Príspevok je spracovaný s podporou projektu "Dobudovanie prototypu simulátora lodnej prevádzky", ITMS kód projektu 26220220007, Žilinská univerzita v Žiline.



ERDF – Európsky fond regionálneho rozvoja

"Podporujeme výskumné aktivity na Slovensku / Projekt je spolufinancovaný zo zdrojov EÚ"



CONDITIONS FOR EFFECTIVE DEVELOPMENT OF THE MOTORWAYS OF THE SEA

Miroslava Mikušová¹

Introduction

Road transport networks developed with traditional paths, evolving first into roads and then into motorways. When we hear last named term we imagine a road in generally good condition, with few curves, thus permitting a relatively mouth and comfortable journey. What is not very common is that when we hear the term 'motorway', we are aware that we are not talking only about a road with a specific route and road surface.

The quality and value of a motorway in reality are enhanced by a range of complementary services such as resting areas, service stations, emergency telephones, clear signage, no cross-roads, etc. The same is happening in European maritime transport where the key routes between the Member States of the EU are frequently denominated like a motorways of the sea.

Concept of the Motorways of the Sea

The "motorways of the sea" concept are a new concept aimed at introducing new intermodal maritime-based logistics chains in Europe. These chains should be more sustainable and commercially more efficient, than road-only transport. Motorways of the sea should improve access to markets throughout Europe, and bring relief to the over-stretched European road system. For this purpose, fuller use should have to be made not only of our maritime transport resources, but also of the potential in rail and inland waterway, as part of an integrated transport chain.

Motorways of the Sea are existing or new sea-based transport services that are integrated in door-to-door logistic chains and concentrate flows of freight on viable, regular, frequent, high-quality and reliable Short Sea Shipping links. The deployment of the Motorways of the Sea network should absorb a significant part of the expected increase in road freight traffic,

¹ Ing. Miroslava Mikušová, PhD. Žilinská univerzita v Žiline, F PEDAS, Katedra vodnej dopravy, Univerzitná 1 Žilina, email: <u>miroslava.mikusova@fpedas.uniza.sk</u>

improve the accessibility of peripheral and island regions and states and reduce road congestion.

Motorways of the sea are about making better use of Europe's transport resources and about efficient, safe and secure shipping in Europe.

Present situation in the European Union

There are large differences in demand, trade patterns, types of services and markets in the various Motorways of the Sea regions and this is also reflected in differences in approaches to preparing Motorways of the Sea.

This concept had been introduced in 2001 transport White Paper (European Transport policy for 2010: time to decide), where the Directorate-General for Energy and Transport proposed the development of Motorways of the Sea as a "real competitive alternative to land transport."

The main roles of the Commission as a european coordinator to support the implementation of the Motorways of the Sea are:

- motivate the relevant players in the public and private sector to prepare and submit Motorways of the Sea project proposals in the framework of the TEN-T and Marco Polo programmes,
- foster co-operation between the public and private sector in the preparation of the Motorways of the Sea,
- encourage Member States and regional authorities to create favorable conditions for successful deployment of Motorways of the Sea,
- help raising awareness amongst shippers of the benefits of integrated Short Sea Shipping and Motorways of the Sea,
- help identifying and solving obstacles to its development,
- help targeting financial interventions in support of the Motorways of the Sea.

The main reasons for supporting the creation of Motorways of the sea by EU are that they:

- provides more efficient, more cost effective, less polluting freight transport;
- reduces road congestion on key bottlenecks across Europe;
- provides better, more reliable connections for peripheral regions;
- plays a role in making Europe's economy stronger and more sustainable.

In accordance with information mentioned above it seems that the future Trans-European transport network (TEN-T) will incorporate intermodal logistics chains that contributes to the largest extent towards reaching objectives linked to rebalancing the modal split, constituting the central axis of the maritime transport network in the following key corridors defined by European Union:

- 1. Motorway of the Baltic Sea
- 2. Motorway of the Sea of Western Europe (Atlantic Ocean North Sea/Irish Sea)
- 3. Motorway of the Sea of South-east Europe (Adriatic, Ionian and Eastern Mediterranean Seas)
- 4. Motorway of the Sea of South-west Europe (Western Mediterranean Sea).

