TEN-T Project 2011-IT-94006-S
“Implementation study to prepare a Public Private Partnership (PPP) to improve the capacity of the port of Venice and related logistics system”

Final event

Venice Offshore – Onshore Transfer System

DEMAND FOR THE VENICE OFFSHORE TERMINAL
Chris Rowland
Director
MDS Transmodal

2nd December 2014, Italian Embassy in London
Summary

• The Offshore Terminal within the context of the North Adriatic market
• Demand for the Offshore Terminal
THE OFFSHORE TERMINAL WITHIN THE CONTEXT OF THE NORTH ADRIATIC MARKET

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• The challenge in the 2011 NEA report for the Northern Ports:
  – Munich to a Benelux port is 830 km by road whereas Munich to an Adriatic port is 550 km
  – The sailing distance between Italy and the Rhine delta is 4,815 km
  – A Chinese box destined for Munich could save 280 land km and 4,815 sea km by switching from North to South

• On behalf of Rotterdam, Antwerp and Hamburg the study argued:
  – The Alps are a natural barrier and infrastructure is expensive
  – Scale economies dictate the largest ships will serve NW Europe & deliver the lowest costs

• An argument based on inertia...

• But why would the container shipping industry not seek to reduce door-to-door costs?

• Our door-to-door transport cost modelling suggests scope to re-direct traffic profitably from North to South if the infrastructure is available
Modelling the future of the European container shipping market

European Container Port Demand Model (ECPDM)

- Objective of model: to describe & “explain” the market based on generalised door-to-door transport costs
- Assumes that shipping lines & shippers seek lowest cost solution
- Data inputs:
  - Trade data (demand)
  - Container shipping costs/TEU between world regions & 40 European container ports
  - Port costs/TEU
  - Road, rail & inland waterway costs/unit
- Cost models used to “explain” current port traffic volumes, taking into account inter-port competition
- Allows scenario development for the future

“2030 NAPA Potential Development Scenario“

- Trade growth & larger ships at all European ports
- Deeper water facilities at NAPA ports
- Competitive market to attract more direct calls from larger vessels (3-4 lines)
- Longer trains for inland distribution from all European ports
- More liberalisation of European rail freight market
## Results of 2030 “NAPA Development Potential Scenario”

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>NAPA Development Scenario</th>
<th>Increase 2012-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPA</td>
<td>1.8</td>
<td>5.9</td>
<td>+227%</td>
</tr>
<tr>
<td>Northern Range</td>
<td>20.3</td>
<td>28.9</td>
<td>+42%</td>
</tr>
<tr>
<td>Tyrrhenian</td>
<td>3.6</td>
<td>6.5</td>
<td>+81%</td>
</tr>
<tr>
<td>Black Sea</td>
<td>0.3</td>
<td>0.6</td>
<td>+100%</td>
</tr>
<tr>
<td>Other</td>
<td>5.6</td>
<td>10.5</td>
<td>+88%</td>
</tr>
<tr>
<td>Total</td>
<td>31.6</td>
<td>52.4</td>
<td>+66%</td>
</tr>
</tbody>
</table>

- Total growth of 227% for North Adriatic ports compared to 66% market growth to reach **5.9 MTEU** in 2030
- North Adriatic share increases from 5.5% to 11.3%
- Northern Range maintains 55% market share, but European transport system more balanced
North Adriatic: 2012 versus 2030

Base Case 2012

NAPA Development Potential Scenario 2030

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Northern Range: 2012 versus 2030

Base Case 2012

NAPA Development Potential Scenario 2030

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DEMAND FOR THE OFFSHORE TERMINAL
Market & Pricing For Terminal Operator

Key market:
- Gateway traffic to/from Northern Italy, Switzerland, Austria & Southern Germany
- Foreland of traffic to/from Suez in large deep sea vessels

Pricing: market is price elastic

Potential cost savings from use of Offshore Terminal:
- Use of larger ships (shipping line saving)
- Time & costs savings compared to current situation at Venice (shipping line saving)
- Availability of warehousing at the quay (shipper saving)

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Results Of “Venice Offshore Terminal Scenario”

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>NAPA</td>
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<td>+227%</td>
</tr>
<tr>
<td>Venice</td>
<td>0.4</td>
<td>1.4</td>
<td>+226%</td>
</tr>
<tr>
<td>Market share</td>
<td>24%</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

• Modelling suggests that development of Offshore Terminal would allow Venice to maintain its market share up to 2030 by being able to accommodate larger ships within a competitive market.
• Development of Offshore Terminal would not be sufficient as scenario modelling suggests further requirements would be:
  – Development of warehousing adjacent to the quay (employment opportunities)
  – Improvements in rail freight offer to be able to extend hinterland
Thank You for Your Attention