THE BALTIC SEA MOTORWAY - RECENT DEVELOPMENT AND OUTLOOK FOR THE FUTURE

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ABSTRACT
The Council of the European Union adopted a political agreement in the summer of 2004 on a common position concerning the new TEN Guidelines proposed by the Commission. These Guidelines introduced the concept of the Motorways of the Sea. Currently, there are four sea motorways in Europe, one of which is the Baltic Sea Motorway. The countries in the northern Baltic Sea area, such as Finland, are faced with long transport distance to Central Europe and seasonal ice coverage of the Baltic Sea. The concept of the Baltic Sea Motorway including land transport feeder connections provides an efficient maritime link and transport chain for the Baltic countries, promotes the internal cohesion of the Baltic Sea region to the core areas of the European Community and reduces high transport costs. The sea motorways have a priority project status just like the land transport connections of particular importance for the European Union. According to the TEN-Guidelines, there are two types of Sea Motorway projects. Horizontal projects, in which the benefits are not only allocated to particular ports (for example ice-breaking, the Baltic information systems etc.) and port-to-port -projects, which aim at providing opportunities for long multimodal transport chains between member countries.

Key words: Motorways of the Sea, Trans-European transport networks, Maritime link, Logistic chain.

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INTRODUCTION

The concept “Motorways of the Sea” was first introduced in the White Paper on European Transport Policy for 2010. According to the “White Paper”, sea transport is not just a means of carrying goods from one continent to another; but it is a real competitive alternative to land transport. For this reason, certain shipping links should be made part of the trans-European transport network, just like motorways or railways, in an effort to reduce road congestion and/or improve access to peripheral and island regions and countries (European Commission, 2001).

The Council of the European Union adopted a political agreement in the summer of 2004 on a common position concerning the new TEN-Guidelines proposed by the Commission in October 2003. According to the TEN-Guidelines, the Motorways of the Sea are one of the 30 priority projects in the development of the EU transport network. In addition to land transport connections, also sea connections, or “the Motorways of the Sea”, are now included in the TEN-network. This enables the logistic connection of land transport priority projects to each other which will contribute to the improvement of the overall efficiency of EU transport network operations. This is important especially to countries like Finland, as the previous TEN-system did not have tools to handle the accessibility problem or to improve connections from peripheral countries to the main market areas of the EU (European Commission, 2004).

The Motorways of the Sea are different than other transport priority projects. The “rules” of the Motorways of the Sea have been described in the Article 12a of the TEN-guidelines. Basically, the TEN-Guidelines give three main objectives for the sea motorways: (1) freight flow concentration on sea-based logistical routes, (2) increasing cohesion, (3) reducing road congestion through modal shift (Figure 1).

The sea motorways have a priority project status just like the land transport connections of particular importance for the European Union. According to the TEN-Guidelines, there are two types of Sea Motorway projects (European Commission, 2005):

- Horizontal projects, in which the benefits are not only allocated to particular ports (for example icebreaking, information systems, development of rescue operations etc.)
- Port-to-port -projects, which aim at providing opportunities for long multi-modal transport chains between member countries.

Financial support can be applied from the Commission to the Motorways of the Sea projects. To be eligible for the higher funding rate of 20 %, the proposed project must be of common interest of the trans-European network of motorways of the sea (part of a Motorway of the Sea corridor). The network shall consist of facilities and infrastructure concerning at least two ports in two different member countries. Finally, the Motorways of the Sea should not exclude the combined transport of
persons and goods, provided that freight transport is dominant (European Commission, 2005).

The European Commission decided to establish a High Level Group in 2004 on the "Extension of the major trans-European transport axes to the neighbouring countries and regions". This Group acknowledged that maritime transport plays a crucial role in freight traffic between the EU and the neighbouring countries. Therefore, the Group paid particular attention to actions related to the improvement of the organisation of intermodal freight transport, particularly in the context of the implementation of the Motorways of the Sea concept. Furthermore, the Group identified the extension of the Motorways of the Sea of the EU to all the sea regions (Atlantic, Baltic, Barents, Mediterranean, Black and Caspian Seas) as a priority for transport facilitation between the EU and the neighbouring regions (High Level Group of the European Commission, 2005).

**SPECIAL FEATURES OF THE BALTIC SEA REGION**

Since May 2004, eight out of the ten countries in the Baltic Sea Region are members of the European Union. The Baltic Sea has nearly become an inland sea of the EU and Russia is the only non-member of the EU which is located along the coastline of the Baltic Sea. Still, the Baltic Sea Region is fragmented with huge economic and social disparities, both in terms of growth and stability. The positive effect of the EU enlargement, which is reflected in increasing trade between the eastern Baltic Sea region and western (northern) Europe, does not automatically mean increasing freight volumes for all transport modes. Maritime transport capacities have been underutilised, even though the potential is huge and transport capacity is virtually unlimited. More competitive and integrated maritime transport is an
important objective (Task Force of the Baltic Sea Motorway and European Commission, 2006).

