Intelligent transport and infrastructure in the BSR

Are we getting any closer?

Transport development priorities in the Baltic Sea region – what has changed since 2005?

Five years ago the Baltic Development Forum Round Table, formed by business executives from a large number of companies – industries, shippers and operators – and organizations in the Baltic Sea region, established private sector priorities for development of the transport sector and infrastructure in the BSR. It was the outcome of a series of debates that happened in the first half of the decade. Business representatives agreed that together with the re-union of the Eastern and Western shores of the Baltic Sea as well as the globalization of demand, specialization of production, enhanced competition and logistic innovations, flexible and secure transport chains were of outmost importance for the survival of most companies. The BDF Round Table emphasized that it was crucial for transport infrastructure of the Baltic Sea region to live up to the needs of the global scene.

At that time the region was a leader in economic growth and innovation, nonetheless a serious need for improvement in coordination and communication at the corporate and public sector level was recognized. As the main challenge serious threats to the industry were defined, for example, the inadequate connection of various parts of the transport system and lack of a user-friendly and efficient supportive structure in terms of standards, administrative procedures as well as interoperability. Furthermore emphasized was the involvement of time lags, costs of insecurity and inflexibility in total transport costs as an increasingly important factor in competitive interfaces. The necessity of developing intraregional connections, the lack of a common vision and a too low priority of transportation in politics were stressed as well.

The Round Table recommended focusing on developing the visions for regional transport infrastructure and increasing the role of public private partnerships, stressing the value and importance of promoting demand-driven air transport networks as well as the promotion of the "Baltic Sea Region of Modern Freight Intermodality". Moreover, in the opinion of the participants, an essential key to the development of the future transport system was the implementation of the Motorways of the Baltic Sea policy as well as developing a fast track harmonization pilot programme.

Five years have passed, during which the financial crisis and problems with the global economy have sharply suppressed our region's fostering. The BDF State of the Region Report 2010 takes note that the Baltic Sea region had until 2008 grown at rates close to the global average, significantly above the level of the North American and the Western European economies. Then in 2009, it experienced a much more dramatic drop than other world regions.

But what has changed since 2005 in the field of transportation in the BSR? Has the situation improved, worsened, or perhaps new obstacles and fears are of concern right now? We posed these questions to executives and experts from the industry.

Lena Lorenc

Karsten Sten Pedersen
Chief Project Manager, COWI A/S

We have over the last couple of years experienced a deep economic downturn in most countries in the Baltic Sea region, which has reduced the demand for transport. However, this will not change the underlying needs identified five years ago although the transport volumes in a few years will be more modest. The economic crisis places even more emphasis on making the region an innovative and competitive region in the future. Efficient transport infrastructure and a strong business sector are essential prerequisites to achieve this. New ways of financing and operating the infrastructure in various forms of public private partnerships are even more important. This will both relieve the scarcity of financial means from public bodies and create jobs. The focus on developing a coherent multimodal transport sector with minimal impact on the global climate is another challenge which has grown in importance. This could be an opportunity for the Baltic Sea region to take even more advantage of the opportunities to cooperate together and create a transport sector benefitting both business and the environment and be well prepared for the future.

Heinrich Beckmann
Managing Director of the Port of Lübeck

Economic development needs optimal and efficient infrastructure which can ensure the best accessibility to all individuals in all regions. Best accessibility means that good transport can be offered for a low price and a journey of people between Baltic Sea regions can be reached in the shortest time possible. Unfortunately, the development of the TEN-Transport network is still delayed, so logistics and transport costs cannot be reduced adequately. To improve this, the European Commission has to strengthen its efforts to finalize at least the main infrastructure projects. Since cross-border traffic in the Baltic Sea region is often sea traffic, the hinterland connections of the ports have to be improved. Ports must be enabled to offer multimodal transport to a higher degree than in the past. To cope with the expected traffic volumes in the future either the port infra- and superstructure has to be extended or the productivity in the ports has to be improved. Public and private ports must be supported in doing this in their efforts by the EC or national governments. Moreover, the new IMO regulation that the sulphur content of fuel oil used onboard ships must not exceed 1% in special "SOx Emission Control Areas" (SECAs), as the Baltic Sea area will increase transport costs and the price of goods. Hereby a decline in consumer demand and production can be expected. Due to this, the economic catching-up process of the South-East Baltic countries will be reduced. The competiveness of the Baltic Sea region in comparison with other regions will decline and the rapid growth of foreign trade will slow down. To avoid this, governments of the Baltic Sea area have to search together for options how the aims of the IMO regulation can be reached without negative economic effects.

