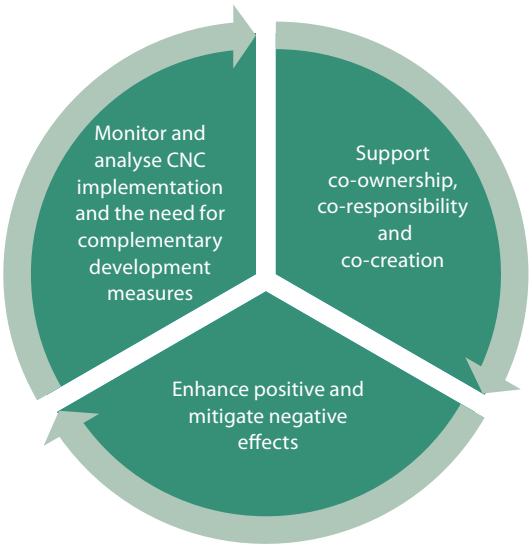


Fig. 12. Recommended policy and action measures.

4.3 Recommended policy and action measures by stakeholder

The following governance measures are recommended to strengthen the outcome of the CNC implementation, presented by the main responsible stakeholder category and the geographical reference level. For all stakeholders, it is recommended to keep an open mind for new cooperation and collaboration opportunities.

4.3.1 European level authorities

The term 'European level authorities' denotes the European Commission, in particular, DGMOVE and DGREGIO with related agencies.

Monitor and analyse CNC implementation and the need for complementary development measures

- Analyse how the CNCs contribute to the strengthened economic, social and territorial cohesion of the BSR through, inter alia, accessibility and connectivity of all regions, including the areas located outside the current delineation of the corridors.
- Propose, in a dialogue with the national, regional and local level stakeholders, extensions to the corridors by 1) integrating relevant Motorway of the Sea links in the core network corridors on land and 2) provide necessary land extensions, to create a coherent core transport system. (e.g.the Gdynia – Karlskrona connection as emphasised in both the Gdynia case presented in section 3.2.3 and the Blekinge case presented in section 3.3.1).
- Promote a harmonised planning approach to the cross-border infrastructure investments on the core network corridors between the involved Member States based on, among all, outcomes of Interreg projects.

Support co-ownership, co-responsibility and co-creation

- Encourage bottom-up corridor governance initiatives with a focus on engaging business sector stakeholders (in particular, freight owners and forwarders) in dialogue with the local, regional and national authorities on the CNCs implementation.
- Support the European Coordinators in a continuous stakeholder interaction along the CNCs and consider mechanisms to include in this interaction the public and market players operating in the areas located farther away from the CNCs.

Enhance positive and mitigate negative effects

- Examine and possibly introduce measures in the EU regional policy to address job creation,

competitiveness, economic growth, improved quality of life and sustainable development of the geographical areas which may see disadvantageous effects of the infrastructure investments on the CNCs.
- Encourage the European Coordinators to use the outcomes of this project as showcases for complementary policy measures and stakeholder activities to enhance and support the CNC implementation and extensions in diverse geographies.

4.3.2 National level authorities

The stakeholders considered in this group represent government authorities responsible for, e.g. transport policy and administration, labour market and economic growth.

Monitor and analyse CNC implementation and the need for complementary development measures
- Evaluate the transport network capacity regarding effects of rerouting of transport flows, modal shifts and extended transport volumes as a result of the CNC implementation. This serves as a base to plan additional investment measures should the volumes be too excessive to be accommodated in the current network.
- Monitor the economic development changes influenced by the CNCs across the corridor node areas as well as the catchment and void areas and whenever seen as necessary and appropriate.
- Evaluate the need for an extended CNC network, both within the BSR, within the EU and between the EU and the neighbouring countries, in a dialogue with European, national, regional and local level stakeholders, based on mapping of key infrastructure and transport service bottlenecks.

Support co-ownership, co-responsibility and co-creation
- Consider facilitating and/or supporting complementary governance organisations to help the public and market stakeholders benefit from the completed corridor investments through cross-border or transactional cooperation.
- Promote a better understanding of the CNC implementation process for local and regional growth.