The countries in the northern Baltic Sea area, such as Finland, are faced with long transport distance to Central Europe and seasonal ice coverage of the Baltic Sea which disturbs maritime operations and creates a barrier to Central European markets. Demand for punctuality in transport is growing, as there is no intermediate storing, and raw materials and products are transported directly to production. Ice conditions in the Baltic Sea cause seasonal delays to the transport chain from the northern Baltic Sea area to Central and Eastern Europe. Delays in transport chains will have a negative impact on the efficiency of transport operations and accessibility to markets.

Maritime transport plays an important role in the economic development of the Baltic Sea Region. The economy of especially new member countries grows rapidly, promotes trade and creates needs for the development of transport connections. A strong increase in the demand for transport is forecasted and a corresponding response from the shipping industry leading to more and bigger vessels calling in the ports of the Baltic Sea Region. In the transport sector, it must be taken care of that poor condition of transport connections is not a constraint to economic growth. It is obviously important in the Baltic countries to develop smooth multimodal transport chains between the member countries. The concept of the Motorways of the Sea provides good preconditions for the development of a logistics system connecting the Baltic Sea countries and their hinterland (Task Force of the Baltic Sea Motorway and European Commission, 2006).

The Baltic Sea area has many existing maritime links and the focus of the sea motorways is on the development of transport chains based on these links rather than on the creation of new links. In these circumstances, special attention must be paid to the question of distortion of competition (Task Force of the Baltic Sea Motorway and European Commission, 2006).

CONCEPT OF THE BALTIC SEA MOTORWAY

The Baltic Sea countries have been active in the concretisation of the sea motorway concept. The Baltic Sea Motorway Task Force was established in the year 2004 consisting of all the Baltic Sea countries and the European Commission. The Task Force coordinates the development of the Baltic Sea Motorway by, for example, declaring common statements, exchanging information and initiating various development actions. The Task Force has five informal sub-groups which concentrate their actions on infrastructure, icebreaking, financing, safety and security as well as information motorways. The Task Force has been chaired by Finland until the autumn of 2005. Hence, the chairmanship will be circulated every year and the Task Force is chaired by Sweden in the year 2006.
The assignment of the Task Force has been divided into two main sectors: promoting horizontal projects and developing of the concept of port-to-port projects. The infrastructure sub-group of the Task Force has e.g. prepared a list of infrastructure titles which could be part of a “physical” sea motorway project and for which TEN financial aid could be applied for.

The impact area of every sea motorway project is, however, wider than the area in the immediate vicinity of ports. These projects should always be based on a “logistic idea” of developing a long transport chain between member countries. It is essential that the network of the trans-European transport corridors and the Baltic Sea Motorway will be connected to logistics systems which support each other (Figure 2).

HORIZONTAL PROJECTS

The horizontal projects of the Motorways of the Baltic Sea are mainly organized under the project “Master Plan Studies for the Development of the Motorways of the Baltic Sea” which is co-financed by the EU (Task Force of the Baltic Sea Motorway, 2005).

This package of studies is a result of the work of the Baltic Sea Motorway Task Force and its sub-groups and the study has been prepared in close cooperation with the Baltic Sea countries. The Master Plan study is managed by the Swedish Maritime Administration.

Figure 2. The Baltic Sea Motorway and main transport corridors in the Baltic Sea region.
The development of the Motorways of the Baltic Sea is a long-term joint task for the Baltic Sea countries. The main objective is to develop a framework which will provide a basis for further and more detailed planning of the Motorways of the Sea concept for the Baltic Sea region. The “Master Plan” project is currently divided into the following four sub-projects (Task Force of the Baltic Sea Motorway, 2005).

**Study on goods flows and maritime infrastructure**

The study aims at contributing to increased knowledge of the current situation of goods flows and maritime infrastructure as well as the likely future development and demand of maritime transport in the Baltic Sea region. The study will target both the intra-regional and extra-regional dimension of trade and transport. This is necessary for the further development of transport policies, infrastructure planning and other joint actions in the Baltic Sea region. This study has been completed in the spring of the year 2006.

**Baltic Sea Winter Motorways**

A well-functioning, all-year maritime traffic in the Baltic Sea is of high importance not only for the Baltic Sea countries, but for the transport system of the EU as a whole. A strategy to achieve this is by enhancing the strategic and operational cooperation between the Baltic Sea countries within the area of assistance to winter navigation. The icebreaking cooperation is one such area, in which a joint approach will give added value and improve winter navigation in the region. The long-term strategic vision is to develop a joint Baltic Icebreaking Service.

