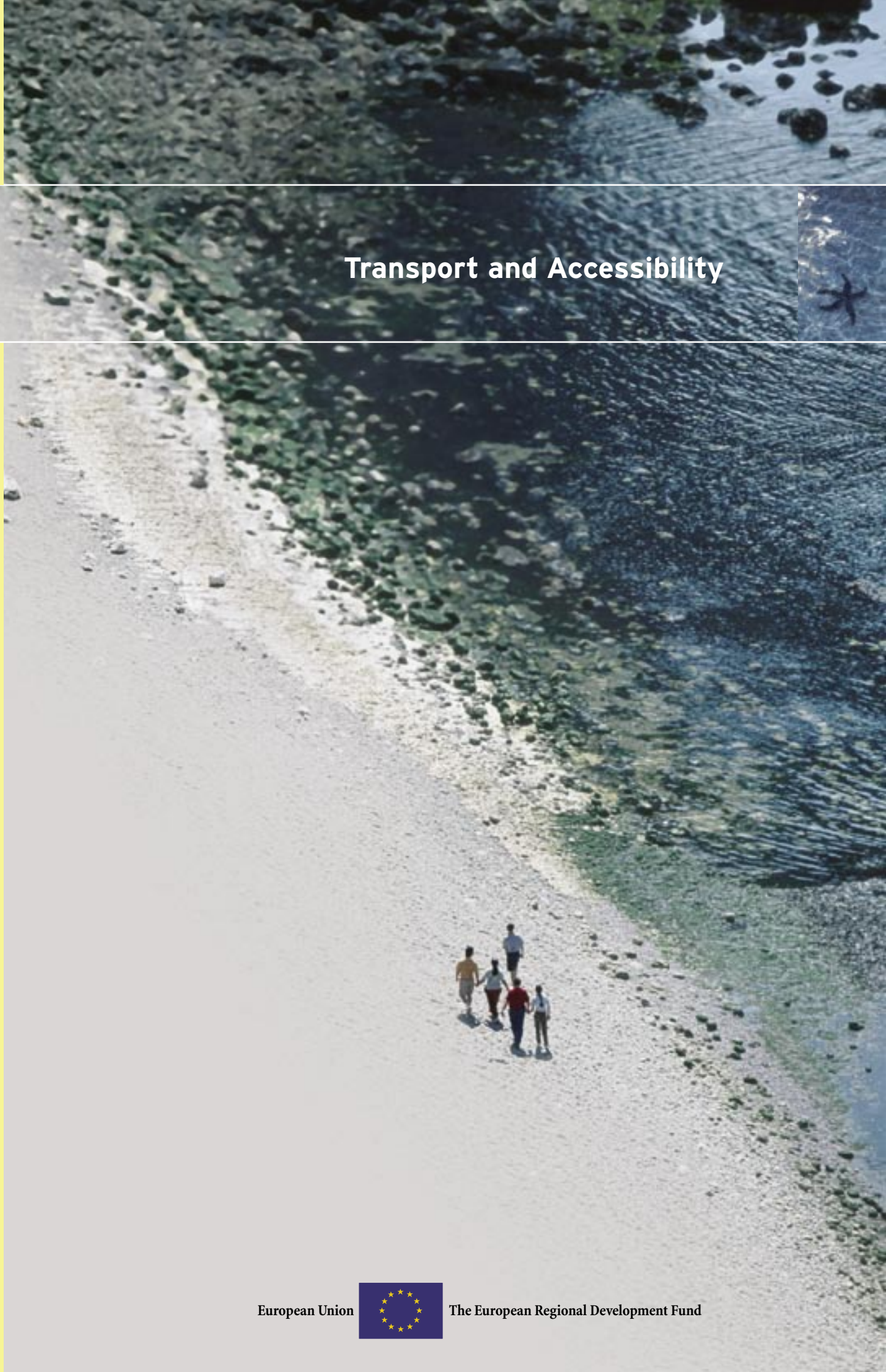
Transport and Accessibility



Towards a New Spatial Agenda for the North Sea Region

European Union The European Regional Development Fund

Transport and Accessibility

Towards a New Spatial Agenda for the North Sea Region

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TOWARDS A NEW SPATIAL AGENDA FOR THE NORTH SEA REGION

Between 1998 and 2001, a spatial vision for the North Sea Region was developed, based on the principles of the European Spatial Development Perspective (ESDP). NorVision, as it was called, is a key advisory document, which has strongly influenced territorial cooperation in the North Sea Region. It describes the existing state of spatial development and suggests directions for the future. Projects that have been developed under INTERREG IIIB NSR put many of them into practice

In mid 2004 the Programme Monitoring Committee for the Interreg IIIB North Sea Programme decided that there should be a selective update to NorVision to have valuable strategic input for the future cooperation in North Sea Region. They agreed that the original NorVision document continues to be relevant and should not be evaluated or reworked. The new spatial agenda, as is has become known, should focus on issues, which have become more urgent or important in recent years or which have not been thoroughly addressed in the original document.

A Working Group consisting of one national and one regional representative per country was set up and discussed the procedure and topics to be addressed. The idea was not to have a complete analysis of the subject concerned, but to develop a more focused approach, which could be used to inform the future programme and which might form the basis for future co-operation projects until 2010. The working group agreed upon the following topics for which studies were carried out:

- Coastal Water Management
- Transport and Accessibility
- Facilitating Innovation and transfer of knowledge and technology
- Energy*
- Demographic Change*

* Energy and Demographic Change were smaller studies than the other three

This is the final report for the study on **Transport and Accessibility**

The findings of these five studies have been summarised and make up part of the **synthesis report**, which will be adopted by the Programming Monitoring Committee and published together with each of the final reports. The synthesis document sits alongside and complements the original Norvison document.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Main Transport and Accessibility (T&A) challenges for the North Sea Region (NSR) until 2010:

- Managing transport growth through optimization of available transport capacity of all modes and their infrastructure plus targeted expansion of infrastructure;
- Delivering improved sustainability through curbing and directing of transport activity and improving the environmental performance of transport activity;
- Fostering territorial cohesion, integration and equity through the improvement of accessibility and connectivity of all areas vis-à-vis overarching transport systems.

Main fields of actions that should consequently be addressed in a new INTERREG programme:

A: The development of efficient transport systems in view of changing market conditions, meaning:

A.1 The creation of integrated and lean freight transport systems

A.2 Ensuring high-level passenger mobility with limited potential to enlarge road capacity

B: Reduction of environmental impacts and other risks related to transport activity, via:

B.1 Modal shifts to more environment-friendly transport modes

B.2 Reduction of environmental impacts and risks associated with transport

B.3 Establishment of common level playing field conditions, in order to allocate transport activity to the optimal (combination of) mode(s)

B.4 Compatibility of transport activity with other societal and user functions and sectors

C: Supporting regional development, integration and equal regional chances via accessibility works and services, via:

C.1 Responding to and supporting further internationalisation tendencies within and beyond the NSR

C.2 Further integration of peripheral regions into overarching transport and geo-economical development schemes

C.3 Improvement of inter-urban communications for dynamic development of cities, city clusters, metropolitan areas and neighbouring agglomerations

C.4 An integrated perspective on conceiving T&A infrastructure and services, regional development and spatial planning

The role that Hinterland connections (can/ought to) play with regard to the challenges at play:

Hinterland connections are essential for the integration of short sea shipping in the logistical chain, and for the realisation of the land-sea corridors.

Furthermore, Hinterland connections –especially via rail and inland waterways- are increasingly vital to circumvent congestion problems in around main ports caused by heavily growing cargo volumes.

The relationship between peripherality and regional development and how to deal with it via INTERREG:

The relation between peripherality and economic development is unclear. The often-assumed negative impact is not supported by empirical evidence and by economic analysis.

Nevertheless, as long as particular cases (certain areas) can benefit from better communications and objectively suffer from disadvantageous infrastructure links to metropolitan areas, such situations merit remediation.

The opportunities for environmentally sounder transport:

There remains a large potential for modal shift to as well as for improving the environmental performance of alternative transport modes.

Accompanying demand management practices and pricing measures can also be considered.

The relationship between congestion and regional development and accessibility:

As with peripherality, the negative impact of congestion on competitiveness is unclear. Such an impact is often claimed, but it is difficult to find scientific evidence. Congestion is, to some extent, a price that is willingly paid to benefit from the economies of agglomeration.

Nevertheless, this cannot be used as an argument to follow “laissez faire, laissez passer” policies. As economic damages due to longer and unreliable journey times are huge.

Traffic management programmes and modal shift policies to influence transport behaviour are just two of the possible measures that can be implemented in this respect.

How to adress efficiency, environmental concerns and equity:

There are only few measures that favour all three objectives simultaneously, or which do not result in reaching one objective at the cost of the other objectives. Examples are:

- measures to improve or to promote intermodal transport (in particular short sea shipping and river-sea transport in the context of the NSR);
- measures that address improved seaport-hinterland connections;
- networks and co-operations to exchange information and experience on best practices (as in Econet), also among different public and private transport actors.

What is the particular benefit of INTERREG in meeting contemporary transport and accessibility (T&A) challenges:

Trans-national and cross-border (“territorial”) co-operation are the only option to achieve a trans-national coordination of spatial and transport policy. INTERREG is the only formal programme in which such co-operation can be established.

How can currently less involved, but vital, actors become more engaged:

More permeable borders should be applied when it comes to conceiving projects and inclusion of project partners: both in a public-private sense and in a NSR-not NSR sense.

To make INTERREG participation more attractive to especially national (policy) organizations, user groups and private actors, it is recommended to reduce the administrative burden of project participation, to offer guidance to writing project proposals and to stimulate organizations currently active in INTERREG projects to involve the indicated (less involved) organizations for their projects. Furthermore, it is important that organizations are able to recover (part of) the costs involved in participation.

Furthermore, in case there are legal barriers preventing currently uninvolved actors from participating in INTERREG projects, then these should of course be taken away.

Finally, as INTERREG pursues (partly) the same objectives as e.g. a Community Programme like Marco Polo and Community Plans like TEN-T and MOS, it seems recommendable to determine to what extent these programmes and plans can increase their mutual complementarities and synergies while avoiding redundancies between them. A streamlining of programmes (and their objectives) that are either conceived from a transport perspective (like the ones under responsibility of DG TREN) or from a spatial planning perspective (like INTERREG and others under the responsibility of DG REGIO) seems worthwhile.

The role of the private sector with regard to TEN-T and MOS in the NSR:

Private sector involvement is evident and essential, since transport decisions are ultimately made by private actors (shippers, travellers,…).

But their involvement can only be assured if projects offer e.g. clear business benefits and do not cause significant extra work and expenses.

The private sector should/can play an important role with regard to TEN-T and MOS-related transport services and construction and financing tasks around infrastructure and superstructure. The question is not so much whether there is a role for the private sector to be played here (there clearly is), but rather: under which programme their participation should be invoked (see also previous topic). I.e.: Firstly, which projects (infrastructures, services, etc.) should/can be realized under INTERREG, under Marco Polo or under specific TEN-T and MOS plans? Secondly, which of these projects should be realized with help from the private sector?

Valuable activities/investments to undertake:

Potential project issues A.1 Towards integrated freight transport systems

Co-operative transnational (“territorial”) development of multi-modal transport chains and missing links in terms of infrastructure and superstructure as the underlying backbone (see the railway plans Hamburg-Stockholm and the plans for Zuiderzeelijn (NL) via HST or Trans EURORAPID Network/magnetic levitation (Maglev) railway technology)

Design (transnational) location incentives to establish transport-sensitive business at multimodally

Strengthening of selected secondary sea ports with a potential to relieve major ports as supporters of cross-North Sea maritime transport

Promotion of river-sea shipping, e.g. from Ruhr area to the U.K. and to Baltic Sea countries, from UK to Benelux and to France through INTERREGional co-operation

Promote dedicated transnational freight train connections with improved inter-operability and inter-modal integration and of new railway services with new operators in a liberalised market

Set up marketing and other forms of co-operation between logistic centres and transport organizations within the NSR and between the NSR and the BSR

Promotion of regular circuits between (existing) multimodal transhipment points (coastal and non-coastal)

Extend the INTERREG IIIB/NWE project Inter Ports Promotion Net to the North Sea (co-operation among sea ports and inland ports of different countries for enhanced waterborne seaports' hinterland transport)

Potential project issues A.2 High-level passenger mobility with limited potential to enlarge road capacities

Promotion of enhanced inter-city train connections beyond the established pan-European corridors: new railway services with new operators in a liberalised market: inter-city and cross-border

Inter-modal integration of airports, particularly setting up light rail and bus connections, notably for the sake of accessibility of smaller airports

Set up and exchange experiences on alternative travel projects with regard to home-office and home-school traffic

Transport surveys for international passengers in all transport modes

Potential project issues B.1 Modal shift to more environmental-friendly transport modes

Develop North Sea-linked MOS including complete transport chains from origins to destinations in the port Hinterland and secondary MOS across the NSR

Promote dedicated transnational freight railway routes through co-operation among national railway companies and regional authorities

Promote 'secondary' high-speed railways (possibly with lower speed than on major high-speed links, but faster than at present), also for passenger transport services; that are not part respectively have a low priority in national (federal) transport network plans or in TEN-Ts

Potential project issues B.2 Reduction of environmental impacts and risks associated with transport

Co-operative development of strategies for risk management (risk reduction; disaster response) with new approaches to co-operation between environmental authorities, ports, transport providers and industry

Reduce the risks involved in hazardous goods transport including the transfer of goods in open water.

Reduce emissions and other external effects of transport activity by all modes f.i. by imposing progressive tolerance levels

Potential project issues B.3 Establishing common level playing field conditions

Eliminate competition distortion between airports

Come to similar interpretation and implementation of the European Air and Water Quality Framework Directive

Potential project issues B.4 Towards compatibility with other societal and user functions and sectors

Determine and manage T&A impacts of tourism and leisure activities

Potential project issues C.1 Response and support to further internationalization within and beyond the NSR

Develop North Sea-linked MOS including complete transport chains from origins to destinations in the port Hinterland and secondary MOS across the NSR. In the same sense: develop rail freight links to and from gateways.

Set up marketing and other forms of co-operation between logistic centres and transport organizations within the NSR and between the NSR and. the BSR

Setting up long distance travelling services for cargo and passengers (see the railway plans Hamburg-Stockholm and the plans for Zuiderzeelijn (NL) via HST or Trans EURORAPID Network/magnetic levitation (Maglev) railway technology). In addition, there may be potential for supplementary railway services that connect to Chunnel passings.

Development of cross-border urban clusters sharing functions and forming one integrated labour market

Potential project issues C.2 Further integration of peripheral regions into social and economic progress

Promotion of T&A projects that are not part of, or have a low priority in the national (federal) transport network plans or TEN-T, demonstrating their regional and transnational benefits

Development and implementation of concepts for sustainable INTERREGional mobility in areas with low population density

Potential project issues C.3 Improved inter-urban communications for dynamic development of cities, city clusters, metropolitan areas and neighbouring agglomerations

Explore light rail and bus possibilities across borders

Development and implementation of inter-city public transport concepts

Potential project issues C.4 Integrate infrastructure with regional development and spatial planning

Develop transnationally harmonised methods to prove the transnational significance of infrastructure projects such as the coast-parallel road/ rail link Netherlands - Northern Germany

Joint execution of (methodologically harmonised) regional (economic and environmental) impact assessment for improved transnational transport links, by regions in different countries served by these links (particularly relevant for links not in the focus of EU TEN-T concepts)

Develop local/regional development action plans, transnationally coordinated, complementary to envisaged improved transnational transport links

1. INTRODUCTION

The present document reports on the findings and recommendations with regard to the assignment “Updating NorVision” Study 2 – Transport and Accessibility, issued by the INTERREG North Sea Programme Secretariat.[1]

Throughout the year 2005 this assignment was carried out by Planco (Germany), Tetraplan (Denmark), Sinclair Knight Merz (United Kingdom) and by Resource Analysis (Belgium). The latter acted as consortium leader.[2]

It had the following objectives: To update the NorVision document with regard to the Transport and Accessibility theme and provide valuable strategic input for the new programming period in case a new North Sea Programme will be established in the next structural funds period.

To provide such inputs, first of all the trends and challenges with regard to Transport and Accessibility that have emerged or whose state of urgency and importance strengthened in recent years were mapped. These could be issues that were not (thoroughly) addressed in the original NorVision document, as well as issues that were already on NorVisions radar, but which became more urgent or important to address in the mean time.

Besides mapping the trends and challenges with which T&A in the NSR will be confronted with in the near future, it has been requested to give recommendations regarding the kind of project initiatives and policy actions INTERREG resources should support. Such initiatives and actions should contribute to coping with the trends and challenges T&A will be exposed to in the NSR. Similarly, they should comply with generic eligibility criteria for INTERREG support, like transnationality, spatial development, cross-sectorality and sustainability.

[1] NorVision refers to a key advisory document on spatial policy in the NSR that was drawn up in the year 2000. It described the existing state of spatial development and suggested directions for future.

[2] For more information on the contracted consultants, we refer to: www.planco.de , www.tetraplan.dk , www.skmconsulting.com and www.resource.be .

2. READER'S GUIDE

The present document has the following structure.

First, we dwell on the methodology that was followed in order to provide the inputs for the present draft version of the final report on "Updating NorVision" Study 2 – Transport and Accessibility. This is done under Chapter 3.

Secondly, we dwell on the background of this report and the assignment behind it (Chapter 4).

Then, we provide an introduction to the policy theme that is key to the updating exercise in question, namely "transport and accessibility" (Chapter 5).

Afterwards, we present an overview of main trends and challenges to which Transport and Accessibility in the North Sea Region is/becomes exposed (Chapter 6).

The next part addresses answers to further questions of the TOR on the "Updating NorVision" Study 2 – Transport and Accessibility assignment (Chapter 7).

This will be followed by a structured overview of project suggestions on how to cope with the future context of Transport and Accessibility in the North Sea Region (Chapter 8).

Finally, we draw conclusions with regard to the questions posed in the TOR and we forward policy and project recommendations (Chapter 9).

The report is completed by a series of Appendices. On the one hand, appendices on literature and stakeholders consulted throughout the process that led to the present draft version of the final report on "Updating NorVision" Study 2 – Transport and Accessibility. On the other hand, appendices on the most relevant trends and challenges for T&A, from a spatial planning perspective, and a long list of project ideas on how to deal with these trends and challenges from an NSR INTERREG point-of-view.

3. METHODOLOGY

The realization of the present draft version of the final report on “Updating NorVision” Study 2 – Transport and Accessibility came about via the following steps and activities.

In order to identify the most urgent and relevant challenges regarding T&A as well as initial suggestions to deal with them, we started of with targeted desk research.

For this purpose, relevant policy documents, project and investment plans from international (EU and INTERREG), national and regional levels, as well as research papers dealing with T&A, were screened. A complete list of the reviewed documents can be found under the Appendices.

The outcome of the literature review provided the basis for subsequent opinion inventory activities in all 7 NSR member states. These opinion inventory activities allowed detecting the T&A trends and themes that are of priority concern on behalf of field level actors. They also served to sound after acceptable and feasible project suggestions in response to the different trends and challenges.

Round table meetings for actor consultation were set up in Flanders (Belgium), Denmark, United Kingdom, Germany, the Netherlands, Sweden and Norway. An overview of the workshop venues and attendance can be found under the Appendices.

As such, the literature findings became exposed to a targeted audience via the different round table meetings, which resulted in extensive on-site and ex post feedback. Together, this served to draw up an interim report, which was submitted to the Vision Working Group of the INTERREG North Sea Region. The discussion of the interim report by the Vision Working Group resulted in a first set of instructions for elaborating the present draft version of the final report. Presenting the interim report at the Annual North Sea Conference, both via on-site and ex post feedback led to further suggestions regarding the elaboration of the present draft version of the final report.

In the following months, under the guidance of the members of the Vision Working Group, a consultation process of this draft final report took place. Feedback from that process was finally used to come to an endorsed final report.

4. PROJECT BACKGROUND

In recent years, the North Sea Region (hereafter: NSR) has witnessed the emergence or strengthening of several policy, business and geo-economical processes and societal concerns with an impact on the spatial planning requirements and challenges for this region.

Examples are globalization trends, the expansion of the EU, the move towards a knowledge-based economy, the increased sensitivity for risks of maritime transport and the growing interest in Short Sea Shipping.

As regards the international planning and policy context for a NSR-specific spatial vision, e.g. the following additional points of reference and frameworks have emerged. Next to the European Spatial Development Perspective, as a main corner stone, there are the Lisbon/Gothenburg strategy, the EU White Paper on Transport Policy, the Kyoto protocol, the implementation of the Water Framework Directive, EU legislation on air and water quality, the revised guidelines for Trans-European Networks, the Green Paper on Ports and the European Maritime Strategy including concepts like the Motorways of the Sea. Finally, there are the new spatial concepts of territorial cohesion and territorial co-operation (see e.g. the cohesion policy reforms the EC adopted on 14 July 2004 and the outcomes from the EU informal ministerial meeting on territorial cohesion in Rotterdam, 29th of November 2004).

In addition, the NSR as an INTERREG territory itself also underwent a change. Currently, it is larger than it was when the NorVision document was elaborated and it now includes the complete ARA-range of ports (Amsterdam-Rotterdam-Antwerp). This also calls for an updated view on how to bring about spatial coordination throughout (and beyond) the region.

In view of these territorial, policy, business, geo-economical and societal developments, the Programme Monitoring Committee of the NSR felt the desire to update the spatial vision for the region's near future, as it was previously described in the key advisory document NorVision.

Finally, in order to anticipate better on a new planning period for structural funds (from 2007-2013) and to be able to arrive at sustainable solutions for all and balance different interests in a better way, also the Vision Working Group of the NSR wanted to get recommendations for a new programme, notably as regards the Transport and Accessibility (hereafter: T&A) theme.

This translated in the underlying assignment to reflect on how to position the NSR and its T&A infrastructures within a changing context. Including a reflection on transport activity in relation to other societal functions and sectors. The outcomes of that analytical (and interactive) exercise should subsequently serve for translation into e.g. policy and funding priorities. Notably, with regard to which kind of planning and business initiatives should be stimulated in view of enhancing a sustainable and competitive T&A system in the NSR.

5. TRANSPORT AND ACCESSIBILITY AS A POLICY THEME FOR THE NORTH SEA REGION

The EU INTERREG funding strategy for the North Sea Region works on the basis of thematic priorities. These are described in the 'Community Initiative Programme' (CIP). This programme recognizes Transport and Accessibility (T&A) as one of the thematic priorities (others are e.g. water management and management of environment and natural resources).

This is logical since the NSR owes its prosperity to a large extent to a strong transport system and well-developed transport services that provide good accessibility to/from and communication of the region. In this regard, accessibility refers both to (timely arrival of) intra-NSR cargo and passenger transport flows, and to transport on a larger geographical scale (i.e. the extent with which the NSR can serve as a basis for import/export and transit flows of goods and its connections for passenger transport with other areas). As a consequence, it also refers to the competitive and location advantages of the region, via its connectivity with or sheltering of e.g. consumer and labour markets. As a matter of fact, T&A standards influence company choices to either or not transit their cargo through the NSR or to locate a distribution or production hub in the NSR.3 In brief, good accessibility is a relevant factor for location and investment decisions on behalf of both companies and citizens.

As the over-all priority with regard to T&A as an NSR INTERREG matter, one can take the objective to come to "Efficient and sustainable transport and communications" (Priority 2 of the CIP). Take note that this priority is not a goal in itself. Instead it should serve to e.g. come to high quality and durable internal and external accessibility and mobility in and to/from NSR places and areas,4 enhancement of competitiveness of economic activities wherever these are located, to territorial cohesion, equity and interrelatedness within and beyond the NSR, while protecting the environment and providing possibilities to safeguard regional identities and natural and cultural diversity.

