

# MOTORWAYS OF THE SEA



## Shifting freight off Europe's roads

**E**urope's firms, organisations and individuals are growing ever more dependent on timely deliveries of raw materials, components and finished products. Freight transport is growing every year in Europe, and so transport infrastructure – and roads in particular – is becoming more and more stretched.

Under current trends, inland freight in the EU-15 is forecast to increase by 70 % by 2020. And in the new Member States, growth will be even sharper, at up to 95 % in the same period. Increases of this magnitude cannot be absorbed by the existing transport system, so it is essential to develop alternative, more flexible transport systems now, to avoid critical bottlenecks harming Europe's economy. Intermodal transport provides a solution, by combining different transport modes for single journeys in such a way that better use is made of the available infrastructure at lower overall costs to society.

Around our coasts, the sea is a largely underused resource for transporting goods and passengers. Not only does sea transport provide an effective alternative to bypass natural barriers, such as the Alps and Pyrenees on journeys between Italy and Spain, it also provides short and quicker routes to Europe's most peripheral regions.

Motorways of the sea are key sea routes between EU Member States, offering regular, high-quality services that, combined with other transport modes, provide an efficient alternative to road-only transport. Through the trans-European transport networks (TEN-T), the EU is now supporting the development of motorways of the sea in four key corridors around our coasts: the Baltic Sea, western Europe (Atlantic Ocean – North Sea/Irish Sea), south-western Europe (western Mediterranean Sea), and south-eastern Europe (Adriatic, Ionian and eastern Mediterranean Seas).

### Motorways of the sea:

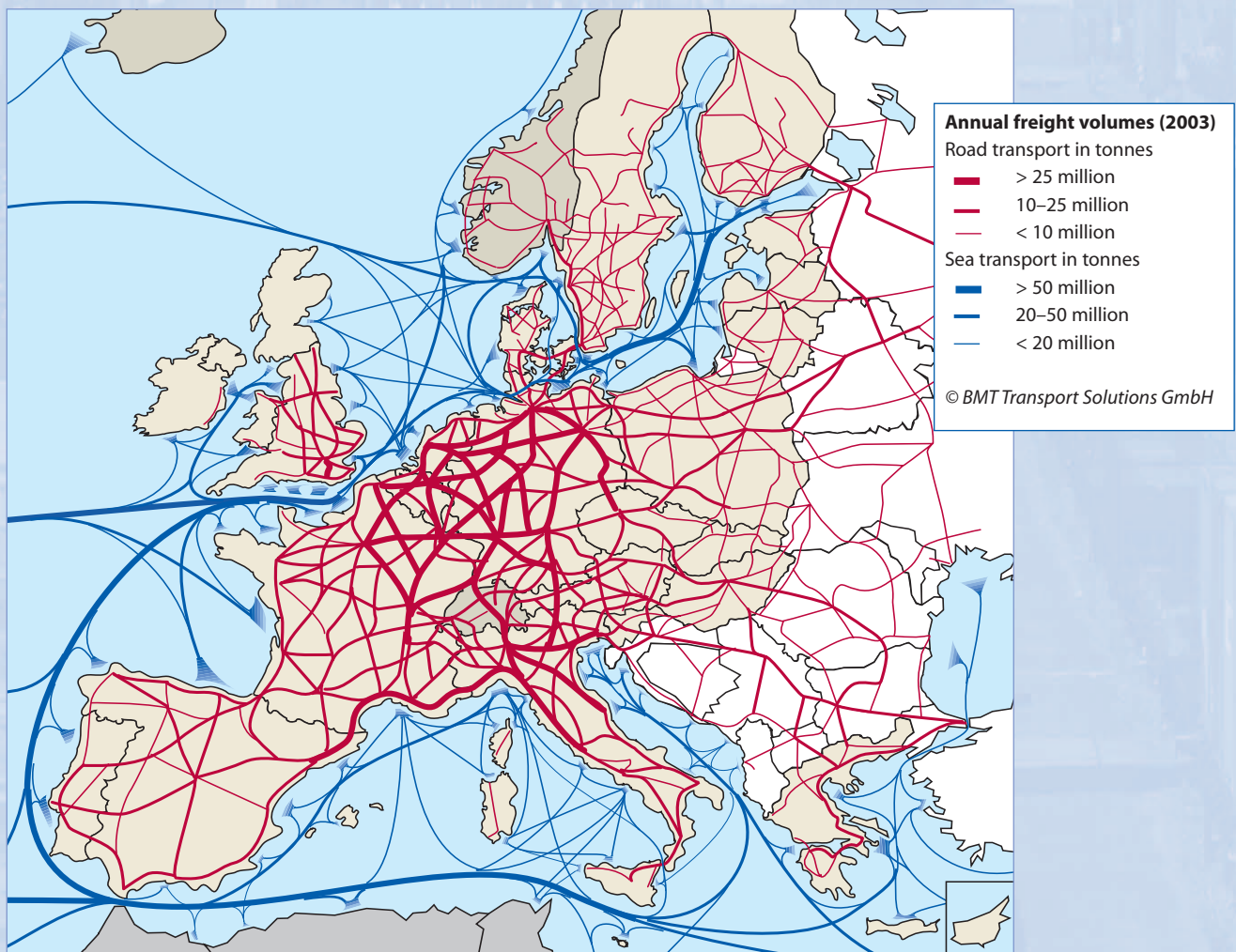
- provide more efficient, more cost-effective, less polluting freight transport;
- reduce road congestion on key bottlenecks across Europe;
- provide better, more reliable connections for peripheral regions;
- play a role in making Europe's economy stronger and more sustainable.