Valery Olefir
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It is clear that transport infrastructure is key to the development of the economies of the Baltic Sea region. In our opinion, ease of access to sea transportation, in particular that of containers, has been the driving force for economic growth in the region and key developments in the hinterland. For example, it has been instrumental in developing the St. Petersburg region of Russia into a major car manufacturing cluster. Prior to the crisis, much of the concern within the industry was how infrastructure would cope with the projected double digit growth in demand. Some CEE economies, and as a result sea trade between them, were heavily hit by the crisis, with recorded drops in container transport demand of up to one third in 2009. Notwithstanding this setback, we are currently witnessing a robust rebound in container transportation driven for the most part by surging domestic consumer demand in Russia and some of the neighbouring states. The Port of St. Petersburg has seen volumes retract by one third in 2010 and investment in new port infrastructure facilities (e.g. Ust-Luga Container Terminal) is brought back into the spotlight. With a recent increase in consumer optimism and transportation demand (e.g. air traffic has seen a similar recovery to pre-crisis levels in some CEE countries), there will again be increasing pressure on infrastructure availability and how to attract the private sector to invest in it. Some recently closed landmark PPPs, such as the one at Pulkovo Airport, may indicate how private sector involvement can be stimulated by support from the government and its various organizations.

Bjarne Mathiesen
Harbour Director, the Port of Aarhus

Today, of strategic importance is to limit emissions from maritime transport in the Baltic Sea. The heavy increase in bunker fuel costs initiated by new, strict emission rules imposes strong requirements for even higher efficiency of the container feeder network in the Baltic. The aim should be a very high capacity utilization of vessels obtained through more effective scheduling and closer integration of feeder lines. Ships travelling in the Baltic Sea must be full at all times and transport of empty containers must be minimized. Priority should be given to the development of the Motorway of the Baltic Sea by consolidating deep-sea containers in hub(s) inside the Baltic hereby avoiding the haulage to continental hubs through the Skagerrak or Kiel Canal. Mileage and time saved could be better spent on effective scheduling inside the Baltic Sea itself. Priority should also be given to developing a proper integrated Information and Communication System for the ports and shipping lines operating in the Baltic. Based on reliable real-time information the sailing speed, the arrival/departure time and the implementation of port operations should be optimized – leading to minimum environmental impact. The BSR is very well suited for sustainable maritime container transport. A well developed Motorway of the Baltic Sea would relieve the road network in all countries surrounding the Baltic from heavy trucking. The emissions from ships and trucks together would be minimized.

TransBaltic Policy Report 2010

Steering through turbulences

Photo: Port of Rauma

The narrow path in the upturn trend of the global economy requires committed leadership and collaborative action. For the Baltic Sea region it means a systemic policy response that will make transport infrastructure, the facilities and workforce cope better with the global trade competition.

The global economic downturn has placed severe constraints on many manufacturers, transport operators and facilities, creating consequences for the many millions who work in and depend on the transport sector. This situation has brought the threat of degrading the region's position on international markets and intensified the need for an appropriate public policy response to increase the accessibility of territories and the quality of connections, and to master the increasing flows in and across the region.

Policies in the stage of transition

A slight recovery in the global economy observed in early 2010 provokes the question whether it will soon return to a sustainable growth path. The Policy Report recently issued by TransBaltic offers conclusions and recommendations for how to proceed in taking up relevant policy actions, aimed at securing future transport development in the Baltic Sea region. Extensive inventories of completed and ongoing policies, strategies and projects in relation to the BSR, together with consultations with stakeholders within the transport sector are summarized in the document. The report highlights certain issues – the obstacles we might be facing and suggestions on how to turn these into our strengths, when planning the geography of future freight flows.