Enhance positive and mitigate negative effects
- Plan for functional connections (i.e. road/rail access infrastructure feeding the traffic to the corridor nodes to the CNCs) at a national level to connect corridor catchment and void areas to the corridorsand encourage regional and local stakeholders to plan functional connections to the CNCs. Consider alternative financing.
- Strengthen positive impacts of the completed corridor investmentsand complementary actions, removing any major cross-border obstacles for regional integration (e.g. between Malmo/Lund and Copenhagen, which would benefit growth processes in the larger area of western Scania in Sweden).
- Consider distributional policies, such as subsidies, tax policy measures or growth initiatives, for:
  a) the corridor transit areas (if exposed to any possible tunnel effect),
  b) the corridor void areas, if there is a need for counteracting the polarisation effects accelerated by the corridor investments, and
  c) a possible socio-economic decline threat in the more distant rural areas (e.g. Jutland in Denmark and eastern parts of the three Baltic States).
- Promote missing links or need for extension of the CNCs.
- Plan harmonised connections to transport networks outside the EU.
- Investigate operational solutions for new transport technologies (e.g. autonomous trucks), organisation of transport services and alternative fuel infrastructure.

4.3.3 Regional/local level authorities

This group of stakeholders consists of regional and local planning authorities and public transport authorities.

Analyse and monitor impacts and need for development
- Evaluate the transport network capacity regarding effects of rerouting of transport flows, modal shifts and extended transport volumes as a result of the CNCs. This serves as a basis to provide investment measures should the volumes be too excessive to be accommodated in the current network.

- Monitor the growth in population triggered by the relocation of the labour force to the corridor node areas and the resulting alignment of labour demand and labour supply, to provide necessary measures, e.g. in availing plots for housing projects and logistics operations.
- Monitor the labour market and business development situation in the corridor catchment areas to mitigate any larger depopulation and relocation processes that might occur due to the completed corridor investments.
- Explore development opportunities stemming from the CNC implementation.
- Evaluate the need for an extended CNC network, both within the BSR, the EU and between the EU and the neighbouring countries, in a dialogue with European, national, regional and local level stakeholders, based on mapping of key infrastructure and transport service bottlenecks.

Support co-ownership, co-responsibility and co-creation

- Consider facilitating and/or supporting complementary governance organisations on the corridor to help the public and market stakeholders benefit from the completed investments through cross-border or transactional cooperation.
- Facilitate cooperation between manufacturing, transport and logistics companies in the area for enhanced opportunities for joint logistic solutions.
- Promote a better understanding of the CNC implementation process for local and regional growth.
- Mobilise public and market stakeholders for coordinated action to alleviate the predicted negative impacts of the completed corridor investments, e.g. by organising cooperation across the administrative borders and sectors to improve the access to the corridor nodes, integrate public transport services and connect the local industries to international networks.
- Support new business opportunities for an extended CNC network, within and outside Europe.

Enhance positive and mitigate negative effects

- Consider preparing positioning strategies for the cities and towns whose competitive situation is predicted to change, either positively or negatively, due to the completed corridor investments. Connect goals for growth, accessibility, intermodality, interoperability and sustainable urban mobility in the development of strategies.
- Promote an international harmonising perspective in local and regional transport planning, especially in the border regions.
- Provide transport investments for supporting infrastructure to the CNCs, and align CNC implementation directions in national, local and regional plans. Consider alternative financing.
- Prepare supportive, sustainable socio-economic growth measures for the corridor transit areas that might suffer from a relatively lower accessibility and – in consequence – face relocation processes.
- Provide guidance to potential investors for their decisions to expand or start businesses through land-use management of sites for location and logistic centres.
- Encourage, in the development of transport corridors, ITS (Intelligent Transport System) and innovative solutions in traffic management, organisation of transport services, and infrastructure for alternative fuels and electric road systems.
- Further the development of statistical data to monitor the performance of corridor urban nodes and logistics centres. Alleviate missing links and promote extension of the CNCs.