# INTEGRATION OF RESOURCES

**M**otorways of the sea are about making better use of Europe's transport resources. Short-sea shipping is well established in Europe's seas, and indeed volumes are growing strongly. In recent years, growth in short-sea shipping has matched that of road transport (at 25 % from 1995 to 2002), and short-sea shipping currently carries some 41 % of tonne-kilometres moved in the EU, whereas road transport accounts for 45 %.

However, whilst the levels of growth are matched, short-sea shipping has not seen a rise in congestion

similar to road transport. On longer trips within the EU, rail, inland waterway and short-sea shipping are often more effective alternatives, being more fuel-efficient, less labour-intensive, and congestion-free. Studies done on the development of motorways of the sea suggest that on many routes seaborne alternatives provide both time- and cost-competitive alternatives to road trips. For instance, a motorway of the sea route could be developed along the Atlantic coast to provide a sea-lane running parallel to motorways. This would provide an attractive alternative, becoming the preferred route for freight transport.



## Critical mass

Motorways of the sea are a new concept. A massive modal shift from road to motorways of the sea can only be achieved through the concentration of freight flows on these sea routes. They will become the flagship of integrated short-sea shipping services providing frequent, high-quality, door-to-door transport services, with integrated connections at either end of the core sea routes.

This requires a new view of transport planning, involving wide-ranging partnerships of public and private players, encompassing not only ports and shipping operators, but also land-based transport operators, freight consolidators, logistics companies and the public sector. A major change in thinking is required, so that individuals consider the entire logistics chain – from the factories where goods are produced, to the final consumer – as a whole.

Most importantly, the partners have to choose the ports between which motorways of the sea services operate, since only a limited number of ports can be linked by motorways of the sea. The services have to be focused on core links to achieve the critical mass, and high service frequency that is essential to their success. The more traffic that uses them, the higher the frequency (and thus greater flexibility for users) that can be developed.

All the players involved need to concentrate their efforts to make motorways of the sea attractive and easy to use. That involves not only the infrastructure required for intermodal services, but also overcoming the technical, administrative and legal disparities of the various modes of transport and Member States.