Important is also the establishment that a region's performance in terms of mobility and accessibility is a function of the following factors. One, the available infrastructure and its saturation –also taking account external and spillover effects of T&A to other societal functions- and the spatial embeddedness and dilatation of infrastructures and real estate. And two, the presence of operators that offer transport and logistical services and their quality. In this regard, it is important to emphasize that availability of an abundant transport infrastructure and network without an adequate exploitation of its (multimodal) capacities does not lead to benefits. In addition, it should be acknowledged that the institutional frameworks that regulate supply and demand of T&A are also of high importance to its functioning.

In order to achieve the priority to come to efficient and sustainable transport and communications, it is important to consider the changing context within which one has to try to achieve it. This demands an inventory of current trends and challenges with regard to T&A in order to establish with regard to which issues the next INTERREG programme should stimulate transnational co-operation. Similarly, identifying relevant trends and challenges is

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[3] Consequently, a good logistical functioning of (sea)ports in the NSR is not only to the benefit of firms located in (the vecinity of) these ports and to transportation and cargo handling companies as such, but also to firms located in other areas within or outside the NSR who also make use (through expeditors, forwarders and other logistical operators) of the services of NSR ports.

[4] With "accessibility" being a product or an objective of transport and communication systems.

necessary to design possible future transnational co-operation actions that are beneficial to T&A in the region. In the following chapter, we report on those trends and challenges.

Exhibit 1: Key characteristics on North Sea Region

The INTERREG North Sea Region comprises parts of 7 countries and is one of 13 INTERREG IIIB Areas in Europe.

The NSR comprises areas with quite different urban structures. A particular characteristic of the NSR is that linkages to national urban centres outside the NSR are in many cases, and always were, equally or even more intensive than linkages within the NSR.

The NSR contains two major national urban agglomerations, the metropolitan area of Hamburg (Germany) with adjacent parts of Lower Saxony and Schleswig-Holstein, and Antwerp (Flanders, Belgium). In other countries major national centres are outside the NSR: Denmark - København, Århus; Netherlands - Randstad region with Rotterdam, Den Haag, Amsterdam; Sweden – Stockholm, Malmö (but Göteborg being the second largest national city within the NSR); UK: London.

The NSR includes major international sea port cities: Germany: Hamburg, Bremen/Bremerhaven, Wilhelmshaven; UK: Felixstowe, Hull; Sweden: Göteborg; the Netherlands: Rotterdam, Vlissingen; and Flanders/Belgium: Antwerp, Ghent, Zeebruges and Ostende.

The North Sea region shows great differences in population densities ranging from sparsely populated areas such as Sogn/ Fjordane in Norway (6 inhabitants/km²) or the Scottish Highlands (8 inh./ km²), to densely populated areas such as the Dutch Randstad, Flanders and Hamburg (2250 inh./km²), or Kiel (2225 inh./km²).

6. MAIN TRANSPORT AND ACCESSIBILITY CHALLENGES FOR THE NORTH SEA REGION UNTIL 2010

From the perspective of transport and accessibility, the main spatial challenges for the NSR are:

- Management of transport growth;
- Responding to an increased call for improved sustainability;
- Achieving territorial cohesion and integration, and balanced economic development

6.1 Managing transport growth

All long-term forecasts for transport in the European Union anticipate a very strong growth of transport flows (in the order of 40% between 2000 and 2020).[5]

Triggers behind this growing transport demand are notably the following:

- Increasing prosperity among the population. In spite of dips in the business cycle every now and then, from a long term perspective the average level of purchasing power shows ongoing improvement.
- Continued growth of car solism and commuting behaviour.[6]
- Growing leisure time and reducing fear of travelling long distances: citizens are becoming increasingly mobile.
- Setting up of multinational plants throughout Europe to serve the whole European market from one production or distribution centre.
- Rise of internet trading and 24/24h economy.
- More growth in final product transport than in commodity flows, which also implies transport of smaller lots (groupage) and fine-grid distribution schemes.
- Ongoing adoption of JIT and other lean logistical principles, shortening time-to-market schedules.
- Tendency to make increasing use of outsourcing.
- Ongoing global division of labour (Far East) and consumption (Europe).
- Integration processes, such as the expansion of the EU, notably towards the East, accompanied by intensifying cross-border trade and transit traffic.

All these factors are also at play for the NSR.[7] In the absence of appropriate measures to manage this transport growth, it is likely to impose a severe stress on its transport system,

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[5] See e.g. ESPON, project 2.1.1. and Prognos, European Transport Report 2002.

[6] Although this could in the long run be contained if oil prices keep rising (see ESPON reports and presentation of TERSYN Strasbourg at North Sea Conference, June 2005, Vlissingen).

and to cause a significant adverse impact on environment and mobility within the NSR, as many of the indicated triggers will lead especially to growth of road transport activity. Notably the following factors lead to a road transport bias: growing amounts of leisure time, continued growth of individual car travelling, increased passenger mobility, groupage transports, internet trading, lean logistics, fine-grid distribution schemes and shortening time-to-market schedules.

As the NSR contains both high-density urbanised areas located in or adjacent to the central capital region of Europe (e.g. Randstad, Flanders, Essex), and low-density areas with island-like metropolises (e.g. Scotland, Norway and Sweden), the challenges resulting from transport growth are different in both types of areas. On the one hand, increasing congestion in high-density areas. On the other hand, deficient accessibility over land[8] of several low-density and remote areas may prevent the latter from playing a significant role in absorbing (part of) the excess transport growth on the traditional routes and in the traditional centres.[9]

In addition, there are a number of emerging economic axes along the perimeters of the NSR for which it is important that development potentials and accompanying transport activities can (a) merely be exploited and (b) exploited in a societally appropriate way. Examples of such axes are: UK-Flanders-Randstad-Groningen-Hamburg-Copenhagen-Stockholm-Helsinki (stretching into the Baltic growth area), Hamburg-Aalborg-Gothenburg-Oslo, Nordic triangle Copenhagen-Stockholm-Oslo, Scotland-east coast of England, North-West continental Europe-Southern Scandinavia-Northern Periphery (e.g. Northern Norway and North-West Russia).

As regards the coming into being of an East-West axis through the NSR and a further interrelating with the new EU member states around the Baltic Sea (Estonia, Latvia, Lithuania, Poland), the following should be pointed out. For the time being, in comparison with the NSR, the countries around the Baltic Sea constitute a low-income but high-growth region. Precisely the economic development of these countries, and their function as gateways to Russia and Eastern Europe, will generate a substantial demand for (freight) transport. Consequently, a large part of this transport volume will transit through the NSR or will have NSR-areas as the origin or destination of such flows, creating opportunities for logistic activities.

6.2 Delivering improved sustainability

A 2nd challenge for which T&A in the NSR must prepare itself is the intensifying call after sustainability.

Triggers behind that call come both from the policy arena and from society at large.

From the policy context, there is an increasing appeal on the transport sector to contribute to or live up to a growing list of treaties and directives.

Some of the most prominent examples are:

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[7] As regards integration processes, notably the adhesion of the Baltic states and Poland to the European Union will have an impact on the volume and articulation of transport flows from, to and through the NSR.

[8] Myriad projects around the North Sea have already been initiated to compensate for this, like NTN II, NMC-NSR, NMC II, SEAPLANE and SustAccess.

[9] See e.g. ESPON, project 1.2.1.

- The Kyoto protocol
- The Lisbon and Göteborg strategy
- CO2 emission targets (and trading schemes)
- EU-directives with regard to water and air (fine particles) quality[10]
- The International Ship and Port Facility Security Code (ISPS)

On behalf of society, there is:

- A growing concern for environmental hygiene,[11] road saturation and transport accidents
- A growing demand after control mechanisms to deal with emergency situations (terror attacks, calamities)[12] and smuggling practices

Furthermore, there are certain indirect factors that fuel policy and societal interests in enhancing sustainability of transport and accessibility matters, like:

- Growing concern for construction and maintenance cost of infrastructure
- Growing experience with traffic management systems
- Limited financial resources for infrastructure works
- Growing interest in transport cost recovery principles
- Prices of energy and fuel have reached historically high levels and may become prohibitively expensive[13]

In theory, all this creates ideal circumstances for a pronounced modal shift from road to alternative forms of transport (rail, inland waterway, Short Sea Shipping) or to reduce road transport activity irrespectively of shifts. In itself, this should contribute to a sustainable character of transport and accessibility. However, there are a number of inhibitors that may prevent that such a shift and a reduction of road transport activity takes place.

- Road transport's environmental performance will improve spectacularly due to the introduction of Euro IV and V engines. And although emissions are only a part of sustainability –which also entails congestion and other transport-related external effects-, it may shift attention away from alternative transport.

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[10] In this regard the already running NOLIMP project is worth highlighting.

[11] Which –within the framework of INTERREG NSR- already led to projects such as SNS.

[12] These concerns already led to projects such as S@S and SAFECOAST.

[13] See also presentation of TERSYN Strasbourg at North Sea Conference, June 2005, Vlissingen.

- Diverging (national) interpretations of European directives may lead to spatial planning and settlement practices that prevent industry and citizens from making more use of alternative transport.[14]

- Meeting safety requirements and monitoring risks is easier in case of unimodal road transport than with multimodal transport chains. This may be a further obstacle to come to a pronounced modal shift.

- Due to the money collecting potential of road transport, it is possible that most efforts to increase sustainability of transport may emerge around road transport (via pricing practices) without that leading to a strongly altered transport behaviour: weak correlation between increased cost of road transport and demand after it.

The outcome of this conjoint of claims and intentions should therefore not automatically lead to enhanced sustainability of transport and accessibility.

6.3 Fostering territorial cohesion, integration, and equity

A 3rd challenge to which T&A in the NSR will be exposed to is the call for territorial cohesion and integration and (balanced) economic growth.15

Good accessibility evidently serves transport purposes. In addition, both directly and indirectly it also serves economic development and territorial integration and cohesion purposes. It contributes to economic competitiveness and dynamism of / in specific locations (see also ESDP, 1999).

Especially in order to underpin economic growth and territorial cohesion and integration along developing geo-economical axes,16 a stronger transport system as a backbone is required.17 Nowadays, the possibilities to interconnect many of these nodes are deficient or count at least with several missing links. This holds probably not only true for traditional transport over land (road, rail), but also for seaborne transport and for high-speed rail and air traffic. The role of the latter is especially important for passenger transport, and should therefore be conceived

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[14] For instance, a (too) strict interpretation of the Water Framework Directive –or its monitoring via an overload of parameters- may prevent companies from settling on waterborne locations, thereby hampering the possibilities of modal shifts to waterways. This may not only be counterproductive in relation to combating road saturation, but it may also be negative to air quality. In this regard, and in order to come to a common level playing field across the NSR, the NOLIMP project is worth mentioning.

[15] Also in this line of action, several initiatives have already been undertaken, like NS RURAL, BESST, F4N, North SEAfaring, Liveable City, B-SURE, SEAPORT, URBAL, VISP, Town-Net, RevitHar and PURE North Sea.

[16] Like the ones mentioned under § 6.1 i.e. UK-Flanders-Randstad-Groningen-Hamburg-Copenhagen-Stockholm-Helsinki (stretching into the Baltic growth area), Hamburg-Aalborg-Gothenburg-Oslo, Nordic triangle Copenhagen-Stockholm-Oslo, Scotland-east coast of England, North-West continental Europe-Southern Scandinavia-Northern Periphery (e.g. Northern Norway and North-West Russia).

[17] See also ESPON, project 1.2.1; BAW, The Northeast-European Agenda for Noord-Nederland - Expert Paper, 2005; and Nordisk Transportpolitisk netvaerk, Transport Corridors, November 2003.

An example of a project that could function as backbone to (part of the) economic axes is the EURORAPID concept.

from a different angle. Notably as regards “new” economic activities,18 it is of paramount importance. This is of special importance to cities as (potential) cradles of innovative and creative business activity (Florida, 2002).19 It appears that, whereas traditional economic activities witness especially the dispatching of goods, new economy activities result –apart from a lot of digital data transmission- in an above average frequency of air travelling by personnel in these sectors (Button and Taylor, 2000) in which personal contact –irrespective of today’s vast IT possibilities- is highly important. Hence, such activities emerge especially in areas that are well-endowed as regards quick travel means. The latter should be seen as a pre-condition to facilitate repeated interaction between actors (Harrison, 1992) that are distantly located from one another. The disposal of good air traffic connections would also (partly) explain why certain areas in Europe, despite their remote location succeed in being the home to successful and large-scale new economy initiatives (e.g. many areas in Scandinavia).

Furthermore, as repeated interaction is a means to learn about the idiosyncrasies of actors, it is obvious that especially interaction between actors that share similar (socio-economic) backgrounds, traditions and norms and value systems, provides a fruitful ground for business opportunities. This adds up to the need to come to high quality NSR-internal and external T&A structures, as a catalyst for interaction. In this regard, it is also noteworthy that the NSR has a lot in common with adjacent areas: shared historic relationships, shared business and world outlook, and shared T&A concerns. As an example, the Baltic countries and the NSR region share a number of spatial and socio-economic characteristics, such as seaside location, importance of maritime trade and the Hanseatic tradition.20 Also with the Northern periphery, the NSR has similar basics in common (also via national –Norwegian, Swedish, Danish- ties). The same can be said about North-West Europe. This underlines the relevance and potential of strengthening those nexi and disposing of quality accessibility even further.

High-speed rail connections can be a good alternative to air flight operations for providing high quality cross-border connections. Especially when connections have to be established in a polycentric geo-economical setting. With regard to the latter –and also in relation to the establishment of emerging axes along and through the NSR- it is also telling that influential social geographers and regional economists observe that such axes often emerge network-wise (Castells, 1996) or in the form of archipelagos of dynamic centres (Veltz, 1996) that form the underlying belt or vertebra of such axes. An important pre-condition is of course that accessibility is good –especially in view of new economy transport requirements i.e. quick inter-city connections, either by train or plane. Especially the fact that in the current era the focus of business activity is less and less nation-bound, makes a cross-border search for input and consumer relationships become all the more natural. In addition, it is also logical that (of-old national) centres of excellences look for knowledge sharing and co-operation with foreign homologues and thus also require good travelling connections. As a consequence, especially those sectors in need of frequent passenger travelling demand high quality and

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[18] Industrial activities where there are location choices (e.g. not extractive industries or heavy industrial activities that are spatially fixed) potentially influenced by the quality of local transportation services (Button and Taylor, 2000). In fact, “new economy” thus embodies a much wider range of industries than those considered at the cutting edge of the knowledge or creative economy. It englobes all types of industry, that are potentially geographically mobile.

[19] In relation to the concept of cities as places of creativity (Florida, 2002), there are of course many factors unrelated to T&A that explain the rise or continuity of certain cities as creative places and attraction poles for innovative, entrepreneuring and creative people and new economy activities. But as far as T&A issues are concerned, quick travel possibilities are clearly one of them (see e.g. p. 220).

[20] BAW, op. cit.

high speed transport solutions. This is also an important facet of the foreseen transport growth for which the NSR will have to prepare in order to underpin processes of economic development and territorial cohesion and integration.

High-speed travelling possibilities are also key to connect and disclose remote and peripheral areas. Not only for accessibility purposes alone, but also to render to them the possibilities of becoming the home to (new) economic activities. Thus, in spite of the fact that there is no clear correlation between accessibility and GDP growth,21 to avoid a process of centralizing all economic activity in the main ports with corresponding human localization trends, it is crucial that remote, peripheral and sparsely populated areas also have good and speedy connections with other parts of both the NSR and the rest of the world. That way, their accessibility is assured and an important pre-condition for initiating and consolidating (new) economic activities is fulfilled, reducing the necessity for delocalization and depopulation.

Knitting the metropoles' and peripheries' perspective together, one can argue that interconnections between metropoles and connections between metropoles and the main ports and economic hubs are of high relevance, also to peripheries. For the material overhead the economic centres will yield from this, will give the rural parts and remote areas of the NSR the opportunity to develop their competences and profiles.22

Contemporary trends that shape the current context behind the call for territorial cohesion and integration and (balanced) economic growth are:

- EU expansion to the east which contributes to growing east-west trade and transport

- Cross-border expansion of traditional Hinterlands of main ports. In more generic terms: international integration processes lead to a geographical reorientation of areas: "What is our relevant geographical context: are those still the national structures or not?" In this regard one e.g. point at the fact that Scotland's main T&A structures are traditionally North-South oriented, but in view of strengthened regional integration, it may benefit from more pronounced East-West orientation and T&A services. The same can be said about f.i. the North of the Netherlands: traditionally considered a peripheral area within the Netherlands, it is now rediscovering itself as a linking pin within the conjoint of North and Baltic sea areas. Other examples are the cross-border expansion of Hinterlands of previously national main ports (e.g. South-Netherlands for Zaventem airport, Southeast-Norway for the maritime port of Göteborg). This does not necessarily have to result in more transport activity (see supra under § 6.1), but it will translate into different patterns of cargo and passenger movements. Hence, it may require altered spatial and infrastructural planning.

- Related to the former: it becomes ever more clear that infrastructures that are located in one country may well attend T&A needs from citizens or industry located in another country (or may cause burdens to neighbouring countries). As a consequence, costs and benefits of projects should be based on causal effects on either side of national borders. And this is seldomly done nowadays.

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[21] See ESPON 1.2.1. and 2.1.1.

[22] This viewpoint was expressed by the Free and Hanseatic City of Hamburg (written inputs from 7/11/2005)

- There remains a strong interest in contributing to regional development via improving accessibility, although one is not necessarily a guarantee for the other. Still, accessibility in its own right is a societal target worth fighting for.

- The attention for the "great works" of our time like the conceiving of TEN-Ts, the HST links and Maglev plans, the Motorways of the Sea and the pan-European Corridors. Evidently, people ask themselves to what extent this will bring balanced economic development or whether it will polarize development disparities? Subsequently, if fuels concerns about what can be done, so that all areas pick the fruits of such works in terms of cohesion, integration and economic development?

- Finally, there is a growing interest in integrated spatial planning.[23] There is a growing awareness that spatial planning and transport choices can contribute to climate, environmental and energy resources management. Hence, a growing policy interest in mobility and environmental impact assessment of location choices, spatial planning and transport practices.[24]

Paradoxically -as a closing word on cohesion, integration and equity purposes- it is precisely geographical and economical integration processes that reveal the existence of a landscape of loosely connected urban concentrations and rural-urban links and voids in (alternative) transport services for cargo and passengers. Evidently, to come to worthy cohesion, integration and equity, this is something to be solved.

6.4 Synthesis

In globo, and based on the former, we come to the following sub-division of main action fields into sub-themes. This structure has been confirmed in the workshops held with relevant actors:

Figure 1: Main and sub-categories of T&A fields of action for the North Sea Region

Theme Structure

A: The development of efficient transport systems responding to changing market conditions

A.1 Towards integrated and lean freight transport systems

A.2 High-level passenger mobility with limited potential to enlarge road capacities

B: Reduction of environmental impacts and other risks related to transport activity

B.1 Modal shift to more environment-friendly transport modes

B.2 Reduction of environmental impacts and risks associated with transport

[23] See also the projects North SEAfaring and VISP.

[24] In a similar vein, it is possible that an evolution towards more integrated city planning can unfold. Meaning a better integration of work and residential functions within cities (see also ESPON reports on this).

B.3 Establishing common level playing field conditions in order to allocate transport activity to the optimal (combination of) mode(s)

B.4 Towards compatibility with other societal and user functions and sectors

C: Supporting regional development, integration and equal regional chances via accessibility works and services

C.1 Response to and support of further internationalisation tendencies within and beyond the NSR

C.2 Further integration of peripheral regions into social and economic progress

C.3 Improved inter-urban communications for dynamic development of cities, city clusters, metropolitan areas and neighbouring agglomerations

C.4 An integrated perspective on conceiving T&A infrastructure and services, regional development and spatial planning

Source: own elaboration.

Theme A fields of action are especially related to managing transport growth, fields of action under Theme B are especially related to delivering improved sustainability and the fields of action mentioned under Theme C relate especially to fostering territorial cohesion, integration and equity.

In the Appendices we give an extensive overview of trends and their implications, corresponding to each main field of action and their respective sub-themes.

7. ANSWERS TO TOR QUESTIONS

7.1 Dealing with specific spatial challenges

7.1.1 What role do Hinterland connections play at the moment and how can gateway cities and "secondary hubs" better be integrated?

Due to the seaside location of the NSR and the relative abundance of inland waterways, short sea shipping and sea-river transport are obvious means of transport, both for connecting the North Sea regions with each other and with other areas. In fact, the share of international waterway transport in the NSR is already large in comparison with the rest of the European Union.

However, the potential for a more intensive use of short sea shipping, instead of road transport, is still much larger. The main drawback of short sea shipping is the lack of door-to-door services. This makes it more difficult and less attractive for a potential user to organise a transport move using short sea shipping, in spite of its lower price.

The objective is clear, and can be concisely described by the concept of "land-sea transport corridors",25 seamless, multi-modal, land-sea transport routes. Seaports are, naturally, important intermodal nodes of such routes.

Hinterland connections are, therefore, essential for the integration of especially short sea and deep sea shipping in sea-land logistical chains on origin-destination relationships. They are also important to connect coastal main ports and gateways with continental gateway cities and secondary hubs in the Hinterland. The latter can serve as locations where feeder and dispatch connections to main transport routes unite. They can also puncture traditional radial-centric transport patterns focused on a single main port. The former form a significant burden nowadays for Hinterland connections of main ports. With many ports now serving larger hinterlands, there are problems with lack of capacity on the local links between the ports and trunk road and rail routes. As far as such (multiple and interconnected) hub-and-spoke networks are not yet sufficiently in place, their development should be supported. By segmenting and, in a way, decentralizing transport flows, saturation effects can be contained.

To achieve a better and more efficient integration and functioning of land-sea transport chains and of (coastal or continental) hub-and-spoke networks, a creation of open freight information and management systems is needed, involving all actors in the land-sea transport chain.26 This arguably implies public-private co-operation and partnerships between main ports or gateway cities and "secondary hubs".

To optimize the integrated functioning and connection between main ports and secondary hubs, the availability of infrastructure for alternative transport modes and regular service schemes are also of vital importance. That way, Hinterland connections can contribute significantly to circumvent congestion problems in around main ports and reduce further external (environmental) impacts caused by heavily growing cargo volumes. This holds true

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[25] "Baltic Gateway" project in the context of INTERREG IIIB.

[26] See various feasibility and pilot studies in the context of the Transport RTD programme: Bopcom; 3SNET, Marnet,….

when deploying rail and inland waterway transport, but also when SSS between coastal main ports and smaller coastal ports as secondary hubs is envisaged. The latter can also function as Hinterland locations where feeder and dispatch transport flows to inland locations unite. The fact that the slack capacity of alternative transport modes provides significant room for growth is an important window of opportunity here.

Furthermore, the creation or further development of secondary hubs on the continent or along the coastline –and their subsequent logistical connection to main ports- can serve as development poles for logistical and industrial spin-offs on Hinterland locations, that way contributing to territorial equity, integration and cohesion. Saturation around traditional main ports offer growing chances for non-main ports in offering attractive locations and transport outlets and circumvent main port problems, certainly as many operators are looking to switch to less congested ports to achieve faster and more reliable round trips, even if such ports are further away from the ultimate traffic origin or destination.

The former also requires changed forms of co-operation among sea and inland ports, with municipalities (to offer logistical sites) and with logistical service providers. Logistical sites at secondary hubs should preferably multi-modally accessible, in order to make a maximum use of alternative transport possibilities and be congruent with minimizing environmental and congestion effects.

7.1.2 How does peripherality in terms of long distances to markets and major transport networks pose a threat to the development of a region, and how could a new programme contribute to alleviate such problems?