4.3.4 Transport market stakeholders

This stakeholder group consists of business stakeholders in the transport and logistics area, e.g. cargo owners and freight and passenger transport operators.

Analyse and monitor impacts and need for development

- Analyse market opportunities, optimised business models, and logistic chains in the impact area of the CNC implementation.
- Analyse modal shift opportunities, in dialogue with national, regional and local level authorities.
- Analyse market perspectives and customer needs to potentially find alternative market niches for services negatively affected by the completed corridor investments, e.g. ferry operations in the south-western part of the Baltic Sea or airports losing passengers to now better accessible hubs.

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

Support co-ownership, co-responsibility and co-creation

- Consider setting up or joining complementary governance organisations on the corridor to receive information about the implementation process, influence the corridor implementation measures and benefit from the completed investments through cross-border or transnational cooperation.
- Intensify business contacts along the corridor, and in the corridor extensions within and outside of Europe.

Enhance positive and mitigate negative effects

- Prepare adaptation strategies to the completed corridor investments, with new opportunities for planning and managing the intermodal supply chains resulting, e.g. from shorter delivery times, better capacity and interoperability between transport networks and between transport modes; this also includes opportunities related tobetter access to intercontinental markets.
- Consider investments in the network of logistics centres located at the corridor hubs.
- Provide adequate train capacity for serving commuting traffic in the labour markets now extended due to the completed corridor investments.
- Promote missing links or the need for extension of the CNC network, both within the BSR, EU and towards EU neighbouring countries.

5. Implementing the policy and action recommendations

5.1 Long-term and durable implementation

The TENTacle project was initiated to achieve long-lasting results in the community of stakeholders affected by and involved in the implementation of TEN-T core network corridors. Compliant with the requirements of the Interreg Baltic Sea Region Programme, the project addressed certain drawbacks in the capacity of public and market sector players to fully exploit the CNCs benefits for prosperity, sustainable growth and territorial cohesion. Such drawbacks are attributed to the low awareness of roles and responsibilities in the governance of the CNCs, the understanding of both the positive and the negative socio-economic and territorial impacts generated by corridor investments, and the ability to plan adequate public policy measures and business strategies in response to them (cf. Chapter 1.3).

Thus, to achieve the capacity change in a wider BSR community of public and market sector stakeholders, it is not enough that the policy and action recommendations on how to capitalise on the TEN-T core network corridors are understandable, attractive and applicable in various development contexts. They should also be co-created in the stakeholder interaction process, so they are finely-tuned to the specific interests and expectations.

In the TENTacle showcases such a stakeholder interaction process was carried out, with the support of think-tanks of experts and practitioners, to connect representatives of public administration (national, regional and local) and business companies. Having mobilised a multi-stakeholder and cross-sectoral ecosystem of relevant players in the specific geographical areas, the TENTacle showcases successfully delivered the action-oriented reports (final outputs) and negotiated the long-term use of findings. For the latter, whenever feasible, the takeover stage was organised, with a designated organisation, often recruited from the project associated partners, given responsibility for formal approval of the showcase outcomes and for inserting them in a binding document (e.g. action plan).

The TENTacle ambition is to achieve a capacity change also at the macroregional level (geographical scale of the Baltic Sea Region) where a vast number of intergovernmental networks are active in responding with joint action to the development challenges shared across the administrative borders. The list below identifies some potential user networks that could take up and further process the policy and action recommendations:

- EUSBSR PA Transport Coordination Group – gathering international cooperation officers from the national transport ministries of the EU-BSR countries;
- CMPR Baltic Sea Commission – with politicians and civil servants representing peripheral maritime regions in the BSR and providing a wider outreach of the TENTacle outcomes through regions in the other geographical commissions of the CPMR;

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

- BSSSC (Baltic Sea States Subregional Co-operation) – grouping politicians and civil servants representing member regions in the BSR;
- VASAB – featuring representatives of the national ministries responsible for spatial planning and development of the BSR countries (including Russia and Belarus);
- BPO (Baltic Ports Organization) – with port authority executives dealing with port development issues, including Motorways of the Sea and CEF funding.