As stated in the Communication on the Future on Transport, adopted by the European Commission on 17th June 2009, the transport system of the EU should provide efficient travel and freight solutions, and better address environmental and climate change challenges. In effect, two essential objectives will be fulfilled: the mobility needs of citizens and businesses, and economic competitiveness of the European Union. Another role of the system is related to its performance outside EU borders, as the new technological and organizational solutions in transport could be exported and/or applied in other countries.

Trans-European transport networks

The Communication paper sets out directions for the transport policies to accomplish the designed vision. One of them would be to upgrade and expand the infrastructure from largely separated modal networks, where even within modes there is a lack of integration between countries – towards a single, integrated transport network. Such an optimization requires that the strengths of each mode are well exploited in combination (co-modality). Furthermore, particular attention should be placed on network nodes, which connect individual modes of transport and where there is a potential for consolidating passenger and freight flows. This is the case for urban areas and intersections of high volume corridors. Emergence of an integrated European transport system will be supported by the reviewed TEN-T policy. In line with the most preferred option, the future TEN-T network shall be composed of two layers – a "core network" and a "comprehensive network". The latter should enable co-modal services for passengers and freight throughout EU territory. Therefore, it should integrate current rail, road, inland waterways, port and airport networks from all EU regions. To ensure homogeneous network planning and the interconnection of national networks, it may see new elements such as dead ends, isolated links or missing links and nodes in the present set-up, especially in the new Member States. The core network will overlay the comprehensive network, directly supporting social, economic and territorial cohesion of the European Union. It will be made up of two categories of nodes – the main ones will include large urban centres (e.g. capitals of the Member States and other cities or agglomerations of supra-regional importance in administration, economy, social and cultural life and transport) and transport hubs (gateway ports, intercontinental hub ports and airports, connecting the EU with the outside world, and the most important inland ports and freight terminals). The intermediate nodes will encompass smaller or less important cities, airports, dry freight terminals, etc., which will be given specific functions after integration in the network.

Green corridors

Integration of modal networks is a policy area, which can make use of specific initiatives, so far kept separate in the transport policy domain. While

dedicated rail freight corridors are already decided for assimilation in the new TEN-T network, the concept of green corridors has not yet been adequately absorbed in the policy planning process.

With the purpose of optimizing transport chains, removing bottlenecks, reducing congestion and environmental pollution, interest in the green corridors concept is placed on long distance routes with a concentration of freight traffic between major hubs. As stated in the Freight Transport Logistics Action Plan, the green corridors industry shall rely on co-modality and on advanced technology in order to accommodate rising traffic volumes while promoting environmental sustainability and energy efficiency. Furthermore, these corridors shall reflect an integrated transport concept where short sea shipping, rail, inland waterways and road complement each other to enable the choice of environmentally-friendly transport. They should be equipped with adequate transshipment facilities at strategic locations (such as seaports, inland ports, marshalling yards and other relevant logistics terminals and installations) and with supply points initially for biofuels as well as other forms of green propulsion. Green corridors are meant to be a platform for innovation and a testing polygon for new transport technologies and intelligent transport applications.

Motorways of the Sea

The MoS policy is aimed at bringing more sustainability and commercial efficiency to logistics chains in Europe. The ultimate trans-European network of sea motorways is meant to concentrate freight flows on sea-based logistical routes and fully exploit the potential of intra-European short sea shipping. The network should encompass both facilities and infrastructure on existing and newly established connections between eligible pairs of ports in two different Member States. The characteristic elements include: port facilities, electronic logistics management systems, safety, security, administrative and customs procedures as well as infrastructure for direct land and sea access, with equipment ensuring year-round navigability. The added value of the Motorways of the Sea is perceived as stimulating modal shift in the transport of goods between Member States, which acts in favour of reducing road congestion. This, however, requires a fuller use of the potential in rail and inland waterway, as part of an integrated transport chain. Also, a vital asset of that policy is seen in improving access to peripheral and island regions of the EU, thus, increasing territorial cohesion.