The analysis of accessibility indicators suggests that TEN-Transport projects improve the accessibility of the central regions more than that of the peripheral regions, so that the relative disadvantage of the peripheral regions actually increases. This would be an unintended consequence of European transport infrastructure policy.27

The relation between peripherality and the economic development is, by all means, unclear. The often-assumed negative impact of peripherality on regional development (see also NorVision) is not supported by empirical evidence and by economic analysis.

- Beyond a certain threshold level, there is little empirical relation between accessibility and economic performance. There are regions with good accessibility having indeed a very good economic record (e.g. urban regions in the “blue banana”). On the other hand, there are also regions with good accessibility lagging behind (e.g. old industrial centres confronted with industrial restructuring in parts of Belgium and Germany). Likewise, there are peripheral regions having a very good economic performance (e.g. many regions in the Nordic countries, Scotland) and lagging behind (e.g. West England, Wales, German North Sea coast). The conclusion is that there are other factors of competitiveness, which can offset peripherality, such as skilled labour, technological innovation, …
- Improved accessibility has ambiguous effects on the economic competitiveness of peripheral regions: it creates a larger market for exports, but also exposes the region to more competition from imports.[28]

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[27] SPESP. In absolute terms, accessibility of peripheral regions may increase, but at the same time it can worsen in relative terms (Spiekermann & Wegener Speech at Annual North Sea Conference, Vlissingen, 15-17 June 2005).

[28] See results of ESPON 1.2.1 and 2.1.1.

Evidently, as long as particular cases (certain areas) can benefit from better communications and objectively suffer from disadvantageous infrastructure links e.g. to metropolitan areas, gateway cities and main ports, such situations merit remediation.

By all means, it is not long distance as such to markets and transport networks as such, that condition regional development, so when trying to improve development potential of a region via T&A initiatives, one should be selective in which initiatives to undertake. The following reflections serve as guidelines for this.

When infrastructure endowment is not sufficient,[29] people and firms can relocate themselves. Authorities might decide to add infrastructure. But when we confront transport supply and transport demand, we are faced with a confrontation between two different temporalities: the temporality of the transport supply, which is expressed in the easiest way by creations of road and rail infrastructures (presently, it roughly takes 13 to 15 years) but also in the functioning of transport modes, versus the temporality of the transport demand, that is those of firms for goods, when it takes only a couple of years for the creation of a production unit or for a relocation. The different temporality of transport supply and transport demand is a major problem.

If one would want to act in the short term in an efficient way and adapt the network use to the traffic evolution, this would imply focusing on quick win possibilities in enhancing connectivity of peripheral areas to markets and major transport networks. The obvious thing to do would then be to not concentrate on (too) costly physical infrastructure projects, which also take a long period to build. Instead, it would be more logical to concentrate on modes and services that can be rapidly implemented, like bus, fast ferry[30] and air traffic[31] connections.

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[29] In the case of the NSR, it are precisely the geo-economical integration processes that uncover the landscape of loosely connected urban concentrations and voids in (alternative) transport services for cargo and passengers.

[30] High-speed fast ferries could, potentially, shift freight (and passengers) from road to short sea on long distance coastal routes (e.g. Flanders-Norway). This would contribute to the strengthening of the transport backbone of the developing axes mentioned above.

There are two, limiting factors to the competitiveness of fast ferries:

- freight rates, which are low due to intense competition in road haulage;
- fuel costs, since high-speed ferries have a very high fuel consumption compared to conventional vessels.

This means that the potential of fast freight by short sea shipping will remain limited:

- until road haulage rates rise, notably as a consequence of a policy of charging infrastructure and external costs fully to users;
- technological progress allowing to reduce fuel consumption without foregoing high speed ("EMMA" project in the context of the Transport RTD programme).

Regularly attacked for being an unsustainable transport solution, air traffic is a rapid and rather cheap way to assure accessibility to/from all kinds of areas and to connect places with large distances between them.

The emergence of low-cost companies in the context of air transport liberalisation has made possible the rapid development of a number of regional airports throughout the NSR, largely in regions that had low air transport access. It has therefore contributed significantly to improving the accessibility of the regions concerned. Drawbacks are that in regions where the related airports are not connected to public transportation networks, significant flows of motor-car traffic are generated (in a number of cases also of a cross-border and transnational nature). Secondly, a number of air connections compete successfully against railway transport, including HST. This puts a mortgage on obtaining revenues from heavy investments in modern railway infrastructure. Thirdly,

Especially international airports seem to play an important role in assuring multimodal accessibility, also from/to the most remote areas. As far as setting up such services and the corresponding infrastructures encounters a lack of public (financial) engagement, and private capital and operators are needed, the necessary institutional settings therefore should be (put) in place.

Actually, the indicated transport modes (bus, fast ferry and air traffic) do not bring the major markets and transport networks physically closer to remote areas, but they do enhance accessibility from/to them through the provision of real time connections with such markets and networks. That way, they can also reduce the need for people and businesses to relocate. In fact, the competitive advantage of regions and countries is increasingly based on human capital. This emphasises the importance of the access to fast passenger transport and to information networks.32

This argument is especially valid for low-density areas, where there are no large concentrations of human capital. Travel and communication must then substitute for proximity.

Fast passenger transport over large distances requires air transport or high-speed railways. For peripheral regions, alternatives to air transport tend to be costly (or do not provide the same service level e.g. in terms of speed). Deregulation of the air transport markets and the entry of a large number of new commercial airlines has resulted in many smaller destinations being served. This has helped to overcome peripherality problems of many of such areas within the NSR.[33]

See in this regard also the exposé on travel needs related to new economic activities and the role of high-speed travel possibilities therein under § 6.3.

7.1.3 What are the opportunities for environmentally sounder means of transportation for connecting the North Sea regions with each other and with other areas?

In freight transport, there remains a large potential for a shift from road haulage to short sea shipping, river-sea transport and railway transport as a way to reduce environmental impacts. However, notably the environmental performance of waterborne transport can still be improved substantially.

While road transport's environmental performance will improve spectacularly due to the introduction of Euro IV and V engines, there is a lot less environmental improvement underway for inland waterway and SSS transport.34 Improving the environmental performance of alternative transport modes themselves is, therefore, a field where positive actions should be supported.

Apart from emission levels (pollutants, noise) there are also environmental gains to be obtained from achieving better loading efficiencies on all transport modes (including road) and

several airline carriers supposedly receive grants for operating airlines from/to certain peripheral airports. In case these are judged to be out of line with competition laws, their continuation may be affected.

[32] SPESP.

[33] SEAPLANE project in context of INTERREG IIIB NSR programme.

[34] See results of "Realise" project in context of Transport RTD programme.

optimizing route planning. Initiatives that contribute to this, notably based on Intelligent Transport Systems and demand management systems (e.g. pricing practices), deserve support, therefore.

Also initiatives that enhance a targeted use of packaging modalities favouring the use of environmentally friendly transport practices (like the 45 feet container) merit support.

In passenger transport, the opportunities for environmentally sounder means of transportation are more limited. For fast passenger transport across the North Sea, air transport is necessary. In low-density peripheral areas, air or car transport is in many occasions the only available options. The use of high-speed rail is restricted to connections between larger metropolitan areas. Not only for the sake of the environment,[35] the development of high speed rail links should be promoted, especially to inter-connect first tier (gateway) cities (see also § 6.3). To connect secondary agglomerations or more peripheral areas with the former, more centrally located, cities; other kinds of rapid travelling connections may instead be more indicated, like bus, light rail and fast ferry. [36]

7.1.4 Does congested inter-city traffic infrastructure in some axes pose any immediate threat to the development, accessibility and competitiveness of the region?

Some parts of the NSR are confronted with (sometimes very severe) congestion: areas near London, Randstad, Flanders. As with peripherality, the negative impact of congestion on competitiveness is unclear. Such an impact is often claimed, but it is difficult to find scientific evidence. Congestion is, to some extent, a price that is willingly paid to benefit from the economies of agglomeration.

Nevertheless, in the congested areas just mentioned, the threat of congestion to economic development is a priority issue. For instance, studies carried out in the context of the development of the Dutch mobility master plan indicate that the costs of congestion, in terms of economic damages due to longer and unreliable journey times, are expected to increase exponentially in the Randstad area. Moreover, congestion is already influencing location decisions. The accessibility of the major seaports (like Rotterdam and Antwerp) is also a major point of attention.[37]

Combating congestion and saturation can be done via a mix of actions outlined under § 7.1.1 and 7.1.3. An additional option would be to transform classical railways into freight-dedicated lines. This can be done by the reusing of traditional lines, vacated e.g. by the creation of high-speed rail networks for passengers. Such dedicated lines should be developed and serviced by shuttle trains, in particular on the Hinterland linkages of seaports and on main transit axes.

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[35] But also for equity and economy/efficiency reasons.

[36] The introduction or revival of services via the mentioned transport modes also stem from the fact that the progress of HST networks, which significantly increases the accessibility of cities directly serviced, is often accompanied by the reduction of services on traditional railways, which negatively affects the accessibilities of a number of other towns. Therefore, solutions have to be elaborated for counteracting this negative evolution, which may partly consist in increasing the regional accessibility of the HST stations.

Also due to scarse financial resources and the temporality dilemma (see § 7.1.1) it may be necessary to look for transport solutions outside the classical railway framework.

[37] See the Flemish and Dutch mobility master plans: Mobiliteitsplan Vlaanderen (2003) en Nota Mobiliteit (2004).

These main railway axes should be well connected to those of the neighbouring countries, including in terms of interoperability.

7.1.5 How can the programme address efficiency, environmental concerns and equity considerations?

To start with, simultaneous accomplishment of cohesion, integration, sustainability and efficiency targets is not easy. On the one hand, this can follow from diverging visions on 'territorial pursuit of happiness' i.e. some may opt for being a backyard or buffer for central areas, whereas other may want to preserve its rural characteristics. On the other hand, increase in regional accessibility does not always lead to increase in regional economic activity. It may in fact be unwanted as it can cause perverse effects.

There can also be more general conflicts between the aims of efficiency, environment and equity.

- The economic (efficiency) evaluation of transport projects generally results in giving priority to projects in the central regions, which would go against cohesion (spatial equity).
- A policy of charging of external transport costs (environmental concerns) increases transport costs, and causes more severe impacts on peripheral regions that use more transport per capita and are sometimes also less affluent (spatial and social equity).[38]
- Focussing on equity alone would lead to projects improving the accessibility of non-metropolitan and peripheral areas, which should not necessarily be positive from an efficiency and environmental point-of view.[39]

With regard to the latter, there is a tendency today to assume that investing in remote or backward areas to fuel economic development there does not lead to significant return on investment. Still, creating the circumstances for transferring to or nurturing business and transport activity in remote areas or secondary ports may well contribute to decongesting saturated areas and improve integration, cohesion, sustainability and accessibility standards. As such, initiatives in that direction may be worthwhile for those purposes alone. Consequently, measuring success of regional development policies must be about more than just wealth creation and efficiency targets (see also § 7.1.2).

Nonetheless, there can be types of measures where the above conflicts do not arise, because they pursue all three objectives, or do not try to pursue one objective at the cost of the other objectives. Examples are:40

- Measures to improve or to promote intermodal transport (in particular short sea shipping and river-sea transport in the context of the NSR);
- Measures that address improved seaport hinterland connections;

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[38] ESPON 2.1.1

[39] Also, as stated before, because the relationship between connectivity and economic progress is not a uniform one.

[40] For additional reflections on and illustrations of examples of ways to pursue efficiency, environmental and equity goals simultaneously, see notably § 7.1.1-7.1.3.

- Networks and co-operations to exchange information and experience on best practices (as in Econet), also among different public and private transport actors.

Moreover, when pricing policies are considered to be useful to achieve efficiency and environmental goals, they should not be abandoned because of spatial equity objectives. Instead, in cases in which pricing policies lead to worsening regional income disparities, such policies should be accompanied with transfers to the regions suffering the losses. An instrument mix of pricing and compensation allows protecting the environment in an efficient way, while avoiding unwanted spatial imbalances.[41]

7.2 What is the degree of knowledge of these issues by key players in the field?

There exists a vast body of knowledge on these issues, in the form of academic, policy and feasibility studies. The extent to which experts communicate this kind of knowledge adequately to decision-makers is unclear.

Furthermore, solutions to these issues require public-private partnerships in an increasing number of cases and there is a lack of experience in that regard and or the institutional settings to allow for such solutions may not always be existing or adequate.

7.3 What is the degree of coverage of these issues by existing policies, strategies and investment plans?

In the field of T&A, the relevance of transnational interdependence and interactions is widely perceived and reflected in the planning documents with three specific focuses: dependence upon transnational links to overcome peripherality, transnational traffic as an essential element of economic strategies, and transit traffic as a possible constraint.

Also, improving seaport Hinterland links by waterways, railways and highways are a priority issue in many public policies and investment plans. Developing secondary hubs with their own feeder and dispatch structures to attend (peripheral) Hinterland areas, and with good multimodal accessibility from/to main ports is also becoming a standing T&A policy feature now. The same can be said about multimodality and the use of alternative transport modes at large. For instance, promotion of short sea shipping, development of Hinterland connections and rail links is extensively covered by policies at all levels (sub-national, national, regional, trans-national, European).[42]

Nevertheless, road transport still claims most of the budget in national mobility and transport master plans.

On the other hand, there is (still) much less attention for e.g.:

- Demand management (including the need for transnational coordination in road pricing policies) as a way to achieve a more sustainable transport system. Infrastructure charging attracts a lot of attention in national and European transport policy. However, the practical measures tend to serve financing purposes more than they serve environmental purposes.

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[41] ESPON 2.1.1

[42] This is demonstrated, among other, by regional and national mobility and transport master plans and by European transport policy (TEN-T, Motorways of the Sea)

- Ways to address potential conflicts between efficiency, environment and equity, e.g. through the use of instrument mixes.
- The potential side-effects of strongly developing regional airports.
- Another void in policy making and planning documents is that they are generally more explicitly related to transport infrastructure (missing links etc.) than to transport services and to the concrete functioning of transport systems. The strategies of operators and their transnational problems and efficiency concerns (loading degrees, routings, cross-border interoperability of railway issues) are seldom mentioned. The same is the case for indicating ways to involve them more systematically in realizing T&A policy goals.
- Schemes to evaluate costs and benefits of T&A projects or measures that are implemented within one nations, but which also have impacts on other countries.
- Ways to improve the environmental performance of alternative transport modes is often considered to be a non-issue as it is (mistakenly) supposed to be and remain superior to that of road transport

Other less-attended, but emerging and highly relevant, issues are:

- Possibilities of segmenting transport activity around the clock
- Management of risks related to transport activity (calamities, terror attacks) and handling operations
- The establishment of transport mode-neutral administration and cost burdens (creating common playing field levels)[43]
- Arriving at similar interpretations of supranational directives[44]
- Integrated spatial planning techniques taking into account the mobility impacts of e.g. settlement decisions and industrial real estate location and design

7.4 How could transnational co-operation meet these challenges? What is the particular benefit of the INTERREG framework?

The international context of transport and spatial planning is widely recognised and described in sub-national and national spatial and mobility master plans. However, this recognition is not reflected in the actual actions and measures, which largely remains restricted to a sub-

[43] Compared to road and also road/rail combined transport, the administrative and customs procedures of a short sea shipping transport are much more complicated. The possibilities for monitoring the transport and cargo during the journey are also more restricted. Consequently, short sea shipping is much less integrated into logistical chains than unimodal road and road/rail combined transport. See also the results of numerous studies that have led to the establishment of Short Sea Shipping Promotion Centres, and of various projects to promote Short Sea Shipping.

These problems are well known by policymakers. Many initiatives and projects at national and European level have addressed these problems, but so far with incomplete results.

On the cost side, there is the problem of transhipments making many intermodal transport chains more expensive than unimodal (road) transport. Here also, more from a research angle, several initiatives and projects at national level have studied this issue, but so far without appreciable practical follow-up.

[44] For an illustrative attempt in this respect, see the NOLIMP project.

national or national scope. The reason is that there is no supra-national authority, with binding competence in this area.

In the absence of such a supra-national authority, cross-border co-operation is the only option to achieve transnational and territorial coordination of spatial and transport policies. INTERREG is the only formal programme in which such co-operation can be established.

Transnational co-operation will, however, also be confronted with the problem of the lack of a supra-national authority that can implement the actions decided upon. To address this problem, two strategies need to be followed:

- Close involvement of all actors in the development of the vision and actions, so that these actions can benefit from voluntary compliance;
- Focussed scope of the vision and actions, so that the actions are limited to the domains where there is a clear value added and willingness to co-operate.[45]

Consequently, the benefit of INTERREG is that it relies on regional actors having the highest interest in solving their problems. A second benefit of INTERREG is its cross-sector approach.

A final observation on the added value of the INTERREG setting for attending T&A challenges, would be the following: “INTERREG projects have been used widely by Swedish universities in order to improve research funding within areas like logistics and terminal structures. This has led to a capacity building within these areas, and has been a benefit to the Swedish society as well as the North Sea Region. This development should be emphasized and further strengthened in the new programme.” In other words, INTERREG projects can lead to highly localized expertise, which –through proper dissemination of knowledge- can be put to use for a wide community of actors. Especially when such knowledge becomes deposited at non-profit centres that have the divulgation of knowledge as one of their core assignments.

The former reflects the more general opinion that it seems necessary to set up procedures aiming at a further exploitation of completed projects and on existing knowledge. Although various INTERREG IIC projects have found a follow-up under INTERREG IIIB, others had no follow-up inside or outside INTERREG. In general, there is a call for exchange and dissemination of project results among actors from within a given INTERREG area, but also between INTERREG programme areas and the actors from different areas. As a matter of fact, in geographically unrelated INTERREG areas quite similar issues can be addressed. F.i. setting up SSS operations is something around which both in Northern Europe INTERREG programmes and in Mediterranean INTERREG programmes projects have been initiated. However, a structured exchange on experiences appears to be absent but can definitely provide added value to the participants (and to the resp. INTERREG programme secretariats).46

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[45] See recommendations of OTB Research Insitute, *Transnational visioning – Edging towards a realization strategy*, Delft University, 2004.

[46] See for instance the Portnetmedplus-project within the INTERREG IIIB Medocc Programme and the NTN II, NMC-NSR and NMC II-projects from the North Sea Region INTERREG Programme.

7.5 Issues related to actor involvement in transnational co-operation projects

7.5.1 Crucial partners outside the North Sea Region for consultation and co-operation

A stronger involvement of actors from outside the NSR INTERREG region is broadly welcomed. It is seen to contribute to a transnational embeddedness of the region as such and of respective projects. It is also believed that this enhances a correct assessment of multi-national pros and cons of projects.

There was consensus that in the transport sector, a strong involvement of partners specifically from the Baltic Sea Region will be essential in order to promote the integration of accession states and to respond to growing transport volumes as its consequence. It was likewise emphasized that Northern Scandinavia and North-West Russia are important areas with regard to co-operating with areas outside the NSR. Notably transport from/to Northern Norway and North-West Russia considered to be an important topic. Also the involvement of for main ports just outside and adjacent areas to current NSR borderlines was seen as relevant.47 This point was specifically raised during the UK workshops.

Co-operation with partners from outside the proper INTERREG area should however not be limited to partners from adjacent areas, as partners from further away can proof to be of similar or even bigger value for specific initiatives. This appears to be a concern that is felt generally among participants of INTERREG projects throughout Europe, and not just within the NSR INTERREG Programme.48 In this sense, INTERREG Programmes have a clear disadvantage compared to for instance the geographical partnering possibilities offered by programmes such as Marco Polo. The latter is a promotion programme on Community level, and as such allows joint actions on behalf of actors from all member states.

It therefore seems recommendable to consider the adoption of a more flexible approach to including project partners i.e. from inside and outside particular INTERREG Programme areas.

7.5.2 Additional actor involvement considerations

Inter-organizational co-operation (public-private; seaports - inland ports; different actors in intermodal transport chains, local-higher authorities) is becoming increasingly important for the success of projects in all sorts of areas. Notably due to the need for integrated transport solutions, involving multiple parties, and projects that geographically span long distances. The development of further co-operation, also with actors that are traditionally not (too) attracted by or active in INTERREG projects, can therefore be a specific target of INTERREG.

Apart from the particular strengths of the INTERREG approach (as described under § 7.4) and the appeal it has to its traditional user group, disadvantages of the INTERREG settings are:

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[47] Although that may also be like introducing a Trojan Horse, that pulls and concentrates transport flows towards it, whereas a decentralization and spreading of transport flows may the objective of specific projects (as voiced during the Edinburgh meeting, May 2005).

[48] Cfr. conversation with Mr. Marco Rolandi, representative of Regione Liguria (I) for projects under the INTERREG IIIB Medocc Programme (Brussels, 21st of October 2005).

- Limited geographical demarcation in a world that is integrating (dealt with under § 7.5.1)

- Lack of appeal to private actors (and probably also to user groups and to a lesser extent national policy levels)

It can therefore be further recommended to consider a more flexible approach to including project partners.

Furthermore, tracing and overcoming the lack of appeal the INTERREG settings have to actors crucial to successful implementation and or extension of projects is necessary.

To start with, it would be beneficial to involve the National governments more.[49] In this regard, the following observation came from the Scandinavian workshops: "[T]he need to involve players from all administrative levels in the countries in the projects. The main players up to now have been the counties supported by regional universities and to a certain extent players from the public-private sector (mainly ports). However, it was acknowledged by both county representatives and national representatives in the workshops that a more profound involvement of the national level would be an advantage for the forthcoming projects."

The involvement of national policy levels or administrations is especially vital for the following reasons. Back-up by national governments to support transnational co-operation is of crucial importance. In fact, especially if transnational projects and developments are initiated decentrally, support from the national policy level is essential to come to come to full maturity and to an extended follow-up and a (wider) implementation of such initiatives. National level support and engagement should therefore be assured. Also, there can be projects that concern public or private authorities that usually do not take part in INTERREG-projects, but do have the final responsibility to force or realize a project. Like e.g. National Railway Companies or transport institutions on federal c.q. national state levels. In such cases, national support is elementary as the traditional INTERREG actors can help, support or build a lobby but will not be able to realize a project. This is notably the case when talking about projects requiring huge investment sums, like the realization of infrastructures.

The former seems to be especially important if projects correspond to strategic issues (freight transport, HST, Maglev etc.). If such projects are largely designed by (local) bodies and partnerships that do not dispose of real decision-making powers then their final implementation or follow-up remains in the air. The fact that many relevant stakeholders in the field of transportation have a national character or do not operate on local level (national administrations, national transport companies and operators etc.), also means that their absence forms an important impediment to come construct a strategic dimension in co-operation.

Until now, in multiple countries national organizations have only to a limited extent involved themselves in INTERREG projects. The main reason mentioned from representatives in the different countries is that INTERREG is a programme for the regions and therefore, it are

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[49] Although it has to be stated that involvement of and interest for INTERREG activities varies from country to country. In Germany, for instance, national organisations having a link to spatial planning and to the environment are well involved in INTERREG activities. But other sector institutions, such as Ministry of Economy, Ministry of Transport (except its department of spatial planning) are not involved, because they don't assign great importance to INTERREG activities, and follow their own channels of international co-operation. This is in principle also true at regional (Länder) level. For example, if an INTERREG project supports improvements of a transport corridor apparently neglected by transport planners, it is clear that the latter are not inclined to become involved. Hence, to involve these sector institutions to a larger extent will require better understanding of the benefits of spatial planning, which is an issue not to be solved through INTERREG.

regional representatives that are the main responsible for the development and execution of projects. In certain projects national representatives may take on the duty to carry out a project management job for a part of a project, but this is not very often the case.

Most likely there is also a financial problem involved, since entering into a major INTERREG project may lock the use of resources for some years to come. This may not be a situation, which is approved by the Ministry of Finance. Only if there is a political decision concerning the national level entering into INTERREG projects will this situation could be avoided. This is not likely to materialize.