Through the regularly arranged exchanges with those organisations via the WP5 thematic seminars and the Advisory Board function, the TENTacle project provides a basis for future political statements, position papers and policy proposals to be put on action agendas. Thereby, it contributes to the expanded knowledge on the consequences induced by the CNCs implementation in a broader territory than just the geographically limited showcases with which the project worked.

5.2 Managing the capacity change

The commitment of policy and business actors to the implementation of the policy and action recommendations presented in this final report is crucial for accomplishing the TENTacle objective in the long run. However, as experience shows, several action plans, strategies or programmes developed in the past by public authorities at all governance levels have, for various reasons, not become successful. The reasons stem from insufficient human and financial resources for pursuing the agreed activities, an unclear designation of roles and responsibilities, shortage of monitoring frameworks for following up the aims and targets of the cooperation – to the lack of political ownership, limited involvement and awareness among the users of transport infrastructure and services.

Similar challenges stand ahead of this final report. Despite long-lasting and intensive cooperation over the national borders around the Baltic Sea, only limited experience has been accumulated on how to absorb inputs from the joint transnational and cross-border projects in the national and regional transport planning procedures. No mechanisms have been created for the jointly prepared strategic documents to embed them in political and administrative structures and – thereby – to avoid revisiting of the initiatives in effect of new political elections or organisational changes.
In that context, assessment of how successful the TENTacle project has become with achieving the capacity change requires a proper monitoring and evaluation scheme at the macroregional level. Such a change is seldom measured and evaluated ex-post in Interreg projects. In consequence, the next generation of projects tends to start from nearly the same point as their forerunners.

The progress in implementing the proposed policy and action recommendations shall therefore preferably be regularly monitored, based on the information gathered, processed and reported. One possible option is a dispersed responsibility with, overall, no single authority to periodically evaluate the extent to which the policy and action recommendations have been pursued. This option would entail work being divided along the thematic or sectoral competencies of the committed organisations. Another option would be that a specific intergovernmental network performs that function, with assignments ranging from analysing and assessing implementation constraints to steering mechanisms for the proposed solutions. These could be devised through progress evaluation approaches such as seminars for showcasing the solutions and platforms for consequent policy and action agreements.

Such an overarching role in managing and monitoring the capacity change could, potentially, be assumed by the Coordination Group of EUSBSR PA Transport in the recently (March 2019) planned and process-driven flagship. Assisted by the BSR ACCESS project platform and supplementary thematic work embracing Action 1 in the EUSBSR Action Plan ('Capitalise on the TEN-T core network corridors for better connectivity, accessibility and cohesion'), the Coordination Group could be well endowed to promote CNCs opportunities in the whole BSR and for its different geographical territories, with the help of the policy and action recommendations included in this report. This would, though, have to be based on a firm commitment from the national governments to support and further the actions carried out by the Coordination Group.

5.3 Corridor governance processes as a follow-up to TENTacle

Governance structures and processes with a cross-border corridor approach supportfurther transnational co-operation and harmonisation. An example is the European Grouping of Territorial Cooperation (EGTC), which entails a governance structure with a certain continuity covering a significant part of a transport corridor. This type of structure is used by the TENTacle Westpomerania-Skåne case to implement a part of the outcomes. Another example is cross-border idea labs with corridor geography as arranged by European Coordinators.

Following this project, further governance initiatives for strengthening cross-border cooperation are being planned. One example is the ongoing BSR ACCESS project, co-funded by the Interreg BSR Programme, which provides a platform for building synergies between projects and initiatives on transport interoperability in the BSR. Results from the TENTacle project are actively utilised in this platform, together with a number of other project initiatives.

Further, the results from this project can be considered as first guidelines in developing a process-driven flagship project in the BSR: 'BSR transport links with the third countries.'

In these initiatives, the difficulty of aligning stakeholders in local and regional levels with national and European levels will be challenged through careful planning for interaction.

REGION BLEKINGE
Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

TENTacle

Scan me

www.tentacle.eu