By 2010 Motorway of the Baltic Sea should link the Baltic Sea Member States with Member States in Central and Western Europe (including the route through the North Sea/Baltic Sea

canal); Motorway of the Sea of western Europe should connect the Portugal and Spain via Atlantic Arc to the North Sea and the Irish Sea; Motorway of the Sea of south-east Europe should link the Adriatic Sea to the Ionian Sea and the Eastern Mediterranean (including Cyprus) and Motorway of the Sea of south-west Europe should connect western Mediterranean (Spain, France, Italy and including Malta) with the Motorway of the Sea of south-east Europe, including links to the Black Sea. This situation describes scheme on fig.1.

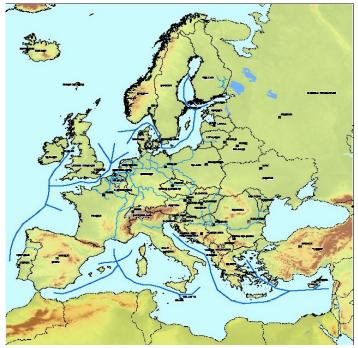


Fig. 1. European Motorways of the Sea [9]

Conditions for successful development of the Motorways of the Sea

The market for the transport of goods in Europe is constantly growing, considering the number of tons transported every year. This increase in the demand for transport has principally favored road transport, thereby causing a significant imbalance in the market and negative environmental externalities, congestion and its associated economic costs, high accident rate and other problems with traffic safety, energy dependency from imported sources, emission of pollutants and noise and greenhouse gases. Also the transport infrastructure is becoming more and more stretched. This is really important concentrate the efforts to make the motorways of the sea attractive and easy to use.

Putting the Motorways of the Sea into effect gives rise to a number of challenges:

- reducing bureaucracy,
- promotion and marketing,
- port capacity, accessibility and efficiency,
- availability of good and non-congested hinterland connections,
- co-operation between all the players in the chain, including between ports,
- seizing the benefits from the booming container traffic,
- establishing integrated information systems,
- ensuring availability of suitable vessels,
- integrating Motorways of the Sea into a broader transport planning perspective,
- coordinating the funding instruments,

- balancing incentives for various modes of transport,
- dealing with distortion of competition,
- providing adequate training and attracting young people to the maritime profession,
- improving energy efficiency and reducing (air) pollution.

Motorways of the Sea will succeed as an alternative to conventional motorways only if they deliver services of which the quality and competitiveness is comparable with alternatives offered by other modes, in particular road transport.

The key players involved in this process are public administrations including a national governments, regional, local administrations and non-international public authorities, ports and port services including a port authorities, ports associations and port service providers such as towage and pilot organizations, ship-owners including associations of ship-owners and shipping lines, intermediate organizations including all types of shipping agents (freight forwarders, ship-brokers, transit organizations, e.g.), shippers, short sea shipping promotion centers, transport organizations including all private transport organizations not focused only in maritime transport (road and rail operators, intermedial logistics companies, eg.), civil society organizations including labor organizations (trade unions and staff organizations), environmental organizations, e.g.

Steps to be taking toward

There exist many challenges that must be taken up to make the motorways of the sea competitive alternative to road transport.

There is no longer sufficient have a network of services from port to port. There should be taking concrete steps towards making motorways of the sea a reality. The concept of motorways of the sea should not be limited only to a determined maritime connection between two European ports, it should include the totality of an intermodal door-to-door logistics chain. To increase the competitiveness of maritime transport are needed a series of complementary services. These services of high quality will be indispensable, as well in terms of cost as well in time, at every point of this logistics chain: transport from door to port, time at the port, journey from port to port as well as transport from port to door.