It is interesting to note that several of the participants in the Nordic workshops expressed the impression that regions are looking more openly to international co-operation at project level than the state, because such co-operation has immediate consequences for different policy questions in the regions. National policies with regard to T&A, instead, are more strongly related to producing national coherence and accessibility. If certain national projects are of an “over”-national nature, funding and resources are sought in the EU funds for TEN-T or similar funding possibilities. This applies e.g. to the Fehmarn Belt analyses. In addition, there have also been several INTERREG projects dealing with the Fehmarn Belt, but the Danish government has not participated in these projects with funding.

Greater interest from the national level is closely tied to funding and resource allocation procedures. Therefore, if a higher degree of national involvement is wanted, a thorough discussion on this topic and the other ones indicated supra should be carried out.

As regards involvement of the private sector, the following observations can be made. Existing competition, e.g. between national railway companies or between Eurostar and Thalys versus national railway companies, also play an important part in limiting co-operation. Furthermore, the increased actor fragmentation in sectors such as the rail and air traffic industry (through liberalization processed) complicates successful and effective co-operation projects. As nowadays the private sector ensures an increasing part of transport services, and the traditional integrated, notably railway, companies are split up, it becomes increasingly difficult to identify and get together the right partners for co-operation. Especially from a transnational co-operation perspective the sight on who is who has become extremely blurred.

Specifically for private actors, it goes that transnational co-operation under public programmes is of interest to them only if it adds to their profits. So far, most INTERREG projects have not provided proof for this. In spite of this, there exists a general call to involve e.g. transport providers, trade associations, economic development agencies and small and medium-sized enterprises to a larger extent in INTERREG initiatives. With regard to private actors, there may also be legal barriers (EU / INTERREG-specific regulations) that prevent a more pronounced participation. For further comments on private sector involvement in INTERREG, see § 7.6.1.

As regards the involvement of private actors, organizations from the road transport sector deserve separate mentioning. Their involvement is crucial for many projects, as road transport is part of the solution in most alternative transport schemes. Moreover, its environmental performance improves through Euro IV and V regimes, and therefore, it also deserves more attention from an environmental point-of-view. At the same time, increasing recognition by major road haulage operators that limitations on road capacity, drivers’ hours and environmental restriction may require rethink in how they resource trunk haulage. Therefore also, it is important to stimulate the engagement of actors from the road transport sectors into intermodal projects and thinking.

As for the user groups, a basic reason for their absence could be their size and therefore limited possibilities for involving themselves in several projects. However, there are examples of user groups involved in e.g. shipping projects in Norway. Another reason could be the limited financial resources available in the user groups, meaning they will have difficulties in meeting the demand of a certain self-financing (e.g. 50%) of the project costs. In addition, they argue that preparation and administration of INTERREG projects is time consuming, that there is often scepticism among other partners towards user groups, that the outcome of projects are often compromises, which user groups can not always support, and the fact that organizations (including user groups) that are located outside an INTERREG area, but do have activities in such an area, have no easy access to participating in INTERREG projects.

As solutions to these obstacles, one can think of simplifying all kinds of procedures, offering guidance to writing project proposals and stimulating public organizations to involve user groups in their projects. Furthermore, it is important that user groups obtain something valuable from their participation (they should at least be able to disseminate their message) and to recover (part of) the costs involved in participation.

In general, it seems that the bureaucratic processes linked to establishing and executing a project, not the least the financial reporting, is something that makes it a real consideration whether to indulge in an INTERREG project or not. Therefore it also seems that certain institutions have established a name as “project creators”, they have the experience and the skill to establish a partnership around a project and carry through an INTERREG application, where other organisations do not possess the same experience, and therefore judge that their efforts will be in vain. This could also easily be the explanation why no user groups are project owners and why national and private actors are reluctant to participate.

Finally, there has been a claim for involving multilateral organizations, like the European institutions and the North Sea Commission, to a larger extent in the shaping of or perhaps participation in INTERREG projects. And there was a similar claim to involve the wider public more in INTERREG projects via consultation actions.

7.5.3 Does a stronger involvement of ports in the programme present any particular challenges in terms of competition and EU competition rules?

This can be a problem if private partners receive investment subsidies. If they simply contribute via the delivery of specific information within the framework of INTERREG, this should not be a problem.

7.6 How can the concept of Motorways of the Sea be put into practice in the future programme?

Due to the seaside location of the NSR and the relative abundance of inland waterways, short sea shipping and sea-river transport are obvious means of transport, both for connecting the North Sea regions with each other and with other areas. In fact, the share of international waterway transport in the NSR is already large in comparison with the rest of the European Union.

However, the potential for a more intensive use of short sea shipping, instead of road transport, is still much larger. The main drawback of short sea shipping is the lack of door-to-door services. This makes it more difficult and less attractive for a potential user to organise a transport move using short sea shipping, in spite of its lower price. Compared to road and also road/rail combined transport, the administrative and customs procedures of a short sea shipping transport are much more complicated. The possibilities for monitoring the transport and cargo during the journey are also more restricted. Consequently, short sea shipping is

much less integrated into logistical chains than unimodal road and road/rail combined transport.50

These problems are well known by policymakers. Many initiatives and projects at national and European level have addressed these problems, but so far with incomplete results.

The objective is clear, and can be concisely described by the concept of “land-sea corridors”,51 seamless, multi-modal, land-sea transport routes. Seaports are, naturally, important intermodal nodes of such routes.

As a point of departure for INTERREG contributions to putting the Motorways of the Sea concept into practice, the European action plan to promote short sea shipping can serve. Suggested actions from that plan should be carefully examined to identify areas where NSR can provide added value.

Several project suggestions have been forwarded in this regard (see Appendices on project suggestions).

7.6.1 What role can and should the private sector play in the implementation of the TEN-T and MOS concepts in the North Sea region?

Private sector involvement is evident and essential, since transport decisions are ultimately made by private actors (shippers, travellers,…). However, the analysis generally stops at this general conclusion.

All consulted sources emphasize a strong need for active (as official partner) integration of private partners into INTERREG projects dealing with transport. Port services, transport on road, railways, inland waterways, sea vessels, forwarding - are all handled by private companies, while the State can only improve infrastructure, border / customs control or safety.

But the involvement of private sector demands special conditions:

- Projects must offer clear business benefits or at least possibilities for cost recovery
- They must not cause significant extra work and expenses
- They must have a clear and limited time horizon
- The involvement of interested private partners must start at a very early stage of the project application phase as private actors often have a higher need for clarification
- Dealing with INTERREG regulations, reporting, financial administration etc. must be arranged by other partners or by external consultants.

A solution may be to limit the involvement of private partners in major INTERREG projects to a few very specific tasks, which have a clear benefit to the private partners, and relieving

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[50] See results of numerous studies that have led to the establishment of Shortsea Promotion Centres, and of various projects to promote short sea shipping.

[51] “Baltic Gateway” project in the context of INTERREG IIIB.

these partners from other more time-consuming project activities, while their contribution still produces over-all societal gains.

As a positive example that demonstrates that (semi-)private sector involvement in INTERREG projects is possible, is the NWE INTERREG IIIB project InterPorts (IPPN). In this project 14 sea and inland harbours co-operate in the marketing of inland shipping.

If INTERREG North Sea Region envisages to allow the participation of private partners, as has been the case under INTERREG NWE, a strategy should be outlined how this could be arranged responding to the above conditions. Take note that also for other EC funded programmes, like PACT and Marco Polo, private actors can be project participants. Therefore, in principle it ought to be perfectly normal if INTERREG NSR would be in line with the participation conditions of those programmes.52 One should of course aim to make programmes like Marco Polo and INTERREG to be complementary instead of clones of one another (more on that in § 7.7).

Advantages of stronger involvement of private parties in T&A INTERREG projects –notably related to TEN-T and MOS, are notably the following:

- To spur innovation and diversification in transport service design
- To improve possibilities for infrastructure financing
- To exchange information and experience on best practices
- To contribute to transport statistics databases

7.7 Creating synergies with other Community Programmes

INTERREG is not the most indicated framework for implementing TEN-Ts and MOS as a whole. For this specific policy plans exist. However, it can be suitable for hooking onto these initiatives or via the development of missing links and targeted interfaces between MOS and land connections. It would therefore be interesting to see what additional, ancillary, measures can be undertaken via INTERREG projects that are not taken care of in the grand TEN-T and MOS plans. The same counts for building upon and complementing North-South and West-East corridors via INTERREG projects.

Similarly, it would be good to see to which extent INTERREG Programmes can serve as a place for activities focussed on operating TEN-T and MOS-related services or (co-financing) or managing missing links and targeted interfaces. In a similar vein as the TEN-Ts, special attention should also go out to the creation of HST, Maglev and air traffic links and networks. In the case that INTERREG Programmes should also support commercially oriented services in the freight transport market, an overlap with instruments from the Marco Polo Programme could occur. In principle this should be avoided. It would be good, though, to see to what extent the two programmes can be mutually complementary. For the one can be a lever to the other and vice versa. Like with the possible link to the TEN-T and MOS plans, it would be interesting to establish whether certain measures in need of funding can not be attended under Marco Polo, whereas they are suitable for INTERREG. What should of course be avoided is that the same initiative can recur to more than one support programme.

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[52] It should be pointed out, however, that in the past the PACT budgets were not always “consumed” completely. This was apparently due to the fact that private actors had problems with the administrative burdens of PACT procedures as well, in spite of the possibility to pioneer profit-oriented projects in a subsidized way.

By all means, given the interest to involve private actors in INTERREG projects more actively, opening up to this actor group should be considered. As a consequence, it can increase the chances of achieving community goals as multiple programmes (e.g. Marco Polo and INTERREG) can spur activities that contribute to reaching shared objectives.53

Of course, a shift towards allowing also private partners to initiate or participate in NSR INTERREG projects maybe material for discussion on a higher EC-level. By all means, there ought not to be principled reasons for allowing private participation in transport projects (via PACT/Marco Polo) but not in projects funded under spatial planning and territorial co-operation programmes, such as INTERREG. Bundling and streamlining of means under control of different DGs (like DG REGIO and DG TREN) for the sake of different programmes, albeit with shared objectives, seems also highly recommendable therefore.

As far as allowing private actors could lead to critics of “favouritism” vis-à-vis the involved private actors, this can be countered by using the same participation and funding requirements as the ones that apply for PACT and Marco Polo initiatives. Namely, apart from the fact that the proposed project must contribute to the overall objectives and spirit of INTERREG, the project should e.g. not lead to distortion of competition on the market, the financial support should be limited compared to what the private partner contributes and can not be dedicated to operational costs –although it is allowed that the project is revenue-generating, the project should have a public character (in the sense that it should be at the disposal of the market at large and not be destined to a sheltered user group), and it should be possible to make plausible ex ante that the project has solid chances on long term survival and existence under market conditions.

[53] Given that private actors are also interested in thriving business beyond all kinds of geographical borders, they can serve as important catalyzers of territorial cohesion and integration by promoting projects that go beyond the territorial scope of a single INTERREG region.

8. PROJECT SUGGESTIONS

In line with the presented sub-division under Chapter 6 of main challenges and their sub-themes- with regard to which T&A actors from the NSR welcome actions and propose solutions, in the present chapter, first of all, we outline a frame of reference to determine what kind of actions should receive priority through a transnational programme. Secondly, we outline a series of broad project suggestions and lines of action. A longer list of operational project ideas can be found under the Appendices.

8.1 Basic principles for prioritization of projects

Having in mind the current discussion about the future transnational INTERREG programmes, it seems logical to divide project suggestions into so-called "structural projects", i.e. projects, which can only be implemented together and which by working transnationally provide a clear added value, “regulatory projects” that deal with legislation and other regulatory frameworks, “supporting projects” that e.g. aim to improve the exploitation of T&A structures via investment in superstructure, and “knowledge projects” that aim to improve the functioning of T&A activities through exchange of knowledge and experiences and other forms of co-operation. In this regard, it seems most logical to concentrate on the structural projects, as they render superior added value and they require a more structural and institutional form of transnational co-operation than the supporting projects. In second place, knowledge projects also seem highly suitable for INTERREG programmes. The other two, seem to be either out of reach for INTERREG programmes (the regulatory projects), or there exist other EU programmes that cover these (notably the technical-operational supporting aspects to T&A assets and activities) or can be initiated on a non-transnational basis (notably the supporting projects).

A supplementary way of dividing project suggestions would be to distinguish between freight and passenger transport. Passenger transport can be served either by road, railway and air traffic, with waterway transport being dedicated exclusively to cargo transport. For transnational co-operation around passenger transport, the main issue appears to high-speed railways. Other major issues of passenger transport are urban/ metropolitan and regional, but these may not fall under the strict conditions for transnational co-operation (joint solutions).

As regards high-speed railway connections as structuring projects, there seems to be a certain scope for INTERREG projects. Although such projects benefit predominantly large urban centres, and less the transited regions in between (due to a limited number of stops), it could mean that certain NSR areas could become connected to such structures. Either by providing stops in one or more regions or cities that are recognized as less prosperous or less well connected in infrastructure terms, or by providing feedering lines to the more central nodes in such structures. In effect, INTERREG projects would not deal with the feasibility of HST or Maglev (EURORAPID) projects from a transport demand point of view, but rather with the benefits to less prosperous regions/cities along the way (e.g. the benefits for potential stops in Groningen and Emden from a high-speed or Maglev rail line between Amsterdam, Bremen and Hamburg:). Take note that such „integration“ benefits are perhaps limited in comparison to the benefits already considered by transport planners. In addition, also light-rail project and improved „secondary“ transnational railway links benefiting transited regions should also be eligible.

Also with regard to passenger transport, road projects may create higher benefits to in-between regions than high-speed railways, but such projects may not get support from INTERREG, because they contribute to an unwanted modal split.

As regards air traffic, the opinions are rather divided. Especially in the more densely populated areas of the NSR there is less interest in air traffic projects than in more sparsely populated and more remoted areas. The latter maintain a great interest in improving and expanding airway possibilities, not in the least to increase their interconnectivity with the outside (more „central“) world.

With regard to cargo transport, the most prominent modes are road, rail and waterway, with air traffic being a less high volume transport mode. Here also, supporting road projects would be contrary to environmental and traffic fluidity objectives. The former would lead us to assign priority to all modes, but road transport.

As regards prioritizing projects focussed on either passenger or freight transport, the following reflections can be forwarded. Projects dealing with freight rather than passenger transport may be more suitable for future INTERREG programmes, for the following reasons: (a) freight transport is an issue that in general needs more attention than does the passenger transport and may even have been insufficiently covered by INTERREG so far, (b) it grows faster than passenger traffic, (c) it becomes more and more a threat to smooth passenger traffic, (d) causing directly and indirectly high external costs and drawbacks for regional development, and (e) freight transport offers many issues for transnational co-operation (between regions, but also between private actors) to promote joint solutions, particularly in the fields of:

- Managing transport growth:
    - Inter-modal transnational transport chains involving sea ports, inland shipping and ports;
    - Railway freight transport and its integration into multi-modal chains;
    - Improve speedy passenger transport possibilities: both via long haul and feedering structures;
- Delivering improved sustainability:
    - Risk management with hazardous cargo;
    - Containment of emissions and other external effects of transport activity;
- Fostering territorial cohesion, integration and equity:
    - Embedding less prosperous or less well connected areas and cities into T&A infrastructure and services.

Take note that both regard to the first and third field transport chains involve not only different sections and modes of transport, but also different levels of consolidation and distribution centers of high significance for regional development (with changing hierarchies of such centeres e.g. between seaports and hinterland centers). In this regard –as well as in regard to the second field of action, modal shift does not aim to eliminate road transport, but to focus road to the "last mile“, and use of rail and waterway transport for the longer sections.

In the field of passenger transport, two lines of action appear to stand out. Projects related to HST or Maglev connections and adjacent (bus, light-rail and train) services –see also supra, and projects related to mapping cross-border travellers behaviour. The latter is vital as there is very little knowledge about origins and destinations for this segment, why they travel, how far they travel and what the environmental and economic consequences are.

8.2 Priority fields of action

8.2.1 Managing transport growth

Most suggestions with regard to Theme A "A competitive North Sea Region with efficient transport systems responding to changing market conditions" are in line with the spirit of DG TREN's White Paper on Transport ("European Transport Policy 2010: Time to Decide") and the Marco Polo Programme. These documents propose a strategy designed to gradually break the link between constant transport growth and economic growth in order to reduce the pressure on the environment and prevent congestion without harming the EU economic competitiveness. To do so the White Paper and the Marco Polo programme distinguish four action priorities:

- Shifting the balance between modes of transport;
- Eliminating bottlenecks;
- Placing users at the heart of transport policy;
- Managing globalization of transport.

In order to deal with growing transport demand and to counter a road bias tendency, especially projects and initiatives in line with the following issues are worth considering

Modal shifts and intermodal transport

- Make stronger use of slack capacity of alternative transport infrastructure
- Promote integrated supply chain management and freight integrator roles
- Enhance use of intermodal transport-friendly packaging modalities (cfr. 45 ft CTN)
- Selective introduction of further intermodal interfaces and improved seaport-hinterland links
- Optimize interoperability[54] [55] and cargo handling efficiency at transhipment points
- Increase capacity on a number of axes, especially in the high-density areas[56] (Randstad-Groningen-Hamburg, Flanders-England through the Channel Tunnel), for instance by the establishment of dedicated freight lines

Road capacity is under strongest pressure. And although it would be utopical to believe rail, air and waterway transport can provide adequate alternatives for all kinds of road-based

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[54] See also ESPON 1.2.1 and Nordisk Transportpolitisk netvaerk.

[55] Obstacles here are of various nature: infrastructure, technical standards, national regulations, insufficient transnationality of operators, absence of transnational access to specific national tariff rebates etc.

[56] Relative to the density of population and economic activity, the low-density areas have a higher supply of rail services.

traffic activities (be it passenger or cargo transport); as far as alternative transport can be engaged to take activity away from the road, such chances should be seized.

Especially as slack capacity of rail, air and waterway infrastructure is huge compared to road infrastructure. Therefore, projects that aim to exploit / tap into this untouched capacity potential (via new services, or the creation of road-alternative transport interfaces) deserve support. 57

The message or philosophy behind this is: spread to lighten the burden (or in Management Consultancy terms: co-operate with your competitors and win).58

Route shifts

- Involve less saturated hubs and adjacent trajectories

Route shifts are about the same spread-and-gain philosophy: involve less saturated hubs – like small and medium-sized ports and airports- and adjacent trajectories to lighten pressure on main traffic axes and main economic and logistical centres.

To enhance such route shifts, evidently, there may also be a selective need to upgrade the internal access within the NSR and to improve the external access between the NSR and the rest of Europe or the world.

Better use of time window between ready-for-shipment and delivery-deadline

- Transport and delivery during «dead» hours
- Intelligent use of «slow» transport modes
- Match passenger and cargo needs after infrastructure around the clock

The spread-and-gain-philosophy can also be adopted from a time perspective: we're moving towards a 24h-economy, but transport activity is still concentrated between 7-19h. It should at least be possible to spread the part concerned with cargo traffic over a larger time frame. Projects that are in line with this also deserve support (e.g. initiatives to enable deliveries and shipments outside the typical time frame during which sending and receiving of goods take place). But also when deliveries and shipments should still take place during the classical timeframe, there are still alternatives for overburdening the road system. Rail and waterway transport are often accused of being too slow compared to road transport. But such arguments can be overcome easily if rail and waterway transport can make productive use of the time interval between "ready for shipment" and "moment of delivery". As an illustration:

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[57] Optimisation of the use of existing networks and of maintenance of these networks is promising for at least two reasons. On the one hand, the capacity of existing networks is not fully and rationally exploited. Various measures, such as pricing policies or better traffic management could lead to higher traffic efficiency without significant investments. On the other hand, maintenance of existing networks had often been neglected in the past years and even decades, while financial efforts were mainly concentrated on the development of new infrastructures (motorways, HST-lines etc.). Therefore, the maintenance and development of existing networks is important and may demand a substantial amount of financial resources over the coming years. As this may not be readily available due to scarce public resources, this could imply that new investments will increasingly have to be financed through alternative procedures such as public-private partnerships. Providing the institutional conditions that allow this to happen is therefore also highly important.

[58] Hamel, G. Doz, Y.L. & Prahalad, C.K. (1989). Collaborate with your competitors and win. Harvard Business Review. 67(1): 133-139.

several European countries do not allow truck transport during the weekend or a day of the weekend. This amount of time is in many occasions enough for rail or waterway transport to make up for speed differences with road transport. In the same vein, rail and waterway transport can make use of night time travelling to deliver early in the morning or during daytime, when loading on a truck in the evening would mean it can also leave for its destination, but may have to wait long hours before being unloaded in situ.

Enhanced performance of transport

Furthermore, projects that are oriented on increasing transport-efficiency in all sorts of ways are also highly indicated, like:

- Improve loading degrees and route planning (including dealing with empty riding and container repositioning practices <-> putting time pressure on low value transport flows), vehicle design
- Increase service levels for passenger and cargo transport: new Origin-Destination relationships, more services per time unit[59]
- Eliminate specific infrastructure bottlenecks and fill in missing links: develop a high level of external access to and from the NSR as well as a high level of internal access within the NSR
- IT solutions to back-up transport activities and to regulate transport demand: These options are gaining interest due to the observation that a modal shift will likely not suffice to accommodate the expected transport growth in a sustainable way. Another reinforcing factor is the diffusion of mobile communication and navigation equipment (GSM, GPS, Galileo in the medium term) onboard vehicles, as well as ticketing systems.
- Use of information, communication and navigation systems to connect transport respective transport operators and modes: In the private transport sector information, communication and navigation systems are increasingly used in all stages of the transport process: matching supply and demand, booking, document handling, customs declaration, tracking and tracing, invoicing,… The use of these systems is most widespread in deepsea, air and road transport. Short sea, inland waterway and rail are lagging. The challenge is to integrate systems across different transport companies and across different modes. Particularly relevant for the NSR is the integration of short sea shipping in intermodal transport information systems so that modal shifts can be enhanced.[60] In the latter regard, also the use of tracking (and tracing) systems is useful.

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[59] Increase performance, profitability and marketing of long-distance intermodal systems and services beyond NSR.

Build upon potential offered by the MOS for the external access of NSR: better integration and connection to long-distance maritime transport.

Promote maritime, dry and inland port coordination and co-operation (including the medium-sized ones) for developing sustainable (external) transport services, also beyond the proper NSR e.g. developing connections between NSR ports and ports from other (INTERREG) areas.

[60] See various feasibility and pilot studies in the context of the Transport RTD programme: Bopcom; 3SNET, Marnet,…

8.2.1.1 Priority projects

Suggestions for priority projects in the field of “Managing transport growth”/”A competitive North Sea Region with efficient transport systems responding to changing market conditions”, based on the priority principles outlined under § 8.1 would be the following:

Potential project issues A.1 Towards integrated freight transport systems

(a) Co-operative transnational development of multi-modal transport chains[61] and missing links in terms of infrastructure and superstructure as the underlying backbone
Potential actors/ partners:
Seaports (private or public) and Inland ports (private or public)
Railway companies and/or national rail administrations (public or private)
Logistical providers (transport, distribution) (private)
Local authorities (public)

(b) Design (transnational) location incentives to establish transport-sensitive business at multimodally accessible Hinterland sites to decongest main ports and their surroundings
Potential actors/ partners:
Local/ regional authorities (public)
Operators of multimodal centres (private or public)
Sea ports (private or public)

(c) Strengthening of selected secondary sea ports with a potential to relieve major ports as supporters of cross-North Sea maritime transport[62]
Potential actors/ partners:
Secondary seaports (private or public)
Local authorities and national and regional administrations
SSS promotion centres
Shipping companies (private)
Other industry-related organizations (private)

(d) Promotion of river-sea shipping, e.g. from Ruhr area to the U.K. and to Baltic Sea countries, from UK to Benelux and to France through inter-regional co-operation
Potential actors/ partners:
Sea ports (private or public)
Inland ports (private or public)
Regional/ local authorities (public)
Shipping companies (private)

(e) Promote dedicated transnational freight train connections with improved inter-operability and inter-modal integration and of new railway services with new operators in a liberalised market [63]
Potential actors/ partners:
Railway companies and/or national rail administrations (public or private)

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[61] Project example INTERREG IIIB/NSR: REMARCC Network of regional maritime competence centers; activities: creation of regional/ INTERREGional co-operation clusters for waterborne transport and logistics; improvement of knowledge about waterborne transport and logistics; optimisation measures for the intermodal logistic chain; promotion measures for waterborne transport. The project involves port operators, shipping companies, shippers, forwarders, logistic providers with a leading role of port regions.

