Technological Infrastructure for the Motorways of the Sea

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Former CEO, Piraeus Port Authority
Purpose of talk

- View Motorways of the Sea from ‘infrastructure’ viewpoint
- Raise related issues within the same general context
WHITE PAPER "European transport policy for 2010: time to decide"

- COM (2001) 0370
- Major policy document of EU
- Outlines EU transport policy for 2010
- All modes
- 4 parts
White paper cont’d

- Policy guidelines
- Part 1: shifting the balance between modes of transport
- Part 2: eliminating bottlenecks
- Part 3: placing users at the heart of transport policy
- Part 4: managing the globalisation of transport
- Conclusions: time to decide
- Annexes
EU-15 modal split
Short sea shipping (SSS)

- Central pillar of EU transport policy:
  **SHIFT CARGO FROM LAND TO SEA**
- Goal: reduce transport ‘external costs’
  Congestion/noise/pollution/accidents
- 2001: 0,5% of EU GDP
- 2010: rise by 142% to 1% of EU GDP
  (80 billion euros a year) if no action is taken
In 2003, Short Sea Shipping within the EU-15 accounted for 1.6 billion tonnes of goods, of which almost a third concerned the ports on the Mediterranean sea.
Short Sea Shipping by Reporting Country and Sea Region

Map 1: EU-15 $SS by sea region and $SS by reporting country – million tonnes, 2003
SSS bulk

Figure 6: Share of SSS in liquid bulk handled – 1000 tonnes, 2003

Figure 7: Share of SSS in dry bulk handled – 1000 tonnes, 2003
SSS unitized
SSS obstacles (some)

- Has not yet fully shed its past image as an old-fashioned industry;
- Involves complex administrative and documentary procedures;
- Requires enhanced port efficiency;
- Needs new advanced technological solutions for ships, ports, loading units and telematics networks.
EU: Actions to promote SSS

- Adoption of a Directive standardising certain reporting formalities for ships to arrive in and/or depart from ports;
- New support programme “Marco Polo”;
- Proposal for a Directive on Intermodal Loading Units;
- Introduction of the “Motorways of the Sea” approach;
- Proposal for a Directive on market access to port services (“port package”).
Action framework: substantial

Question: Does future look bright as regards EU ports, SSS and intermodality?

Answer:

• we still have a long way to go
The not-so-good news...

- SSS grew considerably between 1990 and 2002 (36%),
- But road transport grew even faster (41%)
- Inland navigation growth almost stagnant (<17% in 12 years)
Focus after 1985
Declining shares

### Modal split

<table>
<thead>
<tr>
<th>Year</th>
<th>Road</th>
<th>Rail</th>
<th>Inland Waterways</th>
<th>Pipelines</th>
<th>Sea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>34.7</td>
<td>20.0</td>
<td>7.3</td>
<td>4.5</td>
<td>33.5</td>
</tr>
<tr>
<td>1980</td>
<td>36.3</td>
<td>14.6</td>
<td>5.3</td>
<td>4.3</td>
<td>39.4</td>
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<tr>
<td>1990</td>
<td>41.9</td>
<td>10.9</td>
<td>4.6</td>
<td>3.0</td>
<td>39.6</td>
</tr>
<tr>
<td>1991</td>
<td>42.3</td>
<td>9.8</td>
<td>4.5</td>
<td>3.3</td>
<td>40.0</td>
</tr>
<tr>
<td>1995</td>
<td>43.0</td>
<td>8.5</td>
<td>4.4</td>
<td>3.1</td>
<td>41.0</td>
</tr>
<tr>
<td>2000</td>
<td><strong>43.2</strong></td>
<td>8.2</td>
<td>4.2</td>
<td>2.8</td>
<td><strong>41.6</strong></td>
</tr>
<tr>
<td>2001</td>
<td>44.0</td>
<td>7.9</td>
<td>4.1</td>
<td>2.8</td>
<td>41.1</td>
</tr>
<tr>
<td>2002</td>
<td><strong>44.7</strong></td>
<td>7.7</td>
<td>4.1</td>
<td>2.8</td>
<td><strong>40.8</strong></td>
</tr>
</tbody>
</table>
Not-so-good news cont’d

- in 1985 road surpassed SSS as the top transporter in intra-EC trades in ton-km,
- a position that it will continue to hold if no serious action is taken
- Recent trends disturbing
And more…

- Marco Polo got much lower funding than expected (100 million euros for 2003-2006)
- 1st call (Dec. 2003): 15 million euros
- 13 projects retained
- 2nd call (Dec. 2004): 20.3 million euros

- Compare with 80 billion euros of annual external costs!
Yet more...

- Serious fleet modernization problems in both SSS and IW
- EILU Directive: lack of enthusiasm from industry
- Big setback for EU port industry
- By extension, serious setback for EU intermodal transport
TEN-Ts (Trans-European transport networks)

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 1.10.2003
COM(2003) 564 final
2001/0229 (COD)

Proposal for a

DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending the amended proposal for a

DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Decision No 1692/96/EC on Community guidelines for the development of the trans-European transport network

(presented by the Commission pursuant to Article 250(2) of the EC Treaty)

PORTMOS workshop, Lisbon, Portugal,
May 31, 2005
Basic concept

- High-level group chaired by K. van Miert
- 29 high priority projects across EU
- Funding up to 220 billion EUR by 2020
- Introducing ‘Motorways of the Sea’
TEN-T priority projects
Funding for TEN-Ts