**Safe major routes of the Motorways of the Baltic Sea**

Existing hydrographic survey data in the Baltic Sea is not sufficient. Quality assurance by re-surveys of the main routes on the Motorway of the Baltic Sea has already been deemed necessary and a scheme is developed and approved by the IHO Baltic Sea Hydrographic Commission. Reliable surveyed routes and extended areas allow safe icebreaking operations also in heavy ice conditions.

**North Sea Baltic Hub**

There is a need to improve the supply of interregional and intermodal transport service within the North Sea and Baltic Sea regions, as interregional trade is expected to grow. The rapidly increasing containerised trade also requires improved supply of maritime services. The aim of this subproject is to create a basis for commercial as well as political decisions, fostering the development of a North Sea Baltic Hub.

New elements to be added to the package of Master Plan studies will be considered in the upcoming calls for proposals for TEN financial aid. For example, the so-called information motorways have been in discussion.
PORT-TO-PORT PROJECTS

The goal of port-to-port projects is to interconnect land transport connections of the TEN-network in order to develop multimodal transport chains between the member countries and neighbouring countries of the EU. Port-to-port projects are very challenging due to the participation of numerous stakeholders in the development of them (Figure 3). All participants should benefit from their participation.

The possible conflicts between stakeholders include, for example, different political cultures and priorities in infrastructure development, distortion of competition as well as balancing between the requirements of the EU Commission and project proposals of partners and competition between project partners.

A typical transport chain, for example from Finland to Central and Eastern Europe, involves feeder transport by rail or road to a port, sea transport over a long distance to a European port and a delivery transport from this port by rail or road to the destination possibly across national borders. Figure 4 illustrates costs in this transport chain.

The average logistics costs for example in Finland are 2-3 times higher than in Central European countries. Decreasing these costs improves the competitiveness of a transport chain including a maritime link. Identification of the “bottlenecks” of this transport chain especially with regard to hinterland connections, port infrastructure, information systems as well as customs and administrative procedures...
constitutes the basis for development projects and measures. On the other hand, the Baltic Sea is also an opportunity which must be utilized by Finland. Sea transport is economical and sustainable.

Figure 4. Typical transport chain and logistics costs in freight transport on the Baltic Sea Motorway between Finland and Central Europe.

Finland cannot change its geographical location, but given its peripheral location in the EU, it is better to be separated from the main market areas by sea than a mountainous region.

Finland and Germany have opened a call for proposals procedure in this spring to enable a structured way for development and evaluation of mature sea motorway projects. The goal set by the Ministries of Finland and Germany of preparing the project proposals is to implement land and sea transport chains through the ports of these two countries. Partners from other countries can also participate in these projects provided that the Ministries of these countries have publicly announced about this opportunity. There has been great interest for the call for proposals. Projects approved by the procedure are eligible for funding in the upcoming calls for proposals for TEN financial aid.

CONCLUSIONS

As the initiative of the Motorways of the Sea will be developed further, the following issues are essential in the success of the project:
It should be recognized that the four defined motorway corridors in the EU are quite different. Certain preset goals can be easily achieved in the Mediterranean Sea but not in the Baltic Sea, and vice versa. To give an example, the Baltic Sea has numerous sea connections, and thus the focus of development is in making the existing sea connections more efficient and connecting them as part of a multimodal logistics chain of land and sea transport.

The Motorways of the Sea are not a synonym for short sea shipping. Short sea shipping already exists, but the Motorways of the Sea should provide additional value in order to deserve their existence. This additional value is brought by the fact that the Motorways of the Sea are one of the 30 priority projects in the TEN-network of the EU and they interconnect the priority projects of land transport. This is especially important in peripheral countries, such as Finland, which have to overcome long-distance sea connections to reach the central market areas of the EU. Through the concept of the Motorways of the Sea, the system trans-European transport networks have a “tool” for solving this problem of market accessibility.

According to the TEN-guidelines, there are two types of projects of the Motorways of the Sea. The purpose of port-to-port projects is to develop multimodal transport chains between at least two member countries of the EU. Main attention has so far been paid to these port-to-port projects.

According to the TEN-guidelines, there can also be projects with wider benefits not linked to specific ports. For example, icebreaking is a good example of these horizontal projects. It can also be a question of alleviating the administrative burden of sea transport or developing an information system encompassing the entire sea region. These horizontal projects have great potential and they deserve more attention in further development of the concept of the Motorways of the Sea.

Port-to-port projects are very challenging due to the large number of actors involved in them. It should be noted that all parties participating in these projects should benefit from their participation. Benefit for a certain party is often a disadvantage to another party. Especially in the circumstances of the Baltic Sea, which has numerous existing sea links, the question of distortion of competition requires a lot of attention. The role of Ministries and actors in the market should also be clarified. The Ministries can provide a general framework and set goals of development, but they should not get too much involved in single projects. A bottom-up approach is the best way of developing concrete projects. Projects should be based on realistic estimates of transport volumes and create permanent and economically feasible transport chains.
REFERENCES


