



**PRIORITY 6
SUSTAINABLE SURFACE TRANSPORT**

MTCP

Maritime Transport Coordination Platform
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**WORK PACKAGE 2.1
QUALITY & EFFICIENCY**

**TERMS OF REFERENCE DESK STUDY ON GOOD FLOWS IN
EUROPE FOR A PRE-DEFINITION OF MOTORWAYS
OF THE SEA (MOS)**

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TERMS OF REFERENCE**FOR A DESK STUDY ON GOODS FLOWS IN EUROPE FOR A PRE-DEFINITION OF
MOTORWAYS OF THE SEA (MOS)****- PHASE II -****I. Objectives of the study**

The scope of the assignment is to follow up the work undertaken in a first phase of the study on goods flows in the European Union and towards our neighbour-relevant for road, rail, maritime and inland navigation transports achieved by BMT Transport Solutions GmbH in July 2005.

First results delivered in July 2005 simulate roughly a potential for additional inserted MOS links between different port regions. Measured effects were the transport demand for the MOS and possible modal shift effects on road transport.

Based on these first elements, the objective of the Phase II is to complement the study with the following elements:

1. Modal shift effects on road, rail and inland navigation at regional level (country) ;
2. Impact on existing maritime traffic flows and SSS lines (for which an inventory would be necessary) ;
3. Transport demand and goods flows shall be projected under alternative growth forecasts (high, medium and low).

The study shall give indications where motorways of the sea could be set up throughout Europe. In particular, potential for “pendulum services” between Northern and Southern Europe, with hubs and spokes, should be addressed as described hereafter.

II. Scope of the study

- 1) Provide methodological note explaining the model used, the data sources and the setup of the simulations in a clear and comprehensive way, including:
 - Description of cost functions, modelling of stated preferences and how they are used to decide on modal shift
 - Basis on which the Roro/Lolo traffics are differentiated
- 2) Provide the following information on the MOS simulations carried out:

- What is the proportion of traffic attributable to transit?
 - What is the load factor on the simulated MOS lines?
 - Differentiation between types of cargo (e.g. Liquid and dry bulks, Unitised cargo, Roll-on Roll-off (trucks, trailers), Other general cargo)
 - Determine impact of linking up individual MOS links into a MOS network
 - Calculate and present impact on level of road congestion
 - Differentiate between modal shift from the different transport modes
 - Present information on modal shift in absolute terms (number of lorries) and as part of the total traffic between the regions considered
 - Identify bottlenecks for implementation of simulated MOS links
- 3) Complete the simulations for the missing regions so as to:
- Ensure complete coverage for all main EU port regions with their main destinations
 - Provide consolidated results per Member States (as a separate deliverable)
- 4) Carry out simulations based on 2010 traffic forecasts, 2010 being the target date for the implementation of the Motorways of the sea (with high, medium and low hypothesis)
- 5) New case studies for selected links:
- Determine sensitivity of outcome to availability of capacity (e.g. would two departures a day/one departure every two days increase/decrease the modal shift?)
 - Impact of port choice on neighbouring ports, taking into account Intra-port competition
 - Impact of choice of location in relation to presence of deep sea ports
 - New “pendulum services” with hubs and spokes linking for e.g. South West – North West ports (on Western and West Mediterranean corridors) and North East – South East ports in Eastern Mediterranean and Adriatic seas.

III. Expected results, conclusions

Taking into account what is above, the report should give indications where Motorways of the sea could be set up throughout Europe and give indications on relevant maritime coastal areas/ clusters of ports.

The study should allow strategic choices to be made for high potentialities for motorways of the sea.

The contractor shall submit the final report in English in three months not later than **31st March 2006**, in both paper and electronic versions. A draft final report shall be submitted in writing no later than **1st March 2006**.

The report should be accompanied by presentation material to be used for visual presentations by the Commission services.

IV. Method

The study shall comply with the conditions of the contract to which these Terms of Reference are attached.

The study shall mainly be based on desk research.

The contractor shall gather the necessary data and information from sources outside and inside the European Union institutions. The contractor shall carry out the relevant analyses of that data and draw justifiable conclusions or make justified evaluations. The contractor shall present the data in an understandable format in which the main issues shall be clearly listed.

The contractor shall review the recent literature within the relevant field and fully exploit the outputs of former studies carried either at international, European or national level.

V. Budget

... € , - at rate costs + 20% overhead, corresponding to about ... person days.

VI. Team

The participants will be selected based on the following criteria:

- Experienced researcher or practitioner within the relevant field.