[62] This would be in line with developing a framework concept for North Sea MOS within the framework of INTERREG to support the corresponding EU-programme. This programme will have to obtain political acceptance from national and regional political levels.

[63] Examples: Iron Rhine and Betuwe line.

Logistical providers in the fields of transport and distribution (private)
Regional authorities (public)

(f) Set up marketing and other forms of co-operation (statistics) between logistic centres and transport organizations within the NSR and between the NSR and. the BSR[64]
Potential actors/ partners:
Operators of multimodal centres (private or public)
Freight forwarders (private)
Transport organizations (public –notably railway companies- and private)
Research institutions
Industry-related organizations (private)
Local authorities and national administrations (public)

(g) Promotion of regular circuits between (existing) multimodal transhipment points (coastal and non-coastal)
Potential actors/ partners:
Operators of multimodal centres (private or public)
Logistical providers (transport, distribution) (private)
Local/ regional authorities (public)

(h) Extend the INTERREG IIIB/ NWE project Inter Ports Promotion Net to the North Sea (co-operation among sea ports and inland ports of different countries for enhanced waterborne seaports' hinterland transport)
Potential actors/ partners:
Sea ports (private or public)
Inland ports (private or public)
Regional/ local authorities (public)
Logistical providers (transport, distribution) (private)

Potential project issues A.2 High-level passenger mobility with limited potential to enlarge road capacities

(i) Promotion of enhanced inter-city train connections beyond the established pan-European corridors: new railway services with new operators in a liberalised market: inter-city and cross-border[65]
Potential actors/ partners:
Railway companies (public or private)
Regional/ local authorities (public)
National railway authorities/ transport ministries (public)

(j) Inter-modal integration of airports, particularly setting up light rail and bus connections, notably for the sake of accessibility of smaller airports
Potential actors/ partners:
Airport authorities (public or private)
Regional authorities (public)
Public transport authorities (public or private)

[64] Including development and dissemination of knowledge on logistical management practices and of quality standards and certified quality labels for integrated trans-national transport chains. It could also involve projects to elaborate transport statistics.

[65] Examples: Amsterdam - Groningen – Bremen – Hamburg (the 'northeast corridor' is -from a Dutch perspective- an important missing link in the TEN (Nota Mobiliteit, 2004)); triangle Oslo - Copenhagen - Stockholm; Fehmarn Belt route Hamburg - Copenhagen including a fixed link across the Belt; Hamburg - Flensburg - Aarhus - Aalborg – (including ferry link to Oslo); and Scotland – North East England – South East England.

(k) Set up and exchange experiences on alternative travel projects with regard to home-office and home-school traffic[66]
Potential actors/ partners:
Local government (public)
Education authorities (public)
Employers and trade associations (private)
Public transport authorities and urban planners (public or private)

(l) Transport surveys for international passengers in all transport modes
Potential actors/ partners:
Research institutions
Carriers of passengers

8.2.2 Delivering improved sustainability

Besides designing measures and projects based on efficiency principles, there is also a need to take wider social and environmental goals of the community into account. The suggestions with regard to Themes B "A transport system that respects environmental and other risk concerns" are inspired by this. To a large extent, they are congruent with the broader community goals as mentioned in the:

- Lisbon Strategy (2000)
- Gothenburg European Council (2001)
- Kyoto protocol (1997, ratification in 2002)

The Lisbon Strategy (2000) is a commitment to bring about economic, social and environmental renewal in the EU.

The Gothenburg European Council (2001) agreed on a strategy for sustainable development and added an environmental dimension to the Lisbon process for employment, economic reform and social cohesion.

Under the Kyoto Protocol (1997), the EU committed itself to reducing its greenhouse gases emissions (of which CO2 is the most important one). In May 2002, the EU-15 and all its member states ratified the Kyoto Protocol. The ten accession countries all have ratified the Kyoto Protocol later on.

To contribute to sustainability levels –apart from the suggestions mentioned under § 8.1, especially the following threefold combination of actions seems indicated. One, to influence transport behaviour. Two, to reduce and deal with external effects related to transport. Three, to foster goodwill and a benevolent mentality vis-à-vis alternative transport.

Aim for more optimal transport behaviour

- In terms of hour of travelling, chosen route and mode of transport
- Introduction of traffic management practices and incentive systems

[66] Also in view of possible tendencies to better integrate work and residential functions of cities in the future and the development of home-working possibilities and the rise of e-services (see also ESPON reports).

- Stimulate knowledge on emission-related impacts

Manage environmental impacts and risks related to transport

- Improve environmental performance of all transport modes
- Improve prevention and response to disasters and illegal transport flows (whether cargo or passengers)
- Level control burden for intermodal transport chains with unimodal transport: level the playing field conditions between modes and between countries.[67] [68]

Raise awareness around alternative and multimodal transport options

- To stimulate its use of alternative and multimodal transport

Concrete things one can think of with regard to the former are:

Introduction of traffic management systems and incentives e.g. LKW-Maut, road pricing, bonus-malus systems, exempting regular SSS lines from pilotage costs, etc.) to enhance modal shifts.Improve environmental performance of transport activity: this is both a matter of routing and loading efficiency, modal choice and reducing emission levels

Management of contingency situations and of illegal transport practices is a further matter of concern. Safety and security in transportation have also become an increasing priority in public policies. They comprise safety against all kinds of accidents and casualties as well as security against criminality in public transportation and against terrorism. Another important problem in this context is the transportation of hazardous goods, the control of which has to be strengthened. Increasing security and safety in tunnels has also become an important topic after a number of tragic casualties took place in recent years.

Coming to equal burdens for unimodal and intermodal transport in terms of meeting safety requirements and monitoring risks. That would also take away an obstacle to recur to alternative transport. See also § 7.3 in this respect. In a similar vein, there is a need to come to leveling the regulations and support measures between countries e.g. the co-financing mechanisms for transport terminals or airports in different countries, and the rules for measuring air and water quality, as a basis for location decisions.

8.2.2.1 Priority projects

Suggestions for priority projects in the field of “Delivering improved sustainability”/”A transport system that respects environmental and other risk concerns”, based on the priority principles outlined under § 8.1 would be the following:

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[67] See also the NOLIMP project in this regard.

[68] Although it would be too ambitious to think that agreements on the level of an INTERREG region can have regulatory power, they can become to function as a precedent for regulation that is subsequently imposed or agreed upon on a higher policy level. In that regard, the importance of projects that try to set (new and progressive) standards for e.g. administration and emissions, should not be underestimated.

Potential project issues B.1 Modal shift to more environmental-friendly transport modes

See (c)
Develop North Sea-linked MOS including complete transport chains from origins to destinations in the port Hinterland and secondary MOS across the NSR[69]

See (e)
Promote dedicated transnational freight railway routes[70] through co-operation among national railway companies and regional authorities

See (i):
Promote 'secondary' high-speed railways (possibly with lower speed than on major high-speed links, but faster than at present), also for passenger transport services; that are not part respectively have a low priority in national (federal) transport network plans or in TEN-Ts

Potential project issues B.2 Reduction of environmental impacts and risks associated with transport

(m) Co-operative development of strategies for risk management (risk reduction; disaster response) with new approaches to co-operation between environmental authorities, ports, transport providers and industry; [the example of the INTERREG IIIC exchange of experience project ECONET, but with focus on joint solutions]
Potential actors/ partners:
Seaports (public or private) and Inland ports (public or private)
Railway companies and/or national rail administrations (public or private)
Regional/ local authorities (public)
Port operators (private)
Logistical providers (transport, distribution) (private)

(n) Reduce the risks involved in hazardous goods transport including the transfer of goods in open water.
Potential actors/ partners:
National and Regional authorities (public)
IMO (multilateral organization)

(o) *Reduce emissions and other external effects of transport activity by all modes f.i. by imposing progressive tolerance levels*

Potential actors/ partners:
Seaports (public or private) and Inland ports (public or private)
Railway companies and/or national rail administrations (public or private)
Regional/ local authorities (public)
Port operators (private)
Logistical providers (transport, distribution) (private)

[69] In line with standing INTERREG projects such as NMC II, NTN II and NMC-NSR.

[70] E.g. extension of Dutch Betuwe line in Germany; the 'iron Rhine' link Ruhr region – Antwerp

Potential project issues B.3 Establishing common level playing field conditions

(p) Eliminate competition distortion between airports.[71]
Potential actors/ partners:
Regional administrations (public)
Airport authorities (public or private)
Competition authorities (supranational)

(q) Come to similar (progressive) interpretation and implementation of the European Air and Water Quality Framework Directive.
Potential actors/ partners:
Regional administrations (public)

Seaports (public or private) and Inland ports (public or private)
Railway companies and/or national rail administrations (public or private)

Potential project issues B.4 Towards compatibility with other societal and user functions and sectors

(r) Determining and managing T&A impacts of tourism and leisure activities
Potential actors/ partners:
Planning authorities (public)
Representatives of tourism industry (public and private)

8.2.3 Fostering territorial cohesion, integration, and equity

Like the project suggestions with regard to Theme B, those related to Theme C "A transport system supporting regional development, integration and equal regional chances" are also based on wider social and environmental goals of the community. Besides being congruent with the broader community goals as mentioned in the:

- Lisbon Strategy (2000)
- Gothenburg European Council (2001)
- Kyoto protocol (1997, ratification in 2002)

They are also inspired by the

- European Cohesion Policy for 2007-2013 (2004)

This European Cohesion Policy for the period 2007-2013 calls e.g. for a sustainable and competitive 'knowledge economy', helping the least favoured regions and a balanced and harmonious territorial development and cohesion throughout Europe. Improving accessibility of areas and places is considered to be one of the necessary ingredients to achieve these goals.

[71] Different airports enter into different co-operations internationally, and this has a major impact on the costs and services.

To cope with the altered geo-economical context for T&A in the NSR, there is first of all a need for projects that underpin accessibility from an intra-NSR and INTERREGional perspective.

This can both be done via targeted infrastructure/superstructure and via transport services.

With regard to transport services for passengers, especially the potential of air transport can be exploited more to secure accessibility of remote areas.

For shorter distances, bus and light rail possibilities are worth exploring

They can be rather low cost solutions fitting into larger feeder-gateway concepts to connect peripheral areas and central areas

In the same vein: projects should be welcomed that hook onto MOS, TEN-T and corridor concepts, that underpin cross-border approaches and integration and which reflect a changed geographical outlook of regions.[72]

Thus, to foster territorial cohesion, integration and equity, the following main action fields can be identified.

Position NSR within a broader T&A-geographical context

- Improve external access from/to NSR
- Hook onto MOS, TEN-T and corridor concepts
- Develop (infrastructure and service) projects that go beyond NSR limits and support its integration and cohesion within a wider landscape

Enhance integration and accessibility of remote areas

- Improve internal access within the NSR
- Underpin shifts in traditional geographical orientations of 'remote' areas (cfr. NNL, Scotland) by targeted investments and services
- Build upon networks of regional airports
- Explore alternative transport means for increasing transport service level, including waterborne for cargo, bus, fast ferry and light rail for passengers to link to main transport hubs and axes, like TEN-T, Maglev and HST (cfr. feeder concept)

Improve inter-urban and inter-regional connectivity

- Development of inter-city connections, also to support changing geo-economical settings for cities and areas

[72] In this regard it is very telling the amount of cross-border rail, bus and tram connections has been decimated in comparison to the first half of the 20th century. The INTERREG framework seems to be extremely suited to improve this situation.

- Develop the network of communication along all the coasts of the ESPON space: applied examples for NSR would be Scotland-Southwards to England, Jade-Weser project, Northern-Netherlands-Hamburg-Stockholm, …

- On a selection of trajectories, it appears to be worth while exploring market possibilities for (light-)rail and bus connections, to connect second rank –but centrally located- urbanizations to cities on HST or Maglev trajectories: appropriate solutions for promoting an improved access to the HST or Maglev lines (e.g. larger number of stations; improvement of links to HST or Maglev stations e.g. through innovative public transport solutions)

- Improvement of the regional/local access to the TEN-T within parts of the NSR

Create endogenous development potential of remote areas through T&A structures

This can in the first place be done via safeguarding the accessibility from/to remote areas (see supra as well reflections under § 6.3), that way minimizing the need for relocations.

- Linking remote areas to main population and economic centres via targeted investments and services

Furthermore, it can be done via exploiting the development potentials of transport hubs in remote areas e.g.:

- Develop upon peripheral air and seaports as potential economic development poles.

Notably seaports are catalysts for regional economic development. They offer platforms for efficient and environmentally friendly transport, and for the establishment of industrial activities.[73]

The concentration of economic activities in a network of port cities, linked by maritime transport, is a way to pursue the policy option of polycentric development promoted by the ESDP, and to spread economic activity more evenly over the European space. Furthermore, one of the drawbacks of this policy option, namely the increase in transport demand and the resulting impacts on congestion and the environment, would be mitigated because of the access to maritime transport.[74]

Stimulate integrated spatial planning practices

With regard to location choices and design of industrial estates and housing areas

- To minimize negative mobility and environmental impacts from location choices[75]

- Create better connections of secondary airports to public transportation networks

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[73] See statement of Gemeinsame Platform des Bundes under Küstenländer zur Deutschen Seehafenpolitik of February 22, 1999; and study on "Vernetzungspotentiale innerhalb der maritimen Wertschöpfungsketten"

[74] Argument based on analysis in SPESP.

[75] Notably with regard to the settlement of transport-intensive sites like European Distribution Centres.

- Stimulate innovative solutions of using space and infrastructure, which can mean both dedicated usage of certain assets and (multimodal) co-use of assets

As regards geographical focus

- Come to cross-border assessment schemes (e.g. cost/benefit analyses) for evaluating infrastructure projects[76]

- Idem as regards road pricing projects: need for better transnational coordination of road pricing systems. Experience shows that uncoordinated measures of road pricing lead to cross-border traffic diversion with negative impacts on neighbouring countries. The introduction of road pricing may also have negative impacts on the economy of the more peripheral regions of an (INTERREG) area.

- Coordinate transport policy with settlement policies, with the protection of valuable natural assets and with regional economic policies

8.2.3.1 Priority projects

Suggestions for priority projects in the field of "Fostering territorial cohesion, integration and equity"/"A transport system supporting regional development, integration and equal chances", based on the priority principles outlined under § 8.1 would be the following:

Potential project issues C.1 Response and support to further internationalization within and beyond the NSR

See (c)
Develop North Sea-linked MOS including complete transport chains from origins to destinations in the port Hinterland and secondary MOS across the NSR. In the same sense: develop rail freight links to and from gateways.

See (f)

Set up marketing and other forms of co-operation between logistic centres and transport organizations within the NSR and between the NSR and. the BSR[77]

See (i)

Setting up long distance travelling services for cargo and passengers (see HST and Maglev railway example Hamburg-Stockholm and plans for Zuiderzeelijn (NL)) in order to redeem unrealized regional aspirations. In addition, there may be potential for supplementary railway services that connect to Chunnel passings in order to exploit connections via the Channel Tunnel in a better way.

[76] Like under footnote 68; although it would be too ambitious to think that planning and assessment practices and proposals created on the level of an INTERREG region can become international standards, they can of course turn out to be enlightening example that proof to be relevant in other territorial contexts as well, and thus get imitation. As such they can also become to function as a precedent for regulation that is subsequently imposed or agreed upon on a higher policy level. In that regard, the importance of INTERREG projects that pioneer in the field of policy assessment and (spatial) planning practices, should not be underestimated.

[77] Including development and dissemination of knowledge on logistical management practices and of quality standards and certified quality labels for integrated trans-national transport chains. It could also involve projects to elaborate transport statistics.

(s) Development of cross-border urban clusters sharing functions and forming one integrated labour market (as far as extending beyond INTERREG A space)
Potential actors/ partners:
Local/ regional authorities (public)
Regional/ cross-border transport services suppliers (public or private)

Potential project issues C.2 Further integration of peripheral regions into social and economic progress

See (i):
Promotion of T&A projects that are not part or have a low priority in the national (federal) transport network plans or TEN-T, demonstrating their regional and transnational benefits[78]

(t) Development and implementation of concepts for sustainable INTERREGional mobility in areas with low population density
Potential actors/ partners:
Regional authorities (public)
Research organizations (public or private)

Potential project issues C.3 Improved inter-urban communications for dynamic development of cities, city clusters, metropolitan areas and neighbouring agglomerations

See (i):
Explore light rail and bus possibilities across borders

(u) Development and implementation of inter-city public transport concepts[79]
Potential actors/ partners:
Regional and local authorities (public)
Public transport organizations (public and private)

Potential project issues C.4 Integrate infrastructure with regional development and spatial planning

(v) Develop transnationally harmonised methods to prove the transnational significance of infrastructure projects such as the coast-parallel road/ rail link Netherlands - Northern Germany
Potential actors/ partners:
Regional authorities (public)
National transport ministries (public)

(w) Joint execution of (methodologically harmonised) regional (economic and environmental) impact assessment for improved transnational transport links, by regions in different countries served by these links (particularly relevant for links not in the focus of EU TEN-T concepts)

[78] E.g. improve connectivity (for freight and passengers) between Scotland and North East England and down the east coast, as there is pressure on the rail link and lack of a road link to motorway standard. A major problem this kind of projects encounter is that it may have lower priority within national programmes. As such, assessing its transnational and local merits is a highly suitable task within an INTERREG project.

[79] Especially in view of rising oil prices (see e.g. ESPON reports), travel patterns may change and shift more from car mobility to public transport.

Potential actors/ partners:
Regional authorities (public)

National sector institutions (public)
Research institutions (public or private)

(x) Develop local/ regional development action plans, transnationally coordinated, complementary to envisaged improved transnational transport links
Potential actors/ partners:
Local/ regional authorities (public)

8.3 Validity of previous NorVision project examples

The previous NorVision document forwarded several project examples with relevance for spatial planning tasks around T&A. Are these examples still relevant?

In a schematic way, and based on own expert judgment, one can assess the relevancy of the different NorVision project examples as follows:

NorVision statements	still valid?
Vision 1: NSR well integrated into the development of the European Space	Vision still relevant
• Identify priorities ... for links ... to national and transnational networks, including NSR port hinterland links	project issue still valid and relevant
• Identify .. concepts for the ... most rational use of (existing) capacities ...; case studies for integrated train corridor management	project issue still valid and relevant: optimise existing scarce infrastructure capacities through intelligent traffic management systems
• ... develop efficient and compatible multi-modal systems	project issue still valid and becoming even more relevant
• ...enhancing inland waterway transport through better integration into regional development measures and through .. networking among inland waterway ports	project issue still valid and gaining importance (positive example of the NWE INTERREG project InterPorts which was proposed to be expanded to the North Sea Region)
• ... facilitate cheaper and more efficient air transport within the region (the NSR)	cheaper: not necessarily, more efficient: yes
Vision 2: NSR with balanced spatial structure	Vision still relevant
• Identify priorities for regional transport links to bind NSR development poles together and to improve links from peripheral to urbanised regions	project issue still valid and relevant transnational transport corridors integrating non-metropolitan areas: "Priorities should be made for projects on the TEN-T network or access to the TEN-T."[80]
Vision 4: NSR takes care of its natural resources, ecological equilibrium and cultural heritage	Vision still relevant
• ... promote sustainable INTERREGional mobility under conditions of low-density, non-agglomeration regions	Still valid
Vision 9: Human activities in harmony with nature	Vision still relevant
• Concepts (for) ... reductions in distances travelled by vehicles in rural areas ..., without harming economic and social progress.	Still valid

[80] Statement from the Näringsdepartementet / Industry Ministry, S-103 33 Stockholm, Sweden.

9. CONCLUSIONS:

The North Sea Region is an area that is already well-deployed as regards infrastructure. Apart from selective upgrading of T&A infrastructure and superstructure (filling in missing links, improvement of inter-modal interfaces and interoperability of transport assets) within the region or from/to the region, there appears to be room for optimizing the T&A capacity of the currently available infrastructure network. This implies a greater use of alternative transport modes.

Also from a societal point of view this is highly recommendable. From the societal and sustainability point of view, it is also worthwhile to stress the relevance of INTERREG projects to be trendsetters and ambitious in adopting or creating progressive environmental standards with regard to transport activity and to create common level playing fields for transport activity by all modes. For they can serve as precedents that can later be adopted on a wider policy and territorial scale. Also from a societal and sustainability point of view, the integration of spatial development planning and transport and mobility assessments of investment and location projects is a must for the future

From a spatial equity and development point of view, there is –however- still reason to support construction projects (e.g. HST or Maglev) and the development of transport services that are based on modes that are not the most performant in terms of sustainability parameters (e.g. air and road transport).

From an efficiency point of view it would of course not very rational to create T&A structures that would put currently remoted and sparsely populated areas at the centre of transport networks (neither is it certain that this is a panacea for bringing about extra economic progress –in fact: many remoted areas are not even underdeveloped). Instead, it makes more sense to selectively improve the connections of such areas to current and upcoming transport vertebras through the NSR and the wider territory around it. In this regard, it is also important to highlight that the NSR INTERREG Programme should not just offer possibilities to improve the connections between remoted and sparsely populated areas within the NSR to corridors, gateways, gateway cities, TEN-T, HST, Maglev and MOS works/lines crossing the NSR. Similarly, the NSR INTERREG programme should also provide opportunities for the NSR on a whole to get better integrated into overarching T&A schemes that go beyond the border of this or any other particular INTERREG Programme's Region.

In order to foster the integration of areas and T&A structures throughout larger territories, project work is also welcome as regards the development of frameworks to assess positive/negative spill-over effects of projects beyond the geographical borders in which a financing authority is active

Related to this, it is also vital to stress the importance to allow that in the future the shaping and carrying out of projects can be done to a larger extent with partners from outside a particular INTERREG Programme Region.

In a similar vein, there is a need to assess the possibilities to have private actors participate more in INTERREG projects as there is a general willingness to enable this on behalf of current project participants. Also on behalf of those that manage and shape the INTERREG Programme there appears to be an interest in this. It can also be the case that involvement and support of national institutions is strongly needed to realize certain projects. Their engagement should therefore also be assured under such circumstances.

As an additional conclusion –which is related to and relevant for all previous points; before broadening the scope of action and participation possibilities for all kinds of actors located

here and there, it would be good to see to what extent other Community Programmes and Plans (e.g. Marco Polo, TEN-T and MOS policy plans) already address specific T&A action fields (creation of grand infrastructures and erection of transport services), to see in which way INTERREG can expand its horizons (content-wise speaking) without producing redundancies with other these other programmes and plans. Certainly, it can learn from the Marco Polo Programme as regards the involvement of private actors into projects.

Finally, it is recommended to foster dissemination of project outcomes not only between actors from within the same INTERREG Region or between neighbouring INTERREG Regions, but also between INTERREG Regions that are situated far away from each other (e.g. on similar projects carried out in the NSR and the MEDOCC).