Remaining Investment -
Projects proposed in 2001 and New Projects
(2003-2020, Meuro)
Motorways of the Sea (MoS- project No. 21)

- Motorway of the Baltic Sea
- Motorway of the Sea of Western Europe
- Motorway of the Sea of South-West Europe
- Motorway of the Sea of South-East Europe
Article 12a TEN-T guidelines

- Concentration of freight flows on sea routes to reduce congestion and increase cohesion
- On one or several of the four mentioned Motorways of the Sea corridors
- Proposed by at least two Member States.
Article 12a conditions & criteria

- Improvement of existing maritime links or establishment of new, viable, regular and frequent maritime links for the transport of goods between member states;
- Reduction of road congestion and/or improvement of access to peripheral and island regions and States. Freight should be predominant, but not exclude the combined transport of persons and goods (Contribution to modal shift and/or cohesion);
- Focus on facilities and infrastructure, which make up the network of motorways of the sea;
- May include start-up aid limited to two years in support of duly justified capital costs;
- May also include activities with wider benefits and which are not linked to specific ports
- Shall in general involve both the public and the private sectors
- Quality aspects;
- Effects on competition
Project selection criteria

- Economical viability
- Financial profitability at the time of application is deemed insufficient
- Maturity of the project
- Stimulative effect of the community intervention on public and private finance
- Soundness of the financial package
- Direct or indirect socio-economic effects, in particular on employment
- Environmental consequences
- Especially in the case of cross-border-projects: coordination of the timing of different parts of the project
### Annex 2: funding possibilities for Motorways of the sea projects

<table>
<thead>
<tr>
<th>TEN-T Guidelines</th>
<th>Marco Polo</th>
<th>ERDF</th>
<th>INTERREG</th>
<th>Cohesion fund</th>
<th>State Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applicant</strong></td>
<td>Member State</td>
<td>Companies</td>
<td>MS/Regions</td>
<td>MS/Regions</td>
<td>Member States</td>
</tr>
<tr>
<td><strong>Funding focuses on</strong></td>
<td>Infrastructure Start-up aid for services and &quot;ancillary&quot; infrastructures</td>
<td>Start-up aid for services and related equipments</td>
<td>Large-scale infrastructure and related equipments</td>
<td>Large-scale infrastructure (more than 10 million EUR) + related studies</td>
<td>Infrastructure Equipment Services</td>
</tr>
<tr>
<td><strong>Objective of programme</strong></td>
<td>Modal shift – cohesion</td>
<td>Regional development</td>
<td>Cross border, trans-national and inter-regional cooperation</td>
<td>Cohesion between MS with the help of actions in transport and environment</td>
<td>Development of short sea shipping and intermodal transport</td>
</tr>
<tr>
<td><strong>Funding intensity</strong></td>
<td>max. 20% for projects; 50% for studies</td>
<td>Up to 35%</td>
<td>Up to 85% in ultra-peripheral regions; 80% in cohesion MS; 75% in Obj. 1 regions; 50% in other regions</td>
<td>Up to 80% of public costs (83% for ultra-peripheral regions); up to 100% for studies</td>
<td>30% for services and 10% for transshipment equipment External cost differential</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Until 2010 – 2 years for start up</td>
<td>Max. 4 years</td>
<td>No formal limit, in practice 2 years</td>
<td>No formal limit, in practice 2 years</td>
<td>No formal limit</td>
</tr>
<tr>
<td><strong>Further information</strong></td>
<td>Webpage¹⁹</td>
<td>Webpage²⁰</td>
<td>Webpage²¹</td>
<td>Webpage²²</td>
<td>Webpage²³</td>
</tr>
</tbody>
</table>
Eligible for MoS funding

- **Facilities and infrastructure** open to all users on a non-discriminatory basis

- Ways of ensuring year-round navigability

- Spectrum of infrastructure is very broad!
Infrastructure spectrum (1)

- dikes, breakwaters, locks and other high water protection measures
Infrastructure spectrum (2)

- lights, buoys, beacons, floating pontoon ramps in tidal areas
Infrastructure spectrum (3)

- infrastructure for utilities up to the terminal site
Infrastructure spectrum (4)

- direct land and sea access to port, including short connecting links to the national transport networks or TEN-T Guidelines
Infrastructure spectrum (5)

- port facilities, e.g. equipment available to all users
Infrastructure spectrum (6)

- electronic logistics management systems
Infrastructure spectrum (7)

- information systems, including traffic management (VTMIS) and electronic reporting systems

- (very important, given traffic concentration)
Infrastructure spectrum (8)

- safety and security measures
Infrastructure spectrum (9)

- administration and customs
Infrastructure spectrum (10)

- waterways and canals linking two EU MoS
Infrastructure spectrum (11)

- facilities for dredging
Infrastructure spectrum (12)

- icebreakers and facilities for icebreaking for winter access
SSS fleet ageing (source: Wijnolst & Waals, 2005)

- ships between 500 and 10,000 GRT
- ~10,000 ships in Europe
- ~460,000 port calls (2003)
- 38% of fleet over 25 years
- 21% of fleet over 30 years
- 10% of fleet over 35 years!
- Q: How will fleet be replaced?
Challenges

- Urgent need to reverse trend (road vs sea)
- Need of significant private capital
- Awareness of possible distortions of competition
- Demanding regulatory environment (+safety+security+environmental protection)
- Coordination aspect (many players)
- Focus on a few things that would make a difference (do not spread too thin)
- Allocate resources to most cost-effective solutions
- Take advantage of related EU R&D project results
Thank you very much!

Coordinates

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