Undoubtedly, the probability that maritime transport will constitute a viable complementary alternative to road transport will depend on its ability to adapt the provision of its services to market needs. It is evident that Short Sea Shipping (SSS) has not succeeded in adapting and meeting satisfactorily these needs, given that the desire for modal shift has not materialized. The creation of motorways of the sea was intended to resolve the key inefficiencies that have prevented SSS from reaching its full potential, thus reviding users with competitive door-to-door maritime services as much in terms of cost as much as in time in comparison to road transport.

Conclusion

The motorways of the sea seems to be a really powerful concept. But there are several issues that should be tackled into reality swiftly.

For this potential to materialize itself, the very discussion on the typology of traffic flows should not excessively emphasis the advantage of platforms (RO-RO) over containers. To the contrary, the opinion that the container will serve as the logical vehicle for the expansion of SSS is gaining more support. To this effect, an eclectic approximation that does not favor one type of traffic over another should be more commonly adopted within the doctrine of the motorways of the sea. Only this will enable us to avoid excluding a priori development possibilities.

It is essential to consolidate a high frequency thus adequately meeting the logistics needs of the sectors, which will require bold initiatives within the field of sectorial logistics, as much for exports as for imports. These initiatives must take place simultaneously with the efforts that ship-owners will make.

Financial commitments of the private sector to guarantee frequency and rotations are much more significant with SSS than with road transport, which is mostly financed by the public sector. The relative lack of funds supporting the creation of motorways of the sea can constitute a determinant of a hypothetical failure, in the perspective of substantial changes in the modal split. Including the financing of vessels as part of the infrastructure and transport policy should be considered as a matter of urgency.

It is critical that efforts being made be concentrated in a reduced number of ports so as to assure the viability of any action. However, port experience advises that it should be the market and not policy-makers the one deciding optimally in this situation. The effort to reach a sufficient equilibrium with respect to this matter constitutes itself as a critical point in relation with the consolidation of motorways of the sea.

Otherwise, the highly inflexible reality of the current situation will continue to impose itself and motorways of the sea will be judged as another failed attempt at shifting cargo towards a balanced modal split.

Literature

- BAGCHUS, R.C. AND KUIPERS, B. (1993) Autoestrada del Mare. In: European Short Sea Shipping, Proceedings from the First European Research Round Table Conference on Short Sea Shipping, 26–27 November 1992. London: Lloyds of London Press, 52–65.
- [2] COMM (1999), 317 Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions: The development of Short Sea Shipping in Europe as a Dynamic Alternative in a Sustainable Transport Chain.
- [3] HARALAMBOUS G.: The contribution of the "Sea Motorways" to the European Transport Policy. ECTRI European Conference of Transport Research InstitutesHelenic Institute of Transport, June 2012. http://www.ectri.org/YRS05/Papiers/Session-2ter/haralampous.pdf
- [4] KAPROS S. (2010) European Transport Policy Instruments and actors' attitudes in specific Markets: The Case of Motorways of the Sea in the East Mediterranean, ETC Proceeding
- [5] Motorways of the sea: Modernising European short sea shipping links, Transport Reasearch Knowledge Centre. <u>http://www.transport</u> research.info/Upload/Documents/200608/20060831_100831_88503_Sea_Motorways.pdf

- [6] PAIXÃO-CASACA, A.C. (2006) Insights into the port training of the new European Union Member-States. Maritime Policy and Management 33 (3): 203–217.
- [7] PSARAFTIS, H.N. (2009) Challenges in European Short Sea Shipping13th Congress of Intl. Maritime Assoc. of Mediterranean IMAM 2009, Istanbul, Turkey, 12-15 Oct.
- [8] SMETS I.: Motorways of the sea: Still long way from reality. <u>http://www.europolitics.info/dossiers/integrated-maritime-policy/motorways-of-the-sea-</u> <u>still-long-way-from-reality-art272244-112.html</u>
- [9] http://ec.europa.eu/transport/maritime



Internetové noviny pre rozvoj logistiky na Slovensku. ISSN: 1336-5851