

Towards an integrated transport system in the Baltic Sea Region

TransBaltic Work Packages and Tasks: Information and Progress March 2010

Work package 3 - The Baltic Sea Region as a Transport Gateway Area

The aim of WP 3 is to foster development measures in the field of road, rail, sea transport and inland navigation in order to enhance the gateway function of the Baltic Sea Region (BSR). In the internal accessibility context, these measures should promote a regional growth perspective in better connectivity of the national and regional networks of the BSR countries. In the external accessibility dimension, they should create regional preparedness and response to the increasing transport flows across the BSR, which unfold both between the continents (East-West direction) as well as between the BSR and the European mainland (North-South direction).

Progress so far

An inventory of pan-Baltic transport development concepts and strategies as well as investment plans and intercontinental flows has been performed. The final inventory report will be presented and used as a living document during the project period.

Preparing draft scenario descriptions and a series of foresight debates in the BSR to develop these scenarios further. The foresight debates will be held in Vilnius, Lithuania on March 30th, in Stockholm, Sweden on April 8th, in Bodø, Norway on April 20th and in St Petersburg, Russia on April 29th. The expectation is that both regional and national stakeholders will agree on the final scenarios that shall constitute the suggested foundation for future forecasts and corridor flows.

A report will be presented on the final scenarios as outcome from the regional debates. The reports produced within WP 3 will be used in the upcoming flow modelling work and as a first step towards the proposed BSR Regional Action Plan.







Task 4.1 - Challenges for the Baltic Ports

WP 4 is expected to provide a regional level contribution to pan-Baltic harmonisation actions launched by the national transport ministries in the areas recalled by the EU Baltic Sea Strategy - coordinated national transport policies and coordinated infrastructure investments. In this perspective, Task 4.1 should feature debates and follow-up investigations with stakeholder from the transport sector, in an effort to provide measures to exploit potential of the Baltic ports for developing an integrated transport system in the BSR.

A point of departure for the task is the diagnosis of the port sector in the BSR presented in the Baltic Seaports Outlook from 2008. To complement potential actions at the national level (e.g. Baltic Transport Outlook) this task intends to focus more on port-hinterland relations and impacts, future of smaller ports and environmental challenges. The task shall also suggest solutions and implementation constraints to connect individual BSR sea motorways links into a system. Expected conclusions (e.g. proposed further maritime link projects to emerge through national-regional cooperation) will be communicated at the EU and national levels and incorporated in the proposed BSR Regional Action Plan.

Progress so far

- Preparation of a thematic debate (11 May 2010 in Sopot, Poland) dedicated to a critical review of the Motorways of the Sea policy and its application progress in the BSR.
- Providing Baltic Ports Organization expertise to the shape of the thematic debates in order to identify possible needs for thematic reports.







Task 4.2 Human Capacity Building in Transport Operations

The consequences of the financial and economic crisis have reached the transport sector throughout Europe: there has been a considerable decrease in transport volumes and a considerable decline in employment. The most relevant drivers of change refer to demographic factors (ageing, declining population and social diversity), income situation, increasing global competition and market segmentation, global and regional production networks, labour and environmental regulations and new services and technological innovation. Due to the changing nature of jobs, predefined technical knowledge capabilities will become somewhat less important, while skills to adapt and get new competences and life-long learning will be a privilege. Certain knowledge - notably e-skills - will become more significant. Emerging competences of higher skilled jobs mostly refer to how to learn, communicate, interact and adapt to changing environments in addition to a high quality education.

Across all job functions - soft skills will become increasingly important, especially so for high skilled professional job functions. The general trend of up-skilling across job functions is bound to continue in the coming years.

These trends apply in different ways, depending on the respective transport sector, the size of the company and the region or the location. This also applies to the BSR.

Progress so far

In order to be able to more in detail find out which human skills and which human capacity that will be needed, which weaknesses that will need to be eliminated and which strengths that will need to be fortified and how the attractiveness of the sector fields (for men and women) can be boosted in the future, plans are being made for all the project partners as well as other stakeholders to take part in a written survey. We will also use statistics, discussions with experts and ongoing projects for information synergies in our work. First kick-off meeting with interested project partner will be held in October 2010.







Tasks 4.3 - Transport Sustainability and Green Corridors

In order for freight transport to function seamlessly and with respect to sustainable development principles, an integrated transport system in the BSR needs to be created. This transport system should allow the use of environmentally friendly transport modes within the EU concept of green corridors.

The main aim of the task is to define barriers of integrated transport development in the BSR regarding regional cooperation with Russia, Belarus and Ukraine, and development of multimodal corridors network incl. green corridors and innovative transport solutions.

Concrete activities are for example to form a catalogue of recommendations and guidelines for development of an efficient transport system in the BSR. Case studies that will be performed concern implications of the EU transport policy on development of sustainable transport in the BSR, and on development of environmentally friendly transport modes in BSR transport freight (rail, inland waterway transport, short-sea shipping, green corridors). A study on transport plows to/from India and China to the BSR and their impact on development of future BSR transport patterns will also be performed.

Progress so far

The partners have been working towards elaborating the first draft of the inception study on "Implications of the EU transport policy on development of sustainable transport in the BSR". Currently the work concentrates on EU transport policy effects in Baltic Region and hindrances to its implementation, as well as the green corridors concept. Next step will see a detailed analysis of specific transport issues relevant to the BSR such as:

- transport and innovative logistics perspectives,
- environmentally friendly transport modes in transport freight or
- impact of increased cargo flows between India/ China and BSR on future transport patterns.







Task 5.1- Dry Port Development

The dry port concept is based on a seaport directly connected by rail to inland intermodal terminals, where shippers can leave and/or collect their goods in intermodal loading units as if directly at the seaport. The dry port concept is rather new and unknown; in many cases, the difference of a dry port and a normal hinterland terminal is not being observed.