The diversified European territory

The European Commission's Green Paper on Territorial Cohesion, issued in 2008, is aimed at meeting the objective of harmonious development of the whole EU area by exploiting local potentials and connecting them across the space. To meet the requirements for mobility in a polycentric European territory, it is important to secure integrated and sustainable development of multimodal transport systems. The currently debated EU Cohesion Policy (whereof the territorial cohesion is a part, on par with economic and social cohesion) pursues a new paradigm of a place-based approach. Such an approach is given ground in the Barca report (2009) and manifests itself in three particular features, namely: local specificity of natural and institutional resources as well as of individual preferences and knowledge; the role played by the material and immaterial linkages between places; and resulting need for interventions to be tailored to specific places. A place-based development policy can therefore be defined as a long-term set of actions whose objective is to reduce persistent inefficiency (underutilization of the potential) and inequality (share of people below a given standard of living) in specific places.

The EU Baltic Sea strategy

This macro-regional and multisectoral strategy provides an integrated framework that allows the European Union and Member States to address those challenges for growth of the whole BSR territory, which require coordination of appropriate policies and joint action. The agenda contains a number of specific issues contributing to the better accessibility of the Baltic Sea region, such as: timely completion of the agreed TEN-T priority projects, interoperability of transport systems, icebreaking, co-modality, user charging schemes, transport research and development, new solutions in particular in traffic management systems, promotion of inland waterway and estuary navigation, etc.

The Baltic Transport Outlook aims to describe the current transport flows used by all transport modes in the BSR, infrastructure status, bottlenecks, and to develop forecasts until year 2030.

The study would also identify infrastructure gaps, which are important for the whole region, and suggest relevant measures to eliminate them. The geographical scope of the study is determined by the membership of the stakeholders in the Council of the Baltic Sea States (that is, with North-West Russia, but without Belarus). Results are expected to be delivered in autumn 2011.

Both the Baltic Transport Outlook and some other current and future initiatives stemming from the EU Baltic Sea Strategy are challenged by their geographical scale and multi-sector dimension. They, hence, may become a good polygon for streamlining the transport policy with the cohesion policy within the framework of the Strategy. In order to become relevant and meaningful for the whole functional area of the BSR, the abovementioned initiatives need to encompass not only the Member States but also territories of their neighbouring countries, and especially Russia and Belarus. In the spirit of the place-based development policy, their implementation approach should include the perspective of regional development and employ a participatory process, with applied competence of local (pan-Baltic) stakeholders.

The role of TransBaltic

The TransBaltic project is a direct follow-up to the regional level initiatives towards pan-Baltic transport development in the period of 2006-2008. It can also be regarded as a coordinated response from the regional authorities to the challenges posed by the transport chapter of the EU Strategy for the Baltic Sea region. TransBaltic wishes to complement actions taken by the national authorities within the framework of the EU Baltic Sea Strategy. The action plan, seen as one of the project's final products, will contain measures, which will address internal connectivity, interoperability and intermodality constraints of the Baltic Sea region from a sustainable regional growth perspective. The plan will also feature regional preparedness measures for increasing intercontinental transport flows. These measures will serve to unlock investments for better external accessibility of the region.

TransBaltic will pay special attention to the territorial dimension of such transport development concepts brought forward under the EU Baltic Sea Strategy as: the green corridors, the network of the Baltic Sea Motorways, the Northern Axis and the gateway role of the Baltic Sea region in its trade exchange with Asia. In this sense, the project will endeavour to practically demonstrate the benefits of streamlining the transport policy with the cohesion policy under one political framework.

With its aforementioned Policy Report, TransBaltic intends to provide evidence and raise awareness of future developments among politicians, officials and private enterprises active in the area of transport and logistics, in this way inspiring them to take up relevant policy actions.

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The above article is based on the TransBaltic Policy Report 2010. Further information as well as a copy of the report can be obtained at http://transbaltic.eu.