

## ***Framework for a BSR multimodal transport strategy***

### **1. Background**

Heads of States and Governments of the European Union met in Lisbon in 2000 and decided to make the European Union into “the most dynamic and competitive knowledge-based economy in the world” by 2010.

Creating a solid European transport system can bring substantial productivity improvements. Transport as an economic sector represents more than 10% of EU GDP, and employs more than 10 million people; productivity gains therein could offer a significant contribution to achieving the Lisbon targets. It is however, extremely difficult for an economy to be competitive without a well-developed transport network. By improving the transports of goods and persons, the transport infrastructure in the Baltic Sea Region has a crucial role in stimulating the internal market and improving the territorial cohesion. By addressing improved accessibility and disparities in transport infrastructure between the old EU member states, the new members of the European Community and north-western regions of the Russian Federation, a wide transport policy on the pan-Baltic level may successfully enhance the competitiveness of the Baltic Sea Region. Thus, actions improving regional accessibility by means of transport infrastructure are necessary for the development of the Baltic Sea region.

As a consequence the BSSSC work group for transport and infrastructure was established with members from different parts of the Baltic Sea Region at the annual conference of the BSSSC in Malmö, on 21-23 October 2004,

The BSSSC Board decided that the work group in the first stage should conduct a survey of the planning situation in the area with the purpose to identify common ground as well as possible points of conflict. The main purpose of the survey has been to present basic facts on the infrastructure situation and to give an inventory of ongoing activities. The survey can be downloaded from the BSSSC website ([www.bsssc.com](http://www.bsssc.com)).

To complete the directives given by the Board a second stage is to be carried out by the work group. This stage has concentrated on a dialogue with other organisations such as CPMR/Baltic Sea Commission, Union of the Baltic Cities, VASAB, Baltic Development Forum and Council of the Baltic Sea States. The aim has been to develop a common vision, strategy and a joint development perspective. The next step will be to work out a joint umbrella project in the transnational territorial co-operation programme for the Baltic Sea Region in the period of 2007-2013. The co-operation with other organisations in the Baltic Sea Region will be an essential part in this stage.

This paper presents a proposal for the approach to the second stage. It must be noted that the framework for the strategy concentrates on the problems of pan-Baltic relevance, importance and influence, which call for transnational actions. It therefore does not reflect on local scale issues, which may be solved through direct national, regional or cross-border initiatives.

The work with the project will consider the newly presented mid-term review on the 2001 White Paper, in which the Vice President in charge of Transport, Jacques Barrot, said: *“Mobility is essential for free movement of European citizens and economic growth. The EU will continue to boost rail and waterways for long distance connections. We also need to step up our efforts to make road transport and aviation more efficient and greener. That is why I want to focus on logistics, green propulsion and intelligent transport systems which use the latest technologies”*.

At the same time the mid-term review report brings a refined orientation of the EU transport policy, which sees a remedy to traffic congestion not only in intelligent mobility solutions and transport demand management, but also in new or improved infrastructure. As underlined, viable alternatives to congested road corridors can support intelligent solutions involving co-modal logistics chains, which optimise the use of transport infrastructure within and across the different modes. This, among all, includes rail corridors and intermodal nodes for rail, sea or air transport.

## **2. Why a multimodal transport strategy for the Baltic Sea Region**

Special conditions in the Baltic Sea Region make it difficult to automatically adopt recommendations of the EU transport policy. This specificity manifests itself in:

- peripheral geographical location of the Baltic Sea Region and its individual parts in relation to large economic markets in Europe,
- existent physical barriers in distribution of goods and passengers (water basin of the Baltic Sea, mountain ranges, large forest areas, big rivers etc.), which extend transport distances and travel times,
- unfavourable climate conditions, which necessitate special efforts for maintenance of the infrastructure,
- decreasing population density towards north-eastern parts of the Region, where large distances between settlements call for specific transport solutions to maintain connectivity and accessibility of these areas,
- uneven economic standings of the old Member States, new Member States and the EU neighbouring countries in the Region, which pose different perspectives for transport as an agent for socio-economic development,
- differences in network density, quality of the links and technical standards of transport infrastructure between the old Member States, new Member States and the EU neighbouring countries in the Region, which determines different priorities for development of transport infrastructure.

These factors together with constraints in the regulatory framework (e.g. different transport management patterns and decision-making procedures in individual countries) contribute to low compatibility of national transport networks and logistic solutions. In order to bridge over

the impact of national borders and high segmentation of the transport system in the BSR, actions are needed at the transnational and interregional level.