## The Baltic Sea

The TEN-T funded project on the Baltic Sea corridor demonstrates that each motorway of the sea has its own characteristics and requirements. There are already many short-sea shipping links in the Baltic Sea. So, the priority is to place these sea routes at the core of integrated transport corridors, whether for trade within or beyond the Baltic region.

The project partners aim to develop integrated maritime and land-based transport infrastructure, which will reduce the high transport costs of serving the region, and better connect the littoral states with each other and with the central areas of the EU. A critical part of the strategy is to ensure year-round access to the peripheral areas, so the partners will be looking at ice-breaking services that can keep the sea connections navigable. Amongst wider concerns, the project will ensure that the highest possible safety standards and strong environmental protection are integral to the development of services.

A simulation done for the Commission, using 2003 trading figures as a basis, suggests that services linking ports in northern Germany or south-eastern Denmark with the Baltic states could attract annual trade volumes of over 2 million tonnes in eastbound trade and over 11 million tonnes in westbound trade, in particular through a modal shift from road.

## Irish crossing

The sea route from Spain/Portugal to Ireland is 600 to 1 200 km shorter than truck journeys through France and the United Kingdom. However, for goods to arrive faster than by road, shipping services need to operate regularly. This is particularly important for perishable cargos such as fruit and vegetables – accounting for around 60 000 truck journeys from southern Spain to Ireland and the UK each year – which cannot sit in port waiting, even for one day, for the next ship. Developing motorways of the sea aims to provide services frequent enough to become a viable alternative to road transport.



# MAKING THE CONCEPT REALITY

**T**he Commission introduced the concept of motorways of the sea in its 2001 transport White Paper, underlining that it is 'a real competitive alternative to land transport'. The 2004 revision of the guidelines for the trans-European transport networks (TEN-T) included the development of four motorways of the sea corridors as one of 30 priority projects, which receive the bulk of EU funding under TEN-T.

Work is now well under way, and initial allocations of EU funding have been made available. Using TEN-T funding, the Commission is supporting the elaboration of master plans for the development of motorways of the sea in the Baltic Sea, Atlantic Ocean and Mediterranean Sea.

Cohesion and structural funds are also available to help specific regions develop their transport infrastructure, and particularly improve links to and from the more peripheral regions of the Union. The Marco Polo programme provides start-up subsidies to get specific intermodal services up and running.

The motorways of the sea concept is about breaking down the barriers between transport modes, organising and making better use of our existing transport resources. It can provide a real alternative, taking traffic off roads and improving the cohesion of the Union. Its success, fundamentally, does not depend on massive investment, but on the various stakeholders making real efforts to work together. With TEN-T support, the EU aims to make this happen, with the aim of having a comprehensive network of motorways of the sea services up and running by 2010.

Motorways of the sea will be extended to the EU's neighbours, under plans set out by a high-level group in December 2005, linking the four corridors with the Black Sea and potentially with the Suez Canal.



## Standard quality criteria have been developed to assess projects for motorways of the sea, and include:

1. quality of port services (one-stop administrative services, services to ships, cost-based prices);
2. quality of hinterland connections and services – good intermodal hinterland connections between the selected ports and the rest of the TEN-T network;
3. overall information systems and monitoring in the transport chain;
4. characteristics of the shipping services involved (e.g. frequency and regularity, safety and security);
5. TEN-T dimension: integration of project into overall network development.

### Further information

The Energy and Transport DG website has information on motorways of the sea, at:

[http://europa.eu.int/comm/transport/intermodality/motorways\\_sea/index\\_en.htm](http://europa.eu.int/comm/transport/intermodality/motorways_sea/index_en.htm)

The European Commission's Directorate-General for Energy and Transport develops and implements policy in these closely linked areas. The 2001 White Paper, **European transport policy for 2010: time to decide**, sets out 60 practical measures designed to bring about significant improvements in the quality and efficiency of transport in Europe by 2010, and to achieve a rebalancing between the modes of transport. The motorways of the sea initiative is a key component of EU policy to promote the use of intermodal transport, making greater use of an underused resource to make freight transport in Europe more efficient.

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