As an advantage dry ports:

- Offer expansion areas for seaports with limited space,
- Partly solve problems caused by increasing truck traffic close to the seaports,
- Increase hinterland region logistics competitiveness,
- Offer new business model and open new markets,
- Reduce costs,
- Offer possibilities to achieve environmental objectives.

We will study the dry port implementation process, especially existing dry ports in Europe. We will also plan and perform dry port demonstrations in selected demonstration sites and contribute to dissemination of the concept.

Progress so far

We will arrange a dry port seminar in April 2010 as a first activity, with participation from container transport industry and port operators.







Task 5.2: Empty Container Management

The main objective of this task is to implement foldable containers in the BSR to reduce negative impacts of empty container flows. As a first step, the status quo of empty container management has been investigated. The share of empty containers worldwide is 20% on seabased and 40% on land-based transport. The main reason is the imbalance of cargo flows and the required compensation of surplus and shortage of empty containers between nodes in the transport chain (e.g. ports or hinterland depots) at a local, regional and global level. Affected stakeholders are port, terminal and hinterland operators, shipping lines, shippers and other transport operators as well as container leasing companies: all those who handle or own their containers. The repositioning of empty containers mainly causes high costs and ties up capacities in transportation and storage. Furthermore, these inefficiencies lead to negative environmental impacts, such as air pollution and unnecessary land use.

Along with the increasing containerisation of cargo flows, empty container management has become an issue in the BSR. Especially the diversity of the origin and destination points of cargo flows in the region requires an investigation of strategies for empty container management. The foldable container will therefore be introduced by the task as an opportunity to face this challenge.

Progress so far

As a partner to put the foldable container into practice, Holland Container Innovations (HCI - a start-up company from Delft University of Technology) has been chosen. HCI has developed and also patented technologies for a foldable container. As a next step, we are looking for affected stakeholders as partners in a pilot case to put the foldable container into practice as a sustainable logistic solution.







Task 5.3 - Deployment of ICT Toolbox for Planning of the Intermodal Supply Chains

There is still insufficient awareness among freight decision makers of the competitive advantages of intermodal transport solutions. Intermodal offer is hardly accessible or not transparent enough for companies, why it is seldom considered as a road transport alternative.

The aim of the task is to demonstrate benefits from utilising Internet tools for planning intermodal supply chains to freight market stakeholders. This kind of tool contains inventory of the freight service providers representing all modes of transport active in given corridors, and shows the optimal transport solution taking into account cost of delivery or lead-time.

In course of the project tool's data base of selected container transport routes will be filled and optimal transport solutions will be compared to actual decisions of freight payers. For stakeholders this demonstration will convey a good opportunity to discuss possible improvements of delivery planning and evaluation methodologies of transport service quality. Strong involvement of stakeholders may lead to improvement of tools as well. The project will end with a tool deployment plan among the potential users.

Progress so far

The ongoing work means gathering of market data relating to transport services in selected corridors, which link Poland with Scandinavia and the port of Hamburg. A created database of transport operators on different modes of transport and their services will provide trading companies with the opportunity to assess their own freight decisions in terms of their optimality (freight expenses or delivery lead-time).

We are also evaluating existing ICT tools for delivery planning to recommend future possible improvements. Analysis of possible Key Performance Indicators recommended for intermodal chains is being performed as well.







Task 5.4 - Competence Management System (CMS) in Harbour Logistics

The task refers to the general challenges that are to provide measures for needed and better qualification of the labour force in transport operations (addressed by task 4.2). This applies in particular to harbour logistics, one of the key areas of the transport chain and a cluster of specific VET experiences /VET competence.

European- and world-wide increasing quality demands on logistics service and a need to implement the EQF (European Qualification Framework) require transnational curricula and standards for employee qualification. We are therefore following the vision of developing CMS on a BSR-wide and non-commercial basis as a platform for harbour logistics training. Our experience is that applied training and qualification activities are successful if they integrate harmonisation (such as EQF), consideration of individual/ local-regional conditions (such as VET infrastructure) and the needs of sector enterprises.

Progress so far

A first workshop has been completed and a second is scheduled. A kick-off with participation from interested partners is planned to take place after the second workshop. A web-based standardised platform for harbour logistics training is soon to be tested by stakeholders.





Task 5.5 - Rail Transport Solution for North-South and East-West flows

The task addresses the problem of a very low market share of rail transport. Today, road transport dominates international freight operations to and from Norway- eastbound to the Baltic Sea countries and southbound to the rest of Europe. It is thus important to find practical and durable solutions to counterbalance growing road transport volumes. The task will assess possibilities to improve competitiveness of rail transports.

The advantages gained by an efficient mainline rail infrastructure can very easily be lost if the infrastructure between the main line and a harbour terminal (last mile infrastructure) is deficient and demands time-consuming switching operations. New rail transport systems require considerable investments. On today's transport market it is difficult to get the necessary capital if profitability is not secured with firm orders.

The task will chart the hindrances by conducting literature search and interviews with relevant stakeholders in the transport chain. We will identify hindrances of considerable impact and possibilities to improve rail freight competitiveness through help from partnerships between private and public stakeholders. Earlier studies mostly seem to have concentrated on identifying bottlenecks in the line infrastructure. Administrative hindrances on international rail legislation are at the same time fairly well known.

Progress so far

A study of previous activities and reports about rail freight transport in the BSR is ongoing parallel with preparation of interviews with relevant stakeholders. An intermediate report with preliminary conclusions of possibilities of increasing competitiveness of rail freight transport will be presented by the end of milestone 2 of the project.