The processes of globalisation, European integration, specialisation in manufacturing and services and division of labour create challenges for the transport sector, which may be solved only through common actions of the BSR countries. Subject to common actions should be: an increasing congestion of the road network caused by increasing flows of goods and persons, road traffic externalities (e.g. environmental pollution, accidents etc.), hazardous cargo management, maritime and coastal safety on the Baltic Sea in effect of e.g. growing oil transports from the Gulf of Finland. A newly emerged threat is acts of global terrorism targeted at collective passenger transport, which bring severe consequences for time and costs of commuting, business and cargo operations.

Common challenges are associated also with the regulatory framework for the transport operations, which needs knowledge sharing and harmonisation. Such examples are: administrative regulations, which prevent especially shipping and rail transport to fully exploit their potential, or road tolls, which – introduced in one country – affect distribution of flows in the neighbouring countries. Another kind of challenges is related with optimisation of decision-making procedures in the field of transport, which could bring maximum benefits for the regional development. In this respect a comprehensive process with active participation of relevant actors and good assessment methods are required.

In order to address the common challenges and propose actions adjusted to the specificity of the Baltic Sea Region a common multimodal strategy for transport development is needed. So far, the initiated efforts to prepare such a strategy have been unsuccessful, likely on account of not harmonised actions of interested parties (national transport sector, pan-Baltic organisations acting at national, regional and local levels).

A significant evidence of the need for the common strategy is the number of pan-Baltic organisations working actively at various levels of governance to strengthen the transport infrastructure in the BSR.

A common strategy should also be seen as a tool to build up common knowledge and for a dialogue as a base for priorities in the field of infrastructure development and intermodal transport solutions. The strategy would offer a solid fundament for investment decisions of the authorities responsible for transport development in respective countries.

### **3. The world's most effective and sustainable transport system – vision behind the multimodal transport strategy for the Baltic Sea Region**

Revived transnational and interregional co-operation in the Baltic Sea Region strengthens the possibilities for a stable socio-economic growth of the area. The co-operation should, however, be organised in such a way that it involves both public authorities at the local, regional and national level, and actors representing research and education institutions and business life. All these partners should complement one another in common thinking about

future and the means to realise the jointly set objectives. Such a need is obvious in the field of transport development around the Baltic Sea.

The ongoing political and economic processes of globalisation, European integration, specialisation in manufacturing and services and division of labour put transport and logistics in a key role as a provider of effective and efficient solutions for distribution of manufactured goods. Equally important is the central position of transport and logistics in ensuring mobility of people. Transport and logistics are getting an increasing importance as part of the economy and as a tool for sustainable growth.

On the other hand, transport traffic is accountable for a large part of environmental pollution, noise nuisance and negative impact on natural and cultural landscapes. Safety at sea and inland waterways stands as an important question for the Baltic Sea with its intensive and fast growing vessel passages. Another challenge is a high number of fatal accidents especially related with road traffic.

The objective set forth in the EU transport policy as to separate (decouple) growth in transport from economic growth must be given special attention in the Baltic Sea Region. Its specific geographical location, diversified climate conditions and different levels of standard in transport infrastructure between the western and eastern parts of the area make it impossible to apply a readymade top-down concept on the transport development. Contrary to this, the solution for the transport system in the Baltic Sea Region should respond to the specific development opportunities and problems existent in the area. At their forefront are transport, ICT and regulations to serve the internal needs of the eleven countries around the Baltic Sea and with harmonised solutions across the national borders.

Both the transborder effects of transport operations (e.g. environmental impacts) and the location of the Baltic Sea on strategic trading routes between EU and North-Western Russia speak for having a broader dimension of the proposed system solution. This includes relations of the Baltic Sea Region with the neighbouring transport areas of the North Sea and Barents as well as with the inland stretches of the Russian Federation.