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LIST OF ABBREVIATIONS:

CIP: Community Initiative Programme

CTN: container

DG TREN: Directorate-General Transport and Energy (European Commission)

EC: European Commission

ESDP: European Spatial Development Perspective

ESPON: European Spatial Planning Observation Network

EU: European Union

GDP: Gross Domestic Product

GPS: Global Positioning System

GSM: Global System for Mobile TeleCommunications

HST: High Speed Train

LKW: Lastkraftwagen (truck)

Maglev: Magnetic levitation

MOS: Motorways of the Sea

NSR: North Sea Region

NWE: North West Europe

RTD: Research Technological Development

SPESP: Study Programme on European Spatial Planning

SSS: Short Sea Shipping

T&A: Transport and Accessibility

TEN-T: Trans-European Transport Network

TOR: Terms of Reference

UK: United Kingdom

APPENDIX A: TRENDS AND CHALLENGES

Structuring trends and challenges

Myriad trends and challenges with relevance for T&A in an INTERREG NSR context can be identified. In order to identify the most urgent and relevant ones, targeted desk research and opinion inventory activities was carried out. The outcomes of these exercises were presented both to the Vision Working Group of the INTERREG NSR and to the attendants of the Annual North Sea Conference.

In the following, we present a overview of trends –structured according to the previously presented sub-division of main challenges and their sub-themes- with regard to which T&A actors from the NSR welcome actions and propose solutions.

Take note that these main and sub-categories of T&A trends and challenges also reveal clear links with the spatial development objectives of the ESDP, with the measure-types under CIP / INTERREG Priority 2 (Efficient and sustainable transport and communications) and with the vision statements that follow from the NorVision document.

Table 1: Cross-linkages between present document's key challenges and trends, CIP measures, NorVision vision statements and ESDP objectives with regard to T&A

Key themes (desk research, opinion inventory activities, feedback from INTERREG NSR Vision Working Group and Annual North Sea Conference)	Measures (CIP)	Vision Statements (NorVision)	ESDP objectives
An efficient transport system responding to changing market conditions	Improve the integration of rural and maritime areas in national and international transport networks	NSR well integrated into the development of the European Space	Polycentric spatial development Parity of access to infrastructure
A transport system that respects environmental and other risk concerns as well as other societal values	Integrated and concerted sustainable management and planning of coastal zones and the North Sea itself	NSR takes care of its natural resources, ecological equilibrium and cultural heritage Human activities in harmony with nature	Wise management of the natural heritage

A transport system supporting regional development, integration and equal regional chances	Effective and sustainable transport in rural and urban areas, including maritime areas, and in new rural-urban connections Development of spatial, integrated strategies on transportation networks and the promotion of intermodal transport systems	NSR with balanced spatial structure	Wise management of the cultural heritage Parity of access to infrastructure New urban-rural relationship Polycentric spatial development

Source: own elaboration.

MAIN THEMES AND TRENDS FOR T&A IN THE NSR

Theme A: A competitive North Sea Region with efficient transport systems responding to changing market conditions	
Sub-theme A.1	*Towards integrated freight transport systems*
***Trends (*Changing demand patterns in freight transport)**	***Implications / challenges***
Individualisation (reduction of single consignments size); growing internet trading, 24/24h economy	• Threat: growing affinity to road transport, groupage, reduction of shipped lot sizes, growing need for fine-meshy distribution • Opportunity: as far as more unitised transport leads to increased containerization, parts of the trajectories can be taken care of by alternative transport • Threat and opportunity: Areas for location of logistical enterprises are often based on good road access, although location and modal split behaviour can be punctured when creating enterprise areas close to railway stations, sea or inland ports or by providing multimodal dilatations

Outsourcing of complete logistical packages Higher demands on quality standards, including reliable and seamless integration and matching of logistical with production processes	• Opportunity: one-stop-shopping create chances for tieing intermodal transport into integrated supply chains • Implication: growing need for co-operation of different logistic actors, including involvement of the road transport business, whereas there has been a lacking interest from the road transport business up to now: important to establish more co-operation with players from that transport sector • Rise of fragmented and multimodal transport chains / Growing need for and importance of supply chain integration and integrated management of such chains compared to pure transport costs • Implication: need for (cross-border) interconnectivity and interoperability of infrastructure, suprastructure and actors • Implication: multi-modality requires full informational and organisational process integration to ensure reliable processes: integration of administrative procedures and transport operations • Opportunity and threat: growing importance of soft quality factors
Continued global division of labour: decoupling of production and consumption areas[81]	• Threat: over-proportionate growth of freight traffic, especially of international long haul traffic • Overload in mainports and road outlets, among others leading to growing port congestion (e.g. longer delays before containers are available for collection) • Pressure on Hinterland connections of main ports: with many ports now serving larger hinterlands, there are problems with lack of capacity on the local links between the ports and trunk road and rail routes (rail issues can include gauge constraints in function of packaging modalities used e.g. 9'6" containers or restrictions on maximum permissible lengths of trains – operators and customers would like to run longer trains and have suitable locos, but connecting lines have length limits and there is limited capacity on trunk line for longer trains) • Opportunity: growing chances for non-main ports in offering attractive locations and transport outlets and circumvent main port problems, certainly as many operators are looking to switch to less congested ports to achieve faster and more reliable round trips, even if such ports are further away from the ultimate traffic origin or destination • Opportunity: deploy slack capacity of alternative transport modes with room for growth (inland navigation) or at times of less activity (night trains) on port-hinterland connections to decongest main ports • Containerization and globalization of cargo flows leads to significant imbalances between incoming and outgoing (container) loads. On several O-Ds (both overseas port-to-port O-Ds and O-Ds between hinterland and mainports) structural problems are emerging in terms of empty riding (mostly with containerized transport). On top of the mere existence of this phenomenon one observes the following. In order to ship back as much containers to the origins –notably the Far East- as the amount that left there, and the obligation to do this on a short term, also time pressure is exerted on hinterland-port repositioning traffic. This results in empty transports, either per truck or not, generating very low added value and absorbing transport capacity ("crowding out effect") that could also be used for more valuable purposes. • In general, the decoupling of production and consumption leads to extra transport and transhipment activity and thus increases the need for throughput capacity of transport and accessibility systems, with congestion and saturation as more than likely consequences (see also elsewhere).

[81] E.g. confirmed by the Study Programme on European Spatial Planning (completed 2000): continued disengagement of spatial patterns of production/consumption.

World is moving towards a 24/24h economy	As long as most transport services are concentrated during daytime, this increases pressure on infrastructures and accessibility to agglomerations during the day Challenge: in order to spread traffic intensity, transport(-related) services should become operational around the clock as well and or one should make better use of alternative transport means to regulate the pressure on road facilities e.g. via targeted costing measures or extended servicing hours for receival and shipment of goods
Shortening time-to-market schedules Rise of postponed manufacturing and final client customization for more sophisticated products. Basic production is done overseas and product finishing takes place near final clients	Implication: growing transhipment volumes in main ports and pressure on transhipment and throughput capacity of main ports, via short lead times and quick turnover, also contributes to congestion. Dependency of main ports on road transport can be punctured via establishment of inland terminals for storage, transhipment and postponed manufacting, provided these are multimodally accessible and use of alternative transport modes for cargo flows from/to main ports is fostered Furthermore, especially final client customization activities imply that, after delocalizing certain production activities from e.g. Europe to China, part of those activities come back over here. Apart from transport and logistical implications, this also entails location and accessibility questions and how to deal with transport between mainports and customization centers and final consumer markets
***Trends* (Changing supply patterns in freight transport)**	***Implications / challenges***
Rise of intermodal cross-border transport chains and concepts Emergence of TEN-T and MOS projects	• Increases the need to come to integrated management of supply chains and to achieve interoperability and interconnectivity of the transport and transhipment apparatus and actors involved

Development of multi-modal hubs (e.g. in sea and air ports) as logistic nodes with good Hinterland links	• Opportunity: growing demand for logistic business areas in/close to ports with good multi-modal hinterland connections. However (see also observations supra with regard to locating e.g. postponed manufacturing activities), interest in locating business activities in main ports outpaces the available space: spatial shortages • Opportunities for 'mass transport of unitised freight' via alternative transport
Growing potential for secondary hubs in the hinterland, co-operating and sharing functions with the primary hubs	• Opportunities for selective geographical decentralization of logistical activities towards Hinterland • Opportunity: potential demand for logistic business areas in selected Hinterland locations with good multi-modal connections to primary hubs (e.g. sea ports) and to the regional hinterland • Opportunity: limitation of road transport in regional distribution activities
Growing (interest in) private sector involvement in public (freight and passenger) transport policy actions and in transport and infrastructure operations	• Implication: need for integration of infrastructure development with transport operations • Need for integration of administrative procedures into transport optimization[82] • Create solid possibilities for PPP and other financing constructions[83] i.e. prepare procedurally speaking for more private involvement, in such a way that it is in line with all kinds of legislation (cfr. EU directives and discussions with regard to the matter)[84] • Need for opening up of programmes like INTERREG, traditionally destined to non-profit partners • Need to involve road transport actors in this process as well • Opportunity: can spur the introduction of innovative solutions and broadening of service package

[82] E.g. simplified customs procedures at the gates of sea ports, using electronic means of document transfer.

[83] Public-private partnerships are promoted by all countries, see for example the Nota Mobiliteit (2004) for the Netherlands.

[84] http://www.telegraaf.nl/binnenland/20516241/Peijs_wil_wegen_naar_Amerikaans_model.html

The liberalization and the transnationalization of railway activities and railway organizations have very pervasive effects on the ease with which all kinds of projects (e.g. initiation of new services) can be set up Reduced railway services for large areas e.g. via withdrawal on main axes by major railway companies	Implication: whereas formerly, the actor landscape was very transparent, today the large amount of parties involved blurs the sight on who to contact when initiating new projects. As such, the fragmentation of the market hampers e.g. getting the necessary data and other info to evaluate ex ante the prospects of new products, as well as getting a sight on whom to involve. This may in fact form a break on the launching of new services, whereas the liberalization ought to stir product development. Lack of (cross-border and public-private) transparency on who-is-who and where can one obtain which kind of information –and how to solve all this, is therefore a policy theme that deserves attention Threat: can potentially be counteractive to modal shifts from road to railway
Rise of the 45 feet container, which is more suitable than the 40 feet deep-sea container for intermodal transport and modal shifts on main ports-hinterland trajectories, as inland barges and railway shuttles are more suited for 45 feet (pallet-wide) containers. It appears that the 45 feet container has become the standard for short sea shipping in northern and north-western Europe, but not in southern Europe	Implication/challenge: the 45 feet container potentially enhances modal shift. Its rise and embracement (as well as those of other packaging modalities that favour modal shifts) should be stimulated as they contribute to sustainable transport practices. It is important to support this trend both on intra-regional trajectories (intra-NSR) as when connecting the NSR with other regions On the other hand, the use of 9'6" containers, brings along specific problems: an increasing proportion of the deepsea trade is in 9'6" containers. These present problems for onward distribution by rail (f;i. signalled in the UK), as not all routes have been gauge cleared for these containers, and even when main lines are OK, the connecting lines to and from ports may be restricted. Furthermore, even where main lines have been cleared, pressure on capacity from other rail services, and the lack of alternative and diversionary routes may limit possibilities for growth
Decreasing (or negative) slack capacity on existing infrastructure Limited financial resources (and ditto public support) to expand existing transport infrastructure (both for road, rail and waterborne transport)	Implication/challenge: tendency to search for ways to optimize the throughput / transport capacity of existing infrastructure via a more efficient exploitation. Like, a more integrated perspective on the use of available transport capacity, better interfaces and connections between resp. transport modes' infrastructure and multimodal accessibility of business parks. Also the elimination of specific railway bottlenecks and a modified and or segmented availability and dedication of transport networks to passenger and cargo transport purposes (notably with regard to rail and road networks) fit into this recipe. [85] In addition, increasing the throughput capacities of certain locks for inland waterway and sea traffic can be mentioned. Selectively, one can also choose to increase the capacity of alternative transport by building supplementary infrastructure, like extending 2 track railways to 4 tracks.

[85] As an example, the possibility was mentioned to improve certain transport possibilities around the clock, albeit acknowledging the fact that there is a tension between, on the one hand, the tendency to go along with a 24-7 economy and modal shift thoughts, and, on the other hand, tolerance vis-à-vis noise and emission hindrance and social effects of night work.

Development of regional airports facilitated by low cost and holiday charter operators Conversion of specific larger airports into main ports	Hands of-old regional and smaller airports interesting hub characteristics • Availability of air freight services can function as contributory factor to the development of freight hubs, both in central and less central areas • Opportunities to develop niche airfreight markets through smaller airports with good road links • Interesting developments in cross ownership of airports e.g. Newcastle and København; • Renders significant scope for and critical mass of regional airports throughout the NSR to communicate and work with each other (as well as users of services in different parts of the NSR, e.g. tour operators); • This would, among other things, enhance the publicity and marketability of NSR's regional airports All in all –together with possibilities offered by major freight airports, this calls for reflection on integration of air traffic into inter-modal schemes and thinking
Considerable share of cargo flows is transported via pipelines	Many times overlooked in policy and development plans. However, also this transport "mode" should be fully considered (also for societal advantages)
Sub-theme A.2	*High-level passenger mobility with limited potential to enlarge road capacities*
***Trends (*Changing patterns of demand in non-local passenger transport)**	***Implications / challenges***
Ageing population and other demographic changes	• Modified mobility behaviour in function of age segment and type of area (urban/rural)
Rise of passenger transport for leisure purposes (to get to leisure destinations)	• Conceive transport as part of (daytrip) leisure excursions
Further growth of individual car travel Continued sub-urbanisation Deficits in inter-city transport links	• Threat: reduced affinity to public transport • Threat: growing congestion and environmental burden • Opportunity: urban clustering and concentration[86]

[86] E.g. the Nota Ruimte (2004), the Dutch Spatial Strategy, promotes a concentrated urbanisation and infrastructure into national urban networks, economic core areas and major transport axes. Nota Ruimte makes specific consideration of Dutch spatial structures to be integrated into European structures.

***Trends* (Changing patterns of supply in non-local passenger transport)**	***Implications / challenges***
Development of regional airports facilitated by low cost and holiday charter operators, leading to price reduction and spatial diversification of scheduled flights Interesting developments in cross ownership of airports e.g. Newcastle and København	Opportunity: creation of a network of air ports, whose members can communicate and work with each other (as well as users of services in different parts of the NSR, e.g. tour operators) in order to broaden range of affordable services Threat: replacement of long-distance rail by air travel; environmental pressure. Similarly: flight offers can be vulnerable to the increase of fuel prices
Growing interest in light rail	• Can be used to enhance interconnectivity between urbanizations
Development of major new rail links (HST or Maglev) and (feedering) connections to established TEN-T and pan-European corridors (e.g. Zuiderzeelijn, Hamburg-Stockholm connection)	• Contributes to territorial interconnectivity: within and beyond the NSR • Widens rail service offer and complements to airborne passenger transport possibilities

Theme B: A transport system that respects environmental and other risk concerns	
Sub-theme B.1	*Modal shift to more environmental-friendly transport modes*
Trends	***Implications / challenges***
Policies to enhance modal shifts from road to sea e.g. via development of Motorways of the Sea concept) Policies to strengthen railways' competitiveness (e.g. development of railway corridors and TEN-T concept) Policies to market inland navigation	• Opportunity: growth potentials for ports and for SSS as long haul transport concept • Opportunity: chance for reducing environmental pressure • Threat: slow market acclimatization to MOS and SSS-related transport chains; difficulty to bind private operators • Opportunity: growth potentials for rail and inland navigation as long haul transport concept or as segments in intermodal chains • Increases the need to come to integrated management of supply chains and to achieve interoperability and interconnectivity of the transport and transhipment apparatus and actors involved (see supra) • Weakness: intermodal transport suffers from lack of clear and user friendly liability schemes in case of rupture and damage of goods, at least this is users' perception • Threat: heavy railway organisations and non-transparent actor landscape (see supra) • Threat: railways not suited for individualised transport demand • Threat: potential conflict between (spatial) equity and modal shift, as the latter favours the creation of high-concentration transit routes, concentrating the transport burdens spatially
Wider (acceptance of) application of social-cost pricing raising the cost of road and air transport Reducing acceptance of pollution from road traffic/enforcement of traffic containment in over-polluted and densely populated areas Growing awareness with regard to climate changes and energy shortages	• Opportunity: growing potentials for alternative modes of transport: • Opportunity: Growing competitiveness of railways and waterways if well integrated into intermodal networks • Opportunity: Improved location qualities and advantages of business sites linked to intermodal logistic centres • Threat: in many countries there is less interest in pricing mechanisms for efficiency reasons[87]

[87] Charging is seen more as a means towards raising revenues necessary for future infrastructure investments, or in the context of prevention of environmental damage. Furthermore, since national governments have often used the transport sector as a major source of tax revenue, many member states may tend to resist further transport pricing initiatives. See ESPON project 2.1.1 - Territorial impacts of EU transport and TEN policies.

Growing congestion on road systems, especially around main ports	• Loss of reliability of road transport • Loss of accessibility of economic and population centres via roads • Need to look for ways to get an increased share of incoming and outgoing traffic flows on alternative traffic modes. Needed facilities for this are regular alternative transport shuttles between mainports and Hinterland hubs and the establishment of such Hinterland facilities
Growing amounts of dangerous goods that are transported	Implication: increases interest in shifting these transports to the most safe modes provided sufficient monitoring and transparency with regard to safety and traceability can be assured Implication: the fact that alternative transport often requires other modal segments tied into one chain, implies that one runs the danger of imposing many security checks along the chain. It also enhances damage risks via transhipment operations. This hampers the attractivity of multimodal transport.
Limited financial resources (and ditto public support) to expand existing transport infrastructure (both for road, rail and waterborne transport)	Implication: need for improved exploitation (deployment) of existing infrastructure instead of creating new. Especially in and around large urbanizations the traffic problematique urges solutions. Demand after regulated use of infrastructure via policies that canalize transport activities towards the most adequate modal option at each moment in time. E.g. via road pricing one can incentive passenger traffic via public transport and decourage "car solism". In the same way, one can regulate cargo transport's access to infrastructure networks via pricing measures in function of loading degree or time slots. That way, one obtains a more efficient deployment of vehicles and ditto use of infrastructure. Awareness campaigns towards alternative transport modes under users can also contribute to this. In this regard, it is necessary to link passenger and goods transport and their combined use of the same transport networks. Consequently (and around the clock) one should determine how the infrastructure can be used in an optimal way and how is it possible to create synergy between passenger and goods transport.
Sub-theme B.2	*Reduction of environmental impacts and risks associated with transport*
Trends	***Implications / challenges***
Increasing concern for environmental impacts of transport accidents at sea or in urban areas.	Implication/challenge: this increases the need for better ways to forecast (probabilities of) accidents, prevent accidents and offer help when they take place. Not only at sea, but also in case of accidents on land side. The availability of (urban) contingency plans are also of relevance in this respect
Growing risks of terrorist attacks	• Growing cost in sea ports and in inland ports due to control measures • Negligence of uncontrollable risks involved in road transport • Advantages of logistical centres to manage risks
Growing amounts of dangerous goods that are transported Growing concerns to avoid or reduce risks	Implication: growing concern for safety matters. This has already been a major issue for maritime traffic during a long period, but for continental traffic (IWW and other forms of transport), there appears to be room for improvement. The implementation of River Information Systems, ISPS and the like are steps in the right direction. In order to manage this issue, also optimized regulatory frameworks can help
Growing amounts of illegal immigrants flows as well as of illegal products: drugs, cigarettes	Call for more control

Sub-theme B.3	*Establishing common level playing field conditions*
Trends	***Implications / challenges***
Tendency to apply a global cost view on transport activities, including the costs caused to the environment and to people and cargo mobility	Implication: need to come to pricing practices that take into account such societal costs in order to level the extra costs involved in intermodal transport through extra transhipment (loading/unloading operations). Possible solution: use environmental savings through intermodal transport as a mechanism to neutralize the transhipment costs involved ("come to mode neutral transhipment costs") – harmonization
More stringent but varying interpretations of requirements and directives with regard to e.g. quality of water, air quality and fine dust and particulates (framework directive water).	Implication 1: can influence the possibilities to establish specific economic activities in specific areas or the carrying out of specific transport activities from one country to another (policy competition). Need to come to similar field-level conditions - harmonization Implication 2: can avoid equal competition between areas and block the establishment of specific economic activities in specific areas the carrying out of specific transport activities.
Increasing amount of regulation and directives. E.g. European Maritime Strategy, White paper on transport policy, Water Framework directive	But lack of uniformity from one country to another in the implementation of it. Countries use more, or less parameters to measure such issues. Or they are more or less benevolent towards identical transport operators. Also, different transport modes are treated in different ways
Allocating business activities in the most suitable places	Implication: ways should be found to stimulate efficient usage of space. However, current regulations do not always incentivy this. As an illustration: in Flanders, incentives are provided for good practices in usage of industrial space, but such incentives are restricted to areas outside ports. In ports, such incentives can not be given (perhaps because it could lead to unfair competition between ports?). A spin-off of such situations is that activities that can very well be located in port areas move elsewhere to obtain such incentives. It thus stands in the way of getting/keeping activities at the most adequate location and it may even avoid optimal use of space in port areas. Implication: need to get activities in the most appropriate places and incentive economic use of space everywhere
Treating of multimodal chains as one in a logistical sense in one thing, but in a security sense is another (especially as regards dangerous goods)	Implication: need to come to an integrated chain control at one point. Once a traffic flow has past the necessary tests, the transport flow should enter/be carried out conform a closed system, so that the security check on an inland station (respecting the most severe criteria) should not be followed anymore by a subsequent check in a seaport f.i. Once complied with security requirements, do not produce control redundancies
Sub-theme B.4	*Towards compatibility with other societal and user functions and sectors*
Trends	***Implications / challenges***
Increasing size of intercontinental container liners and growing amount of large ship movements per time unit at sea and along shores	Implication: growing draught requirements, intensifying the use of the sea by transport activities, increasing interferences with ecological systems at sea and other systems and functions. This calls for more, and integrated, spatial planning practices at sea, in order to streamline/harmonize "sea claims" by for e.g. transport, energy and environmental purposes
Increased problems with regard to finding areas for depositing sea and river sludge	Implication: this causes a need to come to solutions that are sustainable and acceptable e.g. from a societal and spatial planning perspective
Growing awareness of interferences between transport activities at sea with marine milieu	Implication: contributes to developing a scope for the concept of "marine spatial planning"

Seasonal accessibility frictions to leisure areas (e.g. coast) and infrastructure (e.g. inland waterways and road)	Implication: Pressure on rail and road infrastructure during spring and summertime when both passenger and cargo transport recur to available infrastructure in order to reach the seaside (seasonal accessibility frictions). Mutual understanding and compatibilizing the resp. needs of the different users are necessary to avoid conflicts and to serve each user group. As extreme solutions, creation of dedicated infrastructure or use of separated time slots can also be a solution. In a similar context, this issue also exists on inland waterways where cargo vessels regularly have to share waterways and locks with leisure yachts. Also there, a better co-use of and coexistence on transport infrastructure should be aimed for. From a broader viewpoint, one could state that transport and accessibility infrastructures serve multiple societal sectors and functions (like economic and leisure sectors and functions) and that compatibility between these user groups and functions should be strived for Under recreational users of inland waterways there is also concern over compatibility of use of rivers and canals vis-à-vis increasing waterborne cargo activities. Especially on waterways with specific leisure values. An optimization of relationships and use of waterways between the touristic-recreational sector and the economical sector implies also that the inland navigation sector must be comprehensive towards leisure sailors as co-users of waterborne infrastructure. In this regard, attention can also go out to “right of way rules” and speed limits at yachting ports.
Impacts of growth in low cast airlines on passenger ferrry market	However, increase in calls by cruise liners to UK-North East ports has also opened up new leisure markets and drawn in connecting traffic through regional airports

Theme C: A transport system supporting regional development, integration and equal regional chances	
Sub-theme C.1	*Response to and support to further internationalization within and beyond the NSR*
Trends	***Implications / challenges***
Continued internationalisation (globalisation; EU extension towards Central and Eastern Europe)*:*	• Above-average growth of maritime and rail transport (opportunity) and of continental transit on roads (threat) • Need for improved long haul travelling and transport concepts for passengers and cargo plus inter-port co-operation and joint projects between other operators: hook onto concepts like MOS, TEN-T, corridors, etc. Implication/challenge 1: this calls for stimulating co-operation across administrative territories. E.g. via projects that enhance shifting cargo flows to transport modes and routes that contribute to decongesting certain axes or which are more environmentally friendly in general. In concreto this could mean setting up transports/links between the NSR and Baltic and Black Sea areas. This would not only favour T&A and economic development of the NSR, but it would also contribute to sustainability objectives (on the level of the NSR and Europe-wide). It can also contribute to the integration of upcoming areas (like the Black Sea region) into pan-European transport schemes. It would also help to get returns on the large-scale expansion investments that are foreseen in many of the ports in emerging economies (around the Baltic Sea and the Black Sea, among others). This may also demand knowledge transfer in order to come to competitive transport and transhipment practices in all segments of a chain. Also in the area of passenger transport, new cross-border initiatives are needed Implication/challenge 2: the entrance of the Baltic states into the EU and the increased exchange and co-operation possibilities this creates, also alters the geographical positioning of especially the northeastern areas of the NSR. Whereas these had a more or less peripherical status within the EU-15, with the latest entries, they obtain a much more central status. In this new position, they must also be better able to fulfill a linking pin role between the old and the expanded EU and between the Baltic sea area and the NSR. As a matter of fact, this new geo-economical constellation could give way to the creation of an additional pan-European transport corridor. Implication/challenge 3: the development of new gateways could have important demographic and socio-economic effects, which could be of major importance for some (e.g. Scandinavian) places in the North Sea Region
Growing east-west trade and transport	It is important to encourage territorial co-operation between the North Sea Region and the Baltic Region, as in the spirit of MOS. It is important to not adopt too fixed (project) borders for the different regions, particularly because infrastructure is fed by traffic originating or destined for areas outside the NSR (or the BSR, for that matter). This aspect is even further enhanced looking at the growing east-west flows through the regions. It is therefore obvious to underline the need for a joint effort between the North Sea programme and the Baltic Sea programme in order to identify measures for assisting the development of east-west transports.