Vision for the transport system in the Baltic Sea Region presents it as being the world's most effective and sustainable in effect of the actions taken through the joint strategy. According to the vision the BSR transport system ensures:

- Good accessibility – so that the Baltic Sea Region is well connected both internally and to the neighbouring transport areas, which enables the area to develop as a marketplace and nodal point in the European and global perspective. The accessibility is regarded in two dimensions: (1) across the BSR in the north-south and east-west directions and (2) between main metropolitan areas and city regions in the BSR
- Wise management of transport resources, through better collaboration between actors on the transport scene and their commitment to develop road, rail, maritime and air transport infrastructure in the BSR in a holistic way
- An optimum use of all modes of transport and integration of various transport modes into efficient logistic chains

- Appropriate frameworks for implementation and financing of infrastructure measures
- Preservation of natural environment, based on e.g. development of more environmentally friendly transport alternatives (e.g. collective commuting) and technological inventions on shifting the traffic from roads to rails and sea as well as on application of environmental regulations, fees and taxes
- Safe and secure traffic, through active site planning of built-up areas and physical infrastructure, and through traffic control devices and safety installations in the vehicles
- High quality in research and development and efficient absorption of innovations and technological solutions.
- Good co-operation between policy and decision-makers, through establishing of a common decision-making base (database, analyses, studies) at the BSR level, spreading of transport planning and regional development methodologies, and joint actions of pan-Baltic organisations.

A comprehensive vision of the transport system in the Baltic Sea Region promotes a concept that the area operates as a gateway for goods and passenger flows across the Baltic Sea and between its individual parts. In order to fulfil the gateway function, the transport system should contain the following elements:

- network of European and transnational multimodal transport corridors, which improve external accessibility to and from the BSR,
- cross-border sections of national networks, which facilitate interoperability of transport solutions existent in the neighbouring countries,
- inter-regional and regional transport links, which improve access from the European and transnational corridors to local and regional production areas and customer markets,
- ports and airports acting as interfaces between land, sea and air transport modes, well connected with their respective hinterlands,
- network of inland waterways as a part of intermodal transport,
- facilities enabling interoperability between modes of transport, with emphasis to railroads and short sea routes,
- efficient local and regional public transportation, contributing to better mobility within commuting areas and to more compact settlement structures,
- innovative solutions in logistics, especially in port and airport operations, and in traffic monitoring systems
- platforms for co-operation between public administration, research and business sector built to identify potentials and pave the way for future investments in intermodal services
- harmonised policy interrelations between various administrations dealing with transport planning.

The issues above shall be addressed by the upcoming strategy and its three basic components: new and more efficient technologies for the transfer of goods and passengers; investments improving connectivity and accessibility of the territories and systems; and harmonisation of policy actions between and across various governance levels in the BSR.

## **4. Components of the multimodal transport strategy for the Baltic Sea Region**

### **4.1 New and more efficient technologies for the transfer of goods and passengers**

The first component tackles on the technological side of transport operations. Although it has more to do with inventions in the research and development sector and consequent commercial production, the strategy shall reflect on how to use and disseminate best practises in transport-related technologies across the Baltic Sea Region. Focus shall be put on technologies useful in decreasing costs of transport operations related with physical barriers, traffic bottlenecks and harsh climate conditions. Focus shall also be put inventions promoting more environmentally friendly and safer traffic solutions in the BSR. Exemplary topics in this field are: electronic fee collection devices, better transport vehicles (like the vessels promoted in the Via Mare Balticum concept) or intelligent traffic control systems for traffic safety and optimizing available road and rail capacity.

Another discussed direction of the strategy is fact-finding, planning and promotion of such transport modes, which respond to specific needs of regional and local communities in different parts of the BSR. An example of such needs is that the northern part of the BSR is much more dependant on the air transport in commuting than the southern stretches of the area. In turn, some industrial areas in the southern BSR are heavily reliant on proximity of inland waterways.

Topics to be considered in the strategy:

1. Research & development on future vehicles and hardware of the transport systems
  - High speed train systems
  - New ships and maritime-related technology
  - Transport of dangerous goods and maritime safety issues
  - Icebreaking
  - Alternatives to road transport in transportation within and between metropolitan areas
  - Regional aviation
2. Capacity building in research & development and innovations
  - Supporting networks and co-operation between universities and other research institutions in BSR in the field of transport technologies
  - Improving the framework and supporting innovations in strong clusters in the BSR such as maritime transport

- Transfer of knowledge to private sector and to public authorities to improve policy making and legislative framework

### 3. Applied ICT solutions

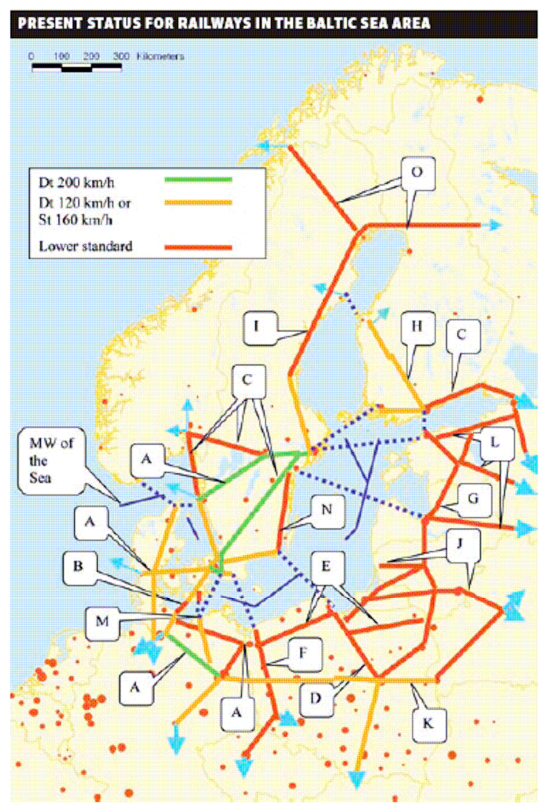
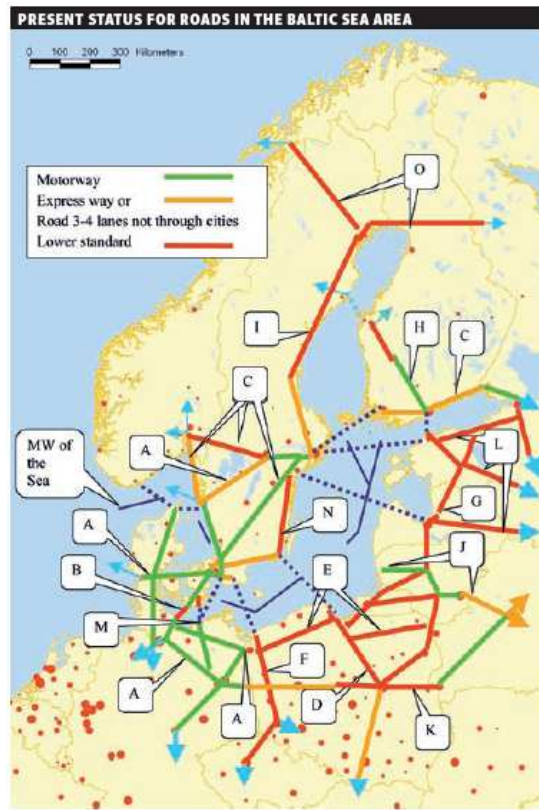
- Logistics, e.g. integrated IT solutions to manage intermodal chains
- Traffic control solutions, including security control
- Special telematic solutions for hubs

## **4.2 Transport network investments improving connectivity and accessibility of the territories and systems**

The second component relates to the required infrastructural improvements. The BSSSC survey on the transport infrastructure planning in the Baltic Sea Region managed to identify infrastructural shortcomings, which should be addressed by joint actions at the inter-regional level. The survey contains analysis of present standards and planned investments in the road and rail networks of special and common interest for the BSR.

The analysis presented in the BSSSC survey in stage 1 could be used as a tentative starting point. See maps and table on page 8 referring to the BSSSC “Survey on the transport infrastructure planning in the Baltic Sea Region, January 25<sup>th</sup> 2006”.

Corridor	Part	Road No
A	Stockholm-Göteborg	E20
	Köbenhavn-Esbjerg	E20
	Fredrikshavn-Hamburg	E45
	Hamburg-Berlin	E26
	Lübeck-Szczecin	A20, E22
B	Szczecin-Berlin	E28
	Köbenhavn-Rödby	E47
	Rödby-Puttgarden	E47
C	Puttgarden-Hamburg	E47
	Stockholm-Köbenhavn	E4
D	Oslo-Göteborg	E6
	Göteborg-Köbenhavn	E6/E20
	Oslo-Stockholm	E18
	Turku-Helsinki	E18
	Helsinki-border RU (S:t Petersburg)	E18
E	Gdansk-Katowice	E75
F	Szczecin-Gdansk (Gdansk)-border LT	-
	Malmö-Ystad	E65
G	Swinoujście-border CS	E65
	Warszawa-Riga	E67
H	Riga-Tallinn	E67
	(Tallinn-) Helsinki-Vaasa	E12
I	Stockholm-Sundsvall	E4
	Sundsvall-Haparanda	E4
J	Klaipeda-Vilnius	E85
	Vilnius-border BY	E28
K	Berlin-Warszawa	E30
	Warszawa- border BY	E30
L	Tallinn-St. Petersburg	E20
	Tallinn-border RU(SO)	-
	Riga-border RU	E22
M	Höjmölle/Nyköbing-Gedser	E55
	Rostock-Berlin	E55
N	Norrköping-Kalmar-Malmö	E22
O	Narvik-Torneå-border RU	E4,E10 E75