Sub-theme C.2	*Further integration of peripheral regions into social and economic progress*
Trends	***Implications / challenges***
Continued efforts to integrate peripheral regions into social and economic progress through improved INTERREGional accessibility, with mixed results … At the same time, various peripheral regions have demonstrated the potential to promote regional development in spite of peripherality, based on labour qualification, intra-regional integration and specialisation on activities with limited transport cost sensitivity[88] Also: Growing share of economic activities with low dependency on transport cost (services; high-value/ low-volume production)	• Potential: peripheral regions become less dependent on INTERREGional accessibility • Risk: Reduced pressure to bind peripheral regions into transport infrastructure networks

[88] According to the ESPON 2.1.1 study on territorial impacts of EU transport and TEN policies, the overall effects of transport infrastructure investments and other transport policies are small compared with those of socio-economic and technical macro trends, such as globalisation, increasing competition between cities and regions, ageing of the population, shifting labour force participation and increases in labour productivity. Even large increases in regional accessibility translate into only small increases in regional economic activity. However , the magnitude of the effect seems to depend strongly on the already existing level of accessibility: For regions at the European periphery or in the accession countries which suffer from the remote geographical location plus an underdeveloped transport infrastructure, a gain in accessibility through a new motorway or rail line may bring significant progress in economic development. But also the opposite may happen if the new connection opens a formerly isolated region to the competition of more efficient or cheaper suppliers in other regions.

The benefits of transport infrastructure are not counted by the member states in their national plans when they accrue in another country (exception: Germany where the opposite is true)[89]	• Threat: underestimation in national plans of benefits of transnational links. Growing need to consider regional aspects when considering international transport links, also in neighbouring countries • Threat: conditions for modal shift towards railway are better on high-intensity transit routes linking major urban concentrations. This favours investments there instead of peripheral regions
Growing regional development bottlenecks due to over-congested (transnational) transport infrastructure[90]	• Risk: loss of competitiveness of seaports and other major urban centers as logistic nodes • Potential: growing potential for secondary hubs (economic clusters) • Potential: growing potential for regional urban-rural clusters with shared functional distribution
Emphasis on pan-European corridors and TEN-Ts	Potential strengthening of centre-periphery dichotomy and bears the risk of overlooking (transport) needs of rural areas by focussing on urban issues
Withdrawal on main axes by railway companies	Reduced pressure to construct missing links from the viewpoint of peripheral areas. Can in general lead to less action to boost peripheral regions and their transport needs and bind them into overarching transport infrastructure networks
Concentration of regional development means towards vanguard areas[91]	But, may not be bad for balance between improved transport links and the local Quality of Life. Rural communities may in fact be split between those who value the isolation and those who seek better connections. In this regard, concentrated development around mainports can even be seen as important to preserve appreciated characteristics of specific areas. A greater need for consideration of "people" issues, in addition to (or maybe as opposed to) "spaces and physical areas" issues
Concentration on main port functions with loss of functions in smaller (dry) Hinterland ports	
Rise in flight operations from smaller regional airports	May partly overcome peripherality status of certain areas, although flight offers can be vulnerable to the increase of fuel prices
Growing interest in light rail concepts	Can enhance interconnectivity of areas
New (EU) regulation on e.g. environment	Can pose a threat to the development of coastal and other more peripheral zones

[89] See also IASON project: Integrated Appraisal of Spatial economic and network effects of transport investments and policies (completed Feb. 2004) The IASON project serves as guideline for EC policy on trans-European networks by forecasting regional economic impacts of TEN projects.

[90] Note: So far, congestion did not have the anticipated negative impact on regional development. But according to the Nota Mobiliteit (Netherlands, 2004), surveys have confirmed that Dutch Randstad agglomeration is considered by them as becoming disadvantageous as compared to similar locations in other European countries. Also, major sea ports increasingly notice problems of competitiveness due to bottlenecks in hinterland transport. Therefore, one can ask whether diversification to a wider number of sea ports and development of new sea ports is a solution?

[91] See e.g. IBO-rapport 'Regionaal economisch beleid in de toekomst' (2004).

Sub-theme C.3	*Improved inter-urban communications for dynamic development of cities, city clusters, metropolitan areas and neighbouring agglomerations*
Trends	***Implications / challenges***
Continued sub-urbanisation Deficits in inter-city transport links Quality of inter-city rail connections is increasingly dependent on operators' service plans, not on infrastructure qualities	• Threat: reduced affinity to public transport • Threat: growing congestion and environmental burden • Increasing congestion • Defectuous accessibility of and communication between city centres: agglomeration diseconomies • Opportunity: urban clustering and concentration: agglomeration economies[92] • Increases certain comparative (e.g. accessibility) advantages of peripheral and low population density areas
Price reduction and spatial diversification of scheduled flights	• Threat: replacement of long-distance rail by air travel; environmental pressure • Opportunity: reduced peripherality disadvantages, although flight offers can be vulnerable to the increase of fuel prices • Similar initiatives can be developed via (high speed) railways
Wider geographical scope of economies	Enhances conceiving of new long distance links (for passenger and cargo transport) and shortens distances mentally
Growing interest in light rail concepts	Can be used to shorten inter-city distances
Sub-theme C.4	*Integrate infrastructure with regional development and spatial planning*
Trends	***Implications / challenges***
Growing interest in integrated spatial planning	Chances for improving multimodal dilatation of industrial sites
While dependency of regional development on transport infrastructure has weakened, dependency of transport demand on regional/spatial development is growing	This requires new approaches for spatial planning - consider its impacts on transport patterns.

[92] E.g. the Nota Ruimte (2004), the Dutch Spatial Strategy, promotes a concentrated urbanisation and infrastructure into national urban networks, economic core areas and major transport axes. Nota Ruimte makes specific consideration of Dutch spatial structures to be integrated into European structures.

As (economic) space is homogenizing through integration processes, assessing regional development impacts and conducting spatial planning should also move up the geographical ladder	Growing need to consider regional development and transport implications of international projects or projects with foreign spill-overs, from a cross-border perspective i.e. include assessment of impacts in other (neighbouring) countries

APPENDIX B: PROJECT SUGGESTIONS

Potential project issues A.1 Towards integrated freight transport systems

Examples of relevant project topics based upon current funding period:[93]

(a) Enhanced use of inland shipping through better integration of inland harbours into regional development measures and through port-port co-operation[94]

(b) Co-operative transnational development of multi-modal transport chains[95]

(c) Measures to enhance cargo handling efficiency in sea ports

(d) Improvement of interoperability (inter-modal at transport hubs; cross-border for railways)

Further potential project examples:

(e) Development of logistical centre systems and transport practices involving and linking sea port and hinterland locations e.g. via Pilot study Jade Weser Port (and other sea ports): Searching for new ways of intermodal co-operation with hinterland traffic

(f) Design and introduction of intermodal interfaces and packaging modalities that favour sustainable (alternative/multimodal) transport e.g. around 45 feet containers and versatile transhipment means

(g) Design location programmes / incentives to establish transport-sensitive business at multimodally accessible Hinterland sites to decongest main ports and their surroundings

(h) Set up (container) repositioning schemes or incentives to avoid empty riding and in general to avoid interferences with laden traffic, especially during day time, and stimulate initiatives to consolidate scattered freight transport demands e.g. via better information pools, especially as regards sea and inland waterway transport

(i) Strengthening of selected secondary sea ports with a potential to relieve major ports

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[93] Relevant project topics, either derived from "NorVision - A Spatial Perspective for the North Sea Region"; CIP - Community Initiative Programme North Sea INTERREG IIIB or from running projects under the current INTERREG programme period.

[94] Project example INTERREG IIIB/NWE: InterPortsPromotioNet - a co-operation of sea ports (Antwerp, Rotterdam, Amsterdam, Medway/UK) and of 10 inland ports from Northrhine-Westphalia/DE. Activities: Identify new potentials for ship transport seaports - inland ports and between sea ports; establish a communication platform to provide market information (potential industrial clients, port profiles, logistic actors a.o.); develop offers for integrated transport chains together with forwarders, industry, shipping lines, logistic providers; identify bottlenecks to enhanced short-sea, inland waterways and port-hinterland rail transport and measures for their removal; inland ports provide local market information to sea ports, sea ports provide marketing knowledge to staff from small inland ports not experienced in this activity; marketing of inland ports as locations for logistic providers and industry (secondary hubs to the seaports) - this will in turn promote the use of inland shipping.

[95] Project example INTERREG IIIB/NSR: REMARCC Network of regional maritime competence centers; activities: creation of regional/ INTERREGional co-operation clusters for waterborne transport and logistics; improvement of knowledge about waterborne transport and logistics; optimisation measures for the intermodal logistic chain; promotion measures for waterborne transport. The project involves port operators, shipping companies, shippers, forwarders, logistic providers with a leading role of port regions.

(j) Extend inland shipping to secondary waterways, including an upgrading of these waterways

(k) Promotion of river-sea shipping, e.g. from Ruhr area to the U.K. and to Baltic Sea countries, from UK to Benelux and to France

(l) Develop a framework concept for North Sea "Motorways of the sea" within the framework of INTERREG to support the corresponding EU programme

(m) Enhance the informational integration of door-to-door logistics[96] and a transnationally harmonised use of telematics as a means to make multi-modal transport more efficient and more attractive

(n) Development/ introduction of quality standards and certified quality labels for integrated transnational transport chains

(o) Development of dedicated freight train connections with improved inter-operability and inter-modal integration and of new railway services with new operators in a liberalised market

(p) Set up and share experiences from integrated supply chains in order to lay foundations for integrated transnational transport-logistic chain supply development with the involvement of all (public and private) actors on selected routes

(q) Provide field-level back-up for the EU plans to promote the job function of Freight integrators

(r) Set up marketing and other forms of co-operation between logistic centres in different areas of northern Europe incl. the BSR

(s) Set up projects for the elaboration of (e.g. door-to-door and intermodal) transport statistics

(t) Develop and disseminate knowledge obtained in e.g. the Nordic countries on logistical management strategies with partners from within and outside the NSR

(u) Tap into knowledge and experiences provided from the previous INTEREG Programmes. A suggestion to a concluding project in the present programme IIIB could be a systematic assessment of knowledge and experiences collected during the INTERREG projects already carried out

(v) Optimize use of available transport capacity, especially of slack capacity of alternative transport infrastructures (e.g. via extension of service regimes around the clock, better/multimodal dilatation of business parks, incentives favouring modal shifts f.i. during specific time or season frames)

(w) Creation of regular circuits between (existing) multimodal transhipment points (coastal and non-coastal) and launch an Inter Ports Promotion Net for the North Sea (incl. possible co-operation with the INTERREG IIIB project IPPN in NWE)

(x) Stimulate Initiatives to engage actors from the road transport sectors more strongly into intermodal projects and thinking

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[96] This is also supported by the EU Commission's transport RTD programme, including in the 90s projects as: BOPCom: Baltic Open Port Communication (1996-1998), MarNet: Maritime Information Network (1997-1998), 3SNET: Short Sea Shipping Network (1998-1999), PROSIT: Promotion of Short Sea Shipping and Inland Waterway Transport by the Use of Modern Telematics (1998-2000). Problem: Shortsea shipping is not used by shippers and forwarders, even if the price of transport is much lower than with competing modes. Objective: Development of open freight information and management systems for shortsea shipping: port communication, market information, electronic booking, tracking and tracing, customs information accessible for all operators, including SME. The research programmes demonstrated the technical feasibility and business usefulness of the systems. The extension beyond the demonstration phase proved difficult. Trans-national co-operation among public parties (port authorities, waterway managers) can pave the way for co-operation between private parties. The participation of large actors (large ship owners, ports,…) is crucial, because of the transport value they manage, but these may prefer in-house information systems. The issue may be less appropriate for INTERREG due to its commercial nature.

(y) Stimulate co-operation between public sector and private sector, so that commercial opportunities can be identified and exploited. In addition, need to consider carefully the role and limits to start-up funding assistance

Potential project issues A.2 High-level passenger mobility with limited potential to enlarge road capacities

Examples of relevant project topics based upon current funding period:

(a) Development of low-price flight connections in the NSR (North Sea Region)[97]

Further potential project examples:

(b) Inter-modal integration of airports: dilatation via (light-)rail and bus connections

(c) Valorize co-operation and exchange possibilities between network of regional airports in the NSR, also with the purpose to set up additional lines

(d) Set up and exchange experiences on alternative transport projects with regard to work-home and school-home traffic

(e) Development of enhanced inter-city train connections beyond the established pan-European corridors: new railway services with new operators in a liberalised market: inter-city and cross-border

(f) Setting up long distance passenger transport services to support integration processes within wider geographical settings (analogous or adjacent to e.g. Hamburg-Stockholm example) via rail (HST or Maglev) and bus

(g) Stimulate initiatives to establish regional and transnational (cross border) public transport associations

(h) Introduction of new technologies in the field of transnational passenger traffic: EURORAPID/magnetic levitation (Amsterdam - Groningen - Bremen - Hamburg and onwards)

(i) Promote initiatives that study and adapt to changing or particular demographic and corresponding mobility patterns e.g. the Nordic region has some features that need to be exploited further. Low population density, long distances between important consumption and production areas demand special solutions. Lessons and implications in terms of transport behaviour and services could be studied and disseminated in co-operation with other low-density areas within the NSR/EU

(j) Stimulate initiatives that enhance the introduction of modern technologies in the field of ticketing to attract passengers to multimodal traffic combinations (e.g. rail + ship) from local up the EU level – incl. development of new software (if necessary) or interfaces to harmonize existing programmes

(k) Consider the assessment of the merits of infrastructure projects that are not part respectively have a low priority in the national (federal) transport network plans e.g. support secondary transport connections not included in TEN-Ts or in national plans, demonstrating their regional and transnational benefits (EURORAPID, Marschlinie along west Jutland coast)

(l) Improve ferry connections to North Sea islands

(m) Improve coast-parallel transport links: west-east axis Amsterdam - Groningen - Emden - Bremen - Hamburg - Lübeck; south-north axis from Hamburg to Hirtshals along the west coast of Jutland

(n) Improve connectivity between Scotland and North East England and down the east coast, as there is pressure on the rail link and lack of a road link to motorway standard

[97] Project example INTERREGIIIB/NSR: SEAPLANE with following activities: status Analysis of the North Sea Air Transport Network (analyse airport and regional socio-economic); Airport Quality Improvement and Development Strategy for participating airports; analysis of airports' market potentials (passengers); Identify measures to improve internal and external airport security and safety; North Sea Aviation Co-operation Network: exchange of know-how and experience; analyse how access to airports can be improved and how they can be tied into the growing European intermodal transport network; advice to airports to improve efficiency, quality and economic sustainability with shrinking public funds and stronger need to work towards a commercially sustainable operation.

Potential project issues B.1 Modal shift to more environmental-friendly transport modes

Examples of relevant project topics based upon current funding period:

(a) Development and implementation of concepts for sustainable INTERREGional mobility in areas with low population density

(b) Measures to reduce car dependency through regional and local partnerships of public authorities with public transport providers, business, schools, shopping, leisure providers

Further potential project examples:

(c) Fill in missing links in multimodal infrastructure landscape

(d) Aim at better exploitation of available transport capacity of networks, certainly of alternative transport networks, e.g. through selective proportioning of multimodal interfaces and ditto dilatation of industrial sites

(e) Develop concepts for better use of existing (limited) transport infrastructure capacities, e.g. through integrated management of railway links[98] [99]

(f) Initiate awareness campaigns to seduce user groups towards alternative and multimodal transport

(g) Offer courses on environmental impacts of transport in general (emission-related impacts)

(h) Stimulate initiatives to come up with and communicate further (political) arguments for the superior societal (e.g. environmental) performance of alternative transport modes

(i) Promote railway and inland waterway transport as environment friendly alternative for harbour hinterland road transport on selected routes

(j) Develop dedicated transnational freight railway routes (e.g. extension of Dutch Betuwe line in Germany; the 'iron Rhine' link Ruhr region – Antwerp

(k) Promote 'secondary' high-speed railways (possibly with lower speed than on major high-speed links, but faster than at present),[100] also for passenger transport services; example EURORAPID (high priority)

(l) Develop North Sea-linked motorways of the sea, including complete transport chains from origins to destinations in the port hinterland [101][102][103] and secondary motorways of the sea across the NSR. In

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[98] For example, the Mobility Plan for Flanders (2003) addresses measures to improve traffic information and management systems.

[99] E.g. the Dutch Nota Mobiliteit (Mobility Policy Document, 2004) has high expectations from organisational innovation in the railway sector.

[100] Examples: Amsterdam - Groningen - Bremen; triangle Oslo - Copenhagen - Stockholm; Fehmarn Belt route Hamburg - Copenhagen including a fixed link across the Belt; Hamburg - Flensburg - Aarhus - Aalborg - [including ferry link to Oslo; the 'northeast corridor' from Dutch perspective) between Randstad and Hamburg is seen as an important missing link in the TEN (Nota Mobiliteit, 2004).

[101] Link to more general promotion activities of national ShortSeaShipping Promotion Centers SPC; their activities: disseminate general information on the advantages of SSS incl. newsletter giving practical good examples, presentations at trade fairs and conferences; advice to industry, trade and transport business how to make more use of ship transport; develop concepts for intermodal transport which involves ship transport; maintain close contact with public administrations; arrange conferences.

[102] The EU Programme Marco Polo (2003-2006) Marco Polo funding is complementary to INTERREG, as is focused on concrete transport services (start-up aid for new services in the non-road freight market to promote modal shift). In the first call of Marco Polo 19 from 92 proposals were selected for funding, of which. Of which 6 were dropped because the leading consortium withdrew. The future Marco Polo programme will support "motorways of the sea action" which shifts large volumes of traffic from road to shortsea and non-road hinterland transport in a door-to-door service concept. Infrastructure measures will also be supported if supporting the motorways of the sea as defined in the TEN.

the latter regard it was stated that MoS to link North Sea and Baltic Sea are far more important for future projects than cross-North Sea links. Therefore, the involvement of project partners from the BSR will be essential and that 20% budget share may be to little (outcomes from German workshops)

(m) Increase the impacts of road pricing (LKW-Maut kind of initiatives) on modal split by complementary improvements of alternative transport modes and intermodal transport chains

(n) Study pricing practices and other measures that can contribute to more optimal use of transport mode specific carrying capacities e.g. to lure transport away from busy day times and incentive night activities: spreading transportation activities

(o) Promote initiatives to transnationally harmonise road toll systems for freight motorway transport as well as inner-city toll systems

(p) Implement bonus-malus systems for good and or regular SSS practices to enhance modal shifts (i.e. via exempting from pilotage costs)

(q) Develop city logistics projects in the field of public transport of goods

(r) Stimulate initiatives that avoid major cargo flows to go through or via large conurbanisations (e.g. Oslo area)

(s) Improve road access around ports (eliminating poor signaling, road widths etc.) that adversely hamper 'intermodality' as well as opportunities for shipments by sea

Potential project issues B.2 Reduction of environmental impacts and risks associated with transport

Examples of relevant project topics based upon current funding period:

(a) Co-operative development of strategies for risk management (risk reduction; disaster response) with new approaches to co-operation between environmental authorities, ports, transport providers and industry; [the example of the INTERREG IIIC exchange of experience project ECONET]

Further potential project examples:

(b) Reduce the risks involved in hazardous goods transport through changed intermodal transport chains (reducing road hinterland transport, enhancing inland waterway and rail transport)

(c) Improve transnational co-operation in the prevention of and the response to ship disasters

(d) Initiatives to develop and introduce terror attack prevention and response systems (also for blind passengers) along integrated transport chains (co-operative responses to the International Ship and Port Facility Security Code ISPS)[104]

(e) Joint projects and knowledge exchange on design of contingency and prevention plans vis-à-vis possible disasters

(f) Projects to prevent and deal with illegal flows of immigrants and merchanise

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[103] The Dutch Nota Mobiliteit (2004) specifically addresses the 'greenport Venlo' to cluster agro-logistic activities; the Dutch Shortsea Shipping Promotion Centre sees particular market opportunities in short-sea shipping towards new EU member states.

[104] Ongoing INTERREG NSR projects: S@S - Safety at Sea (North Sea)(includes risk management, planning systems, data base and spill models); EROCIPS (Atlantic Area): Emergency Response to Coastal Oil, Chemical and Inert Pollution from Shipping (planning systems); Mapping European Seabed Habitats: MESH (North West Europe); Eurobaltic II (Baltic Sea Region)- in development: emergency preparedness; COASTATLANTIC (Atlantic Area); Creating a Sustainable Framework for ICZM, SOLE, AAR (application under development): develops tools for crisis management in coastal areas exposed to risks of oil pollution.

(g) Offer courses on environmental impacts of transport in cases of accidents

Potential project issues B.3 Establishing common level playing field conditions

Examples of relevant project topics based upon current funding period:

(a) Baltic seaports imposing more severe emission tolerance levels than current IMO prescriptions

Further potential project examples:

(b) Level differences in modal-specific costing of external impacts via pricing measures

(c) In general: efforts to come to common level playing field conditions on transport(-related) issues between areas and between modes. Example 1: eliminate competition distortion between airports as a consequence of different charging policies practiced by resp. national (federal) and regional governments. Example 2: Tackle differences in dealing with air quality problems. Aim at qualities and measurement methods that are based on the same parameters and take also into account a supra-local perspective: taking into account the damage that pollutants emitted in one place cause in another (see also table under C.2 trends and implications): set up frameworks that can deliver uniformous and integrated assessments of such issues. Otherwise, market distortion and unwanted location (dis)advantages will continue to exist

(d) There are differences in user charges for different kinds of transport. Transport at sea is 100% paid by the users, while other types of transport are supported in different ways. The new Marco Polo program leaves as an option support for establishment of new short sea routes, but that may distort competition. Action should be undertaken to determine how resources should be used within the transport sector to obtain equal grounds of competition e.g. via proposals to combine grant funding budgets to include roads with rail and waterways seen as potentially reducing scope to assist modal shift

(e) Projects to avoid control overload with regard to safety aspects around transport: set up frameworks that can deliver uniformous and integrated monitoring (type one-stop shopping for closed systems in such a way that intermodal transport does not suffer from disadvantages in safety and control respect vis-à-vis unimodal road transport), without overburdening the transport chains themselves: aiming at cross-modal common level playing field conditions.