As concluded by the work group in the survey - after completion of existing national investment plans, some missing links, especially in the south-eastern part of the BSR, will still exist. Attention should also be paid to intermodal connections between ports/airports and their hinterlands. Further, harmonisation of the TEN-T and the pan-European transport corridors should allow for better integration of the Russian and Belarusian parts of the BSR in the area's transport system.

The infrastructural component of the strategy should include the following four steps:

1. fact-finding on missing links and bottlenecks of inter-regional relevance, which are not included in the ongoing European and national investment plans
2. compilation/preparation of domestic and transnational traffic forecasts and comparing them with the current capacity of the transport network, which could justify the need for new infrastructure investments
3. joint efforts in including relevant investments in the future plans by presenting them in the context of the external and internal accessibility of the BSR
4. promotion of projects included in European and/or national plans but not yet launched

Topics to be considered in the strategy:

- Accessibility of the BSR
  - Present state in internal and external accessibility of the BSR (based on ESPON results and findings of the latest report on accessibility of the BSR)
- Current policies in infrastructure development
  - Expected development in infrastructure standards in effect of European, national, regional and local levels policies
  - BSR-related priorities in infrastructure development
- Future opportunities and demands
  - Predicted developments in goods and passenger transports - scenario analysis in all modes of transport complemented with available reports by national authorities (e.g. Baltic Maritime Outlook 2006) and transnational projects (e.g. Baltic Gateway, Sustainable Transport in the Barents Region etc.)
  - Impact of the flows on sustainable socio-economic growth and territorial cohesion of the BSR
  - Energy, environmental impact, safety and security issues
  - Identification of gaps in available information
- Infrastructure networks
  - Territorial distribution of transnational transport corridors in the BSR (based on BSSSC work, VASAB documents, Interreg IIC and IIIB projects) serving north-south, east-west and inter-metropolitan relations

- Identification of gaps in territorial coverage, inadequate quality of standard and gaps in implementation of transnational projects
- Connectivity of sparsely populated areas in the BSR (based e.g. on reports by the Northern Periphery Interreg programme)
- Possibilities and needs related to improvement of transport infrastructure standards and interconnectivity of national systems
  - Analysis of transnational and interregional nodes and links (capacity, safety, intermodality, connectivity)
  - Planned improvements
  - Co-ordination and co-operation in the process of prioritising
  - Institutional issues
- Financing
  - Current European and national policies
  - European-national-regional-local responsibilities
  - Benchmarking of good examples
  - Private-public partnerships
  - User fees and taxation (e.g. electronic fee collection)
  - New solutions

#### **4.3 Harmonisation of policy actions between and across various governance levels in the BSR**

The third component of the strategy is dedicated to stimulation of exchange and co-ordination actions between administrations and organisations responsible for transport planning and regional development. The need for policy harmonisation results from the overview of common interests, areas of conflict and thematic gaps in the work of respective institutions and organisations, which have been described in the BSSSC survey report.

Harmonisation actions should include building up of a common knowledge and a common perspective on the efficient and comprehensive transport system in the Baltic Sea Region and developing new transport planning methodologies being more responsive to regional growth needs. The component should also tackle on education and competence raising in the field of mutual relations between transport and regional development policies.

Topics to be considered in the strategy:

- Background for harmonisation initiatives across and between the territories in the BSR
  - Analysis of the present state
  - Overview of ongoing initiatives (InterBaltic, BDF activities in the field of transport, VASAB updating of long term perspective, CPMR BSC, UBC, CBSS, national governments etc.)

- Dialogue axes between contradictory goals of sector policies
- Organising the process of harmonisation
  - Dialogue with interested pan-Baltic organisations
  - Solution for an information exchange and co-operation forum for completed, ongoing and future joint transnational projects in the Baltic Sea area in the field of transport
  - Translation of the actions to the national and European planning process for transport and logistics
  - Private-public sector cooperation and policy making
- Education and learning
  - Support for mutual understanding between transport policy and regional development/spatial planning
  - Actions aiming to improve competence in transport and logistics among actors in the BSR