(f) Initiatives to transnationally harmonise and streamline safety standards and practices plus charging systems related to this

Potential project issues B.4 Towards compatibility with other societal and user functions and sectors

Examples of relevant project topics based upon current funding period:

(a) …

Further potential project examples:

(b) Awareness campaigns to sensibilize different user groups of same infrastructures

(c) Dedicated infrastructure for different user groups (e.g. with regard to rail)

(d) Assign prioritary time slots/frames for different user groups (idem)

(e) Take leisure and tourism aspect into consideration when conceiving T&A plans and projects. Examples: improve ferry connections to North Sea islands; improve coast-parallel transport links: west-east axis Amsterdam - Groningen - Emden - Bremen - Hamburg - Lübeck; south-north axis from Hamburg to Hirtshals along the west coast of Jutland; develop multi-modal transport package deals for leisure activities (cfr. build upon airline-ferry or rail-ferry examples); foster beneficial co-existance of yachting activity and utilitary waterborne transport.

(f) Stimulate initiatives that enhance the introduction of modern technologies in the field of ticketing to attract tourists for railway connections or other alternative transport ways e.g. develop methods for a

transnationally (and intermodal rail + ship) standardised E-ticketing from local up the EU level – incl. development of new software (if necessary) or interfaces to harmonize existing programmes

(g) Cope with city-port interactions as a consequence of increased control measures in seaports (quid development of ferry activities in ports, ports as integrated parts of urbanizations?)

Potential project issues C.1 Response to and support to further internationalization within and beyond the NSR

Examples of relevant project topics based upon current funding period:

(a) Promotion of priority transport infrastructure links (to be identified) between major development poles in different countries

(b) Identification and promotion of priority infrastructure links to national and transnational transport networks

Further potential project examples:

(c) Hook onto MOS, TEN-T and corridor concepts

(d) Stimulate cross-territorial co-operation projects to enhance wider geographical integration and cohesion

(e) Research and knowledge transfer projects that allow elevating the level of e.g. transport and management practices on behalf of all involved parties, notably in the Baltic sea area

(f) Marketing and other forms of co-operation between logistic centres in different areas of northern Europe incl. the BSR

(g) Development of cross-border urban clusters sharing functions and forming one integrated labour market[105]

(h) Setting up long distance travelling services for cargo and passengers (see HST and Maglev railway example Hamburg-Stockholm and plans for Zuiderzeelijn (NL))

(i) The development of rail freight links to and from the gateways (where a number of routes unite) needs to be prioritized. Sweden/Norway is dependent on availability of a number of passages. On these passages, one should promote the use of inter-modal transport. Also the connection between gateways and the hinterland is important in the development of sustainable transport routes. In this respect, one should be aware of the fact that market forces may work in a different direction than societal concerns. F.i. as transport has become cheaper, price has become an essential competition parameter[106]

[105] E.g. simplified customs procedures at the gates of sea ports, using electronic means of document transfer

[106] See therefore also under B.1 the need for "further (political) arguments regarding the superior societal (e.g. environmental) performance of alternative transport modes".

Potential project issues C.2 Further integration of peripheral regions into social and economic progress

Examples of relevant project topics based upon current funding period:

(a) Identification and promotion of priority infrastructure links to national and transnational transport networks (including seaport hinterland connections; connections from peripheral regions to the major networks)[107] [108]

Further potential project examples:

(b) Explore and implement light rail possibilities

(c) Valorize potentials from ITC to overcome disadvantages from peripherality

(d) Sustainable (environmentally and socio-economically) development projects with regard to coastal and other peripheral areas that decongest busier areas

(e) Development and implementation of concepts for sustainable INTERREGional mobility in areas with low population density

(f) Development of 'urban networks of proximity' (clusters of regional urban centres)

(g) Development of and agenda setting activities vis-à-vis T&A projects that are not part respectively have a low priority in the national (federal) transport network plans e.g. support secondary transport connections not included in TEN-T or in national plans, demonstrating their regional and transnational benefits (EURORAPID, Marschlinie along west Jutland coast)

(h) Nordic region has demographic features that need to be exploited further. I.e. low population density, and long distances between important consumption and production areas, which demand special solutions. Their (spatio-economic and transport) implications should be assessed further and corresponding development measures should be designed, ideally in joint co-operation with other low-density areas within the NSR/EU

(i) Connectivity needs to be improved within Scotland itself. There is a pinch point at the Forth crossing and poor quality road and rail links to the north

(j) Edinburgh – Perth is a route with high growth potential but problems with transport capacity

(k) Initiatives around "lifeline" ferry services

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[107] Examples mentioned in the NorVision report: Göteborg – Oslo as part of the Copenhagen/ Malmö – Oslo axis, and Amsterdam – Groningen – Bremen – Hamburg/ Lübeck [railway and highway A20] , the prototype of a transnational axis with potentially strong regional impact.

Similar other relevant regional links shall be identified with the involvement of regions affected (the Baltic Gateway project example)

[108] The Federal German Transport Infrastructure Plan 2003-2015 prioritises a number of projects improving sea port hinterland links (rail, waterways, roads to serve Wilhelmshaven/ new container port, Bremerhaven, Hamburg, Lübeck, Kiel, Rostock and others). The Mobility Plan Flanders (2003) includes projects to upgrade the connection of Flemish coastal ports (Zeebrugge, Oostende) to the trans-European inland waterway network; upgrading of the Albertkanaal and of the Zeekanaal Brussels-Schelde).

(l) Initiatives around pump-priming of air services to improve accessibility and stimulate economic activity, although important to not destroy positive features of rural lifesyle

Potential project issues C.3 Improved inter-urban communications for dynamic development of cities, city clusters, metropolitan areas and neighbouring agglomerations

Examples of relevant project topics based upon current funding period:

(a) …

Further potential project examples:

(b) Explore and implement light rail possibilities

(c) Development of maritime/logistical clusters around economic activities that can benefit from joint transport facilities, hubs and location and agglomeration advantages e.g. ethylene Pipeline Stade - Wilhelmshaven / Marl - Groningen

(d) Initiatives to transnationally harmonise road toll systems for freight motorway transport as well as inner-city toll systems

(e) Setting up long distance travelling services for cargo and passengers (see HST and Maglev railway example Hamburg-Stockholm and plans for Zuiderzeelijn (NL))

(f) City logistics projects in the field of public transport of goods

(g) Connectivity needs to be improved between Scotland and North East England and down the east coast, as there is pressure on the rail link and lack of a road link to motorway standard

Potential project issues C.4 Integrate infrastructure with regional development and spatial planning

Examples of relevant project topics based upon current funding period:

(a) ...

Further potential project examples:

(b) Measures to reduce (growth of) transport demand in rural areas through better integration of spatial/land-use planning with transport policies

(c) Development of integrated “spatio-logistical” planning practices: “Logistic Alliances”: align locations of logistical hubs with multiple transport means (development of industrial areas in adjustment with e.g. inland water transport ways)

(d) Design and implementation of mobility impact assessment exercises into spatial planning and location policies

(e) Develop methods to prove the transnational significance of infrastructure projects such as the coast-parallel road/ rail link Netherlands - Northern Germany

(f) Joint execution of (methodologically harmonised) regional (economic and environmental) impact assessment for improved transnational transport links, by regions in different countries served by these links (particularly relevant for links not in the focus of EU TEN-T concepts)

(g) Development and implementation of frameworks that allow to assess spatial-economic impacts of transport and infrastructure projects in response to to better include all benefits along infrastructure and routes and to harmonise project evaluation methodologies. Potential project examples: enlargement of Havel inland waterway extension towards Poland (traffic project No. 17); deepening North Sea - Baltic Sea Canal; deepening middle Weser / Elbe.

(h) Initiatives to bring various national and regional transport concepts for the NSR to one level

(i) Site development for logistic or industrial areas close to inland harbours to promote inland shipping

(j) Development of urban clusters sharing functions and forming one integrated labour market[109]

(k) Planning initiatives that avoid major cargo handlers to settle in saturated conurbanisations where they produce negative externalities (e.g. away from Oslo area)

(l) Initiatives to look at sustainable rural transport, without destroying positive features of rural lifestyle

[109] E.g. simplified customs procedures at the gates of sea ports, using electronic means of document transfer

APPENDIX C: WORKSHOP DATES, PLACES AND ATTENDANCE

Overview of workshop dates and places:

Date	Place	Responsible
22-apr	Brussels	Resource Analysis
27-apr-05	Copenhagen	Tetraplan
28-apr-05	Hamburg	Planco
29-apr-05	The Hague	Resource Analysis
2 May 2005	Bremen	Planco
2 May 2005	Oslo	Tetraplan
4 May 2005	Göteborg	Tetraplan
9 May 2005	Edinburgh	SKM
10 May 2005	Newcastle	SKM
2nd half May 2005	East of England	SKM

Attendants at Flemish workshop:

Organization	Name	First name
Ministerie van de Vlaamse Gemeenschap	Peeters	Yvo
Ministerie van de Vlaamse Gemeenschap	Tiebout	Elke
Ministerie van de Vlaamse Gemeenschap	Bonne	Pim
NAUTIV (Federatie van Vlaamse Nautische Bedrijven)	Bosmans	Jozef
Ministerie van de Vlaamse Gemeenschap	Dumon	Guido
Ministerie van de Vlaamse Gemeenschap	Van Hecke	Els
Promotie Binnenvaart Vlaanderen	Lambrechts	Paul
Gemeentelijk havenbedrijf Antwerpen	Hurkmans	Arnout
Gemeentelijk havenbedrijf Antwerpen	Vanoutrive	Thomas
Port of Oostende	Allaert	Jan

Maatschappij Brugse Zeevaartinrichtingen	Van Cauwenberghe	Patrick
NV Zeekanaal en Watergebonden Grondbeheer Vlaanderen	Buelens	Matthias
Provincie West-Vlaanderen	De Pauw	Evert
GOM West-Vlaanderen	De Raes	André
NMBS	Van Mello	Lieve
Vereniging voor expeditie, logistiek en Goederenbelangen van Antwerpen	Boogaerts	Frank
Infrabel	Dierckx	Geert
Vlaams Instituut voor de Logistiek	Vannieuwenhuyse	Bart

In total 28 organizations (by means of 52 different persons) were invited as regards Flanders. Of the 18 persons present at the workshop, only 2 were on behalf of the same organization. A large number of ministerial representatives were present, albeit none of the same (sub-) department. The private sector was represented by the freight forwarders association of Antwerp and –in a more indirect sense- by the Flemish Logistics Institute. Most attendants were from the waterborne and rail sector.

In addition, 10 NGOs had been invited, with none of them attending. Two of them, however, established contact with the workshop organizers to set up data exchange. This was the case with ESPON and AMRIE.

Attendants at Dutch workshop:

Organization	**Name**	**First name**
Groningen Seaports	Genee	René
Ministerie van Verkeer en Waterstaat	Wolters	Milou
Ministerie van Verkeer en Waterstaat	Bolt	Klaas Jan
Ministry of Housing, Spatial Planning and the Environment	Overman	Mark
the North-Netherlands Provinces	Roona	Bert

In total 33 organizations (by means of 53 different persons) were invited as regards the Netherlands. The 5 persons present at the workshop, represented 5 different organizations. The 2 persons coming from the same ministry did not come from the same (sub-) department. The private sector was not represented. Attendants were largely into waterborne issues.

Attendance at German workshops:

A total of 47 organizations had been invited of which 26 participated with 31 persons.

Attendance and invitations were grouped as follows:

Organization	Participating	Invited
IR North Sea representatives	3	4
INTERREG project managers (1 air transport project/ Seaplane; 1 seaport project REMARCC)	2	3
Other regional authorities (departments for regional planning; transport; economic development, environment	5	10
Chambers of Commerce	0	5
Other regional/ sectoral initiatives	6	9
Federal administrations for sea shipping and inland waterways	3	5
Transport industry associations (port operating enterprises; sea ship owners; inland ports)	3	4
Transport research	4	7
Total	26	47

The focus of interest was on sea ports and their hinterland links (road, rail, waterways), but participants also represented air transport. Freight and passenger transport were represented, with a clear majority interested in freight.

All non-responding organisations had been contacted by phone. Many could not come due to time restrictions, but several ones recommended other persons from their own organisation or other organisations to be invited, too.

The private sector was represented, but with only 3 persons/ organisations (2 industry associations, one inland port company).

Attendance at Scandinavian workshops:

Following main figures concerning attendencies can be extracted:

	Number invited	Number attending	Attendance ratio
Copenhagen	21	7	33%
Oslo	25	9	36%
Gothenburg	23	9	39%

Note: Attendance is including 1 national representative in each country.

In Copenhagen 4 of the attendants came from Jutland (2 from research and development organisations, one from the county level and one representing municipal interests). From Copenhagen participated a representative from the rail freight operator Railion, and 2 persons from the Ministry of Environment including 1 from the national spatial planning department.

Serious discussions were carried out in order to convince staff from the national transport institutions to participate. However, the representative from the development organisation Institute for Transport Studies covered a broad number of topics including road transport, air transport and shipping.

In Oslo the national level were represented with the national representative from the Department for municipalities and counties (KRD) and the director for Short Sea Promotion Centre. The county level was represented with 5 participants of whom 3 came from the south-western part of Norway. One of these was also Secretary General for the North Sea Commission. The director for the port of Oslo participated and so did a freight transport researcher from the Transport Economic Institute in Oslo.

In Gothenburg the national level were not represented, but Banverket, the national rail infrastructure office, was represented with a participant from the region west office in Gothenburg. The research community was represented with 2 professors in logistics from respectively Chalmers and Trollhättan-Uddevalla University. The regions Halland and West Gotaland were represented with 5 participants of whom one was member of the political county council and also a member of the North Sea Commission. Finally participated the manager of regulatory affairs from the port of Gothenburg.

A general observation is that it has not been possible to interest the national level to participating in all workshops. The general remark has been that the INTERREG programme is a programme for the regions, and therefore should the national level not be involved. However, in Denmark and Sweden, the national level would have liked to participate had it not been for other commitments.

Another observation is that invited persons from the private transport business and the shippers' council have not showed any interest for participating. The general feeling is that the business is to a certain extent interested in participating as soon as the projects are getting more concrete, but not in the programme formulation phase.

Attendance at UK workshops:

First name	Last name	Organization	Remark
Kevin	Cullinane	University of Newcastle	Newcastle
Malcolm	Bingham	Freight Transport Association	Newcastle
Helen	Hayden	Newcastle Airport	Newcastle
Simon	Dove	One NorthEast	Newcastle
Nick	Evans	Scottish Executive	Edinburgh
Magne	Haugseng	Tees Valley Joint Strategy Unit	Newcastle
Kate	Mellor	Newcastle City Council	Newcastle
Sara	Thiam	Edinburgh City Council	Edinburgh
Clive	Brown	Edinburgh City Council	Edinburgh
Mike	Padgett	Kirklees DC	Newcastle
Tom	Rye	Napier University	Edinburgh
Duncan	Gray	Forth Ports	Edinburgh
Anne	McGregor	Steer Davies Gleave	Edinburgh
Phil	Flanders	Road Haulage Association	Edinburgh
Graham	U'Ren	RTPI in Scotland	Edinburgh
Deborah	Peel	University of Dundee	Edinburgh
David	Tyldesley	David Tyldesley & Associates	Edinburgh
Greame	Purves	Scottish Executive	Edinburgh
Ian	Lindley	Scottish Borders Council	Edinburgh
Burney	Johnson	Durham City Council	Newcastle
David	Robinson	PD Teesport	Newcastle
Geoff	Dunning	Road Haulage Association	Newcastle
Jane	Cater	Voluntary Organisations' Network North East (VONNE)	Newcastle
Bruce	Macdonald	SQW Economic and Management Consultants	Edinburgh
Chris	Ralph	ECOTEC Consulting and Research	Newcastle
Aidan	Stradling	North East Assembly	Newcastle
Patsy	Healey	Centre for Research in European Urban Environments (CREUE),	Newcastle

		University of Newcastle	
Ben	Fletcher	Humber Ports	Newcastle
Keith	Wilson	Port of Tyne Authority	Newcastle
Jason	Copper	Yorkshire and Humber Regional Assembly	Newcastle
Jan	Anderson	Yorkshire Forward	Newcastle
Charlotte	Carpenter	One North East	Newcastle
Roger	Hargreaves	Edinburgh City Council	Edinburgh
Malcolm	Reed	Strathclyde Passenger Transport Executive	Edinburgh
Anne	Follin	BAA Edinburgh	Edinburgh
Peter	Scott	Scottish Enterprise	Edinburgh
Cliff	Hague	Heriot Watt University	Edinburgh
Brian	Wither	Scottish Executive	Edinburgh
Barclay	Braithwaithe	Aberdeen Harbour	Edinburgh
Martin	Togneri	Scottish Enterprise	Edinburgh
Angela	Harrowing	Office of the Deputy Prime Minister	Newcastle

APPENDIX D: SELECTED BIBLIOGRAPHY TO PREPARE WORKSHOPS AND PREVIOUS REPORTS

The following represents the lion share of the documents that have been screened as part of the desk-research activities under Study 2 – Transport and Accessibility (Updating Norvision). These document screenings led to papers that were distributed to all invited persons as preparation to the workshops that have been held in the various North Sea Region "member states":

- BOPCom: Baltic Open Port Communication (1996-1998) Transport RTD programme project document
- Bundesverkehrswegeplan 2003 (Federal German Transport Infrastructure Investment Plan adopted in 2003). Plan perspective: 2015
- CIP North Sea Region INTERREG IIIB
- Cohesive Thinking Towards a Sustainable Future, Report of the Sustainable European Regions Network, Final report, November 2004
- Current International Shipping Market Trends: *Community Maritime Policy priorities and legislative initiatives* - (European Commission document prepared for the OECD Workshop on Maritime Transport, Paris 4 - 5 November 2004)
- Decoupling Transport from Economic Growth*: Towards Transport Sustainability in Europe - By* M. R. Tight (Institute for Transport Studies, University of Leeds, UK), P. Delle Site (University of Rome, Italy) and O. Meyer-Rühle, (ProgTrans AG, Basel)
- EMMA: European Marine Motorways (1996-1998) Transport RTD programme project document
- ESPON project 1.2.1: Transport services and networks: territorial trends and basic supply of infrastructure for territorial cohesion
- ESPON: Project 2.1.1 Territorial impact of EU transport and TEN policies
- EU informal ministerial meeting on territorial cohesion (presidency conclusions), Rotterdam, 29th of November 2004
- Framtidsplan för järnvägen 2004-2015, Sammanfattning, Swedish national rail administration (Banverket), 2004
- The Future of Transport - a network for 2030 (UK Department for Transport) 2004
- Gemeinsame Plattform des Bundes und der Küstenländer zur deutschen Seehafenpolitik vom 22. Februar 1999 (Joint platform of the German federal government and of the governments of coastal Länder)
- Grundlag for investeringsplan for trafikministeriets område, Ministry of Transport, Denmark, 2003
- High Speed Rail - International Comparisons (Commission for integrated Transport, UK - 2004)

- Interrreg IIIB BSR project “Baltic Gateway
- INTERREG IIIB NSR project REMARCC Network of regional maritime competence centers, Baseline report Denmark, January 2004
- INTERREG IIIB NSR project REMARCC Network of regional maritime competence centers, Norwegian Baseline Report, the current situation in the port region, january 2004
- INTERREG IIIB NSR project SEAPLANE
- INTERREG IIIB NWE project “InterPorts” (InterPortsPromotioNetwork IPPN)
- INTERREG IIIB project MAYA 2 (Marine and Yachting)
- INTERREG IIIB NWE project SustAccess (Sustainable accessibility between hinterlands and gateways around the North Sea)
- INTERREG IIIC project ECONET (European environmental directives in port and industrial areas) and INTERREGIIIB NWE project EPOS (Electronic Port Surveillance System)
- INTERREG IIIC project PORT-NET; LP: Amt für Hafen, Technologie, Luft- und Schifffahrt Abt. Hafen und Schiffahrt
- Landsplanredegørelse 2003, Ministry of Environment, Denmark, 2003
- Marco Polo, Final_e-V15OCT04; CEC, COM(2002)54 final 2002/0038 (COD), Proposal for a Regulation of the European Parliament and of the Council on the granting of Community financial assistance to improve the environmental performance of the freight transport system, 04-02-2002
- MarNet: Maritime Information Network (1997-1998) Transport RTD programme project document
- Mobiliteitsplan Vlaanderen – Beleidsvoornemens (October 2003) (Mobility Plan Flanders – Policy intentions)
- Modern Ports - A UK Policy (DLTR, 2000)
- National Planning Framework for Scotland (Scottish Executive, 2004)
- National Transport Plan 2006-2015 (Norway)
- Nationell plan för vägtransportsystemet 2004-2015, National Swedish Road Administration (Vägverket), 2004
- Nordisk Transportpolitisk netværk (Northern Transport Political Network)
- The Northeast-European Agenda for Noord-Nederland – Expert paper (BAW, commissioned by Samenwerkingsverband Noord-Nederland, versions of January 2005 and May 2005)
- Northern Maritime Corridor: Northern Periphery

- North Sea commission Transport Group (minutes of group meeting)
- NorVision report
- Nota Mobiliteit (2004) (Mobility Policy Document – the Netherlands)
- Nota Ruimte (2004) (National Spatial Strategy – the Netherlands including Dutch part of the North Sea (territorial waters + exclusive economic zone))
- Om regionalpolitikken, St.meld.nr. 25, Ministry of Municipalities and Regions, Norway, March 2005
- PROSIT: Promotion of Short Sea Shipping and Inland Waterway Transport by the Use of Modern Telematics (1998-2000) Transport RTD programme project document
- Regional Action for Logistical Integration of Shipping across Europe (REALISE); WP4 Multimodal transport pricing and costing analysis, Amrie, Belgium 2003
- Ruimtelijk Structuurplan Vlaanderen (RSV) – 1997 (Spatial Master Plan Flanders)
- Sjöfartens utveckling 2003, sektorrapport, National Swedish Maritime Administration, 2004
- Søfartspolitisk vækststrategi, Danish Maritime Administration, 2003
- SPESP (Study Programme on European Spatial Planning) – Final Report, 31 March 2000
- TEN-T Guidelines concerning Motorways of the Sea (MoS; Call for proposals according to Art. 12a of the TEN-T Guidelines; Vademecum of the EU Commission, Directorate-General for Energy and Transport launched on 28-Feb-2005
- Trafikredegørelse 2004, Ministry of Transport, Denmark
- Transport and Environment in Europe (European Environmental Agency, 2004)
- Transport i det kompetente og innovative Danmark, Ministry of Environment, Denmark, 2003
- UK Marine Motorways Study (A. Baird, Napier University, Edinburgh, UK - 2003)
- Vernetzungspotenziale innerhalb der maritimen Wertschöpfungsketten am Schiffbau-, Seeschifffahrts- und Hafenstandort Deutschland (Networking potentials in the maritime value-adding chain of ship-building, sea shipping and ports of Germany), ed. by the Federal Ministry of Economy and Technology, Nov. 2001
- 3SNET: Short Sea Shipping Network (1998-1999) Transport RTD programme project document