Venice and the North Adriatic Ports as the European Gateway of the Greenest XXI century Maritime Silk Road
Map showing some of the potential routes of the maritime and land Silk Road that was published online by Xinhua, China’s state news agency, in March 2014. Source: http://www.xinhuanet.com/
The 21st century maritime link between Asia and Europe is only a variation of the ancient Silk Road.

The only difference between the “maritime” Silk Road used by Marco Polo and that one currently used by the “Phoenician Express”, direct container service operated by Ocean Alliance between Shanghai and Venice, is the modern availability of the Suez Canal.
XIII and XXI century Maritime Silk Road (Suez Canal)

- In export, travelling days from Venice to Chiwan are 30 days, 34 to Shanghai
- From Chiwan to Venice, in import, are just 25 days

Phoenician Express (CMA-CGM, Cosco Container Lines, Evergreen Line e Orient Overseas Container Line)
The XXI Century Maritime Silk Road in the Mediterranean

- Athens (Piraeus) “and” Venice and the North Adriatic Ports?
- Athens (Piraeus) “versus” Venice and the North Adriatic Ports?

Map showing some of the potential routes of the maritime and land Silk Road that was published online by Xinhua, China’s state news agency, in March 2014. Source: http://www.xinhuanet.com/
The XXI Century Maritime Silk Road in the Mediterranean

Athens (Piraeus) “and” Venice in the OBOR strategy:

- Athens as the Mediterranean transhipment port of the Maritime Silk Road

“and”

- Venice and the North Adriatic Ports as its European destination gateway?
The XXI Century Maritime Silk Road in the Mediterranean

Athens (Piraeus) “versus” Venice and the North Adriatic Ports

Athens as European destination gateway would add a longer land leg against the longer and greener maritime leg of Venice and the North Adriatic
Why Venice and the North Adriatic ports (Ravenna, Trieste, Koper and Rijeka) can become the best maritime Silk Road’s European destination gateway
Because Venice and the North Adriatic are at the “right place” to make the Maritime Silk Road greener and with the best time/cost ratio:

- longest maritime leg with bigger and cleaner vessels (18,000 TEU and more);
- shortest land leg to “manufacturing Europe”;
- innovative port and logistics handling of megacargoes.
Venice and the greenest and most time/cost efficient XXI Century Maritime Silk Road

Venice and other North Adriatic ports can take mega vessels (ULCV of 18,000 TEU and beyond) carrying **more than 6 million TEU per year** by 2030 to the heart of the European market because of its:

**Shortest route from China to «Manufacturing Europe»**
1. The shortest (and less costly) maritime-leg;
2. The most efficient port and logistics handling;
3. The shortest land-leg.

**ECONOMIC DRIVERS**
**Least generalized transport cost**
1. Lower direct costs;
2. Lower indirect costs;
3. The (least costly) port & logistics for mega cargoes carried by mega vessels (more than 18,000 TEU).
MARITIME LEG: The shortest sea route to the heart of Europe

Close to Asia
Shanghai 20 days – 8630 NM
LAND LEG: The shortest land route to “manufacturing Europe”

The North Adriatic ports are the nearest to manufacturing Europe, which has moved towards East.

Share of manufacturing employment on total employment: the relevant eastbound shift

(source: VPA elaboration on Eurostat data)
LAND LEG: The greenest way from China to “manufacturing Europe”

-97 KG CO2/TEU
How Venice and the North Adriatic ports will act as OBOR’s European Gateway Terminal?
North Adriatic Ports: current trends
North Adriatic Ports Traffic Growth in spite of the “great recession”

Since the financial and economic crisis has started, the North Adriatic ports traffics have continued thriving. This growth has been particularly significant for the container sector; indeed, from 2009 to 2015,

- **Northern Adriatic ports’ TEU traffics raised by 77%** (from 1.3 to 2.3 million TEU)
- Baltic Ports rose their traffic by 48%,
- Northern Range ports by 22%
- Tyrrhenian ports by 31%

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</thead>
<tbody>
<tr>
<td>Container (TEUs)</td>
<td>1.305.358</td>
<td>1.467.791</td>
<td>1.806.876</td>
<td>1.788.757</td>
<td>1.902.451</td>
<td>2.050.664</td>
<td>2.297.220</td>
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<tr>
<td>Liquid bulk (ton.)</td>
<td>60.029.773</td>
<td>61.429.186</td>
<td>59.066.473</td>
<td>58.903.022</td>
<td>64.282.074</td>
<td>61.672.762</td>
<td>64.361.301</td>
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<tr>
<td>General Cargo (Ton)</td>
<td>27.734.866</td>
<td>33.660.349</td>
<td>38.156.545</td>
<td>36.421.584</td>
<td>40.310.093</td>
<td>43.461.469</td>
<td>46.155.678</td>
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<tr>
<td><strong>Total (ton.)</strong></td>
<td>112.676.150</td>
<td>121.277.882</td>
<td>124.344.989</td>
<td>122.477.882</td>
<td>129.871.448</td>
<td>131.381.370</td>
<td>138.616.694</td>
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<tbody>
<tr>
<td>Container (TEUs)</td>
<td>369.474</td>
<td>393.913</td>
<td>458.363</td>
<td>429.893</td>
<td>446.591</td>
<td>456.068</td>
<td>560.301</td>
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</table>
North Adriatic Ports Traffic Growth: container sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Venezia</th>
<th>Trieste</th>
<th>Ravenna</th>
<th>Koper</th>
<th>Rijeka</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>379.072</td>
<td>338.299</td>
<td>214.324</td>
<td>353.880</td>
<td>168.761</td>
<td>1.454.336</td>
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<tr>
<td>2009</td>
<td>369.474</td>
<td>277.245</td>
<td>185.022</td>
<td>343.165</td>
<td>130.740</td>
<td>1.305.646</td>
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<tr>
<td>2010</td>
<td>393.900</td>
<td>281.629</td>
<td>183.053</td>
<td>476.731</td>
<td>137.048</td>
<td>1.472.361</td>
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<tr>
<td>2011</td>
<td>458.363</td>
<td>393.195</td>
<td>215.336</td>
<td>589.314</td>
<td>150.677</td>
<td>1.806.885</td>
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<tr>
<td>2012</td>
<td>429.893</td>
<td>411.247</td>
<td>208.152</td>
<td>570.744</td>
<td>171.945</td>
<td>1.906.274</td>
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<tr>
<td>2013</td>
<td>443.000</td>
<td>458.497</td>
<td>226.879</td>
<td>600.000</td>
<td>177.898</td>
<td>2.050.664</td>
</tr>
<tr>
<td>2014</td>
<td>456.068</td>
<td>506.011</td>
<td>222.548</td>
<td>674.033</td>
<td>192.004</td>
<td>2.100.715</td>
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<tr>
<td>2015</td>
<td>560.439</td>
<td>501.276</td>
<td>249.000</td>
<td>790.000</td>
<td>200.000</td>
<td>2.100.715</td>
</tr>
</tbody>
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**Market share 2015**
- **Rijeka**: 9.5%
- **Koper**: 37.6%
- **Ravenna**: 11.9%
- **Trieste**: 23.9%
- **Venezia**: 26.7%
Venice Container Port Figures

Variazione congiunturale su 12 mesi

Source: VPA
North Adriatic Ports Container Traffic Forecasts

The red line identify the trend towards the 6 million TEU target by 2030.
The two lines covering the period 2016-2030 are two TEUs throughput forecasts, specifically:

- **Green: Business as Usual**, is the traffic forecast based on the present market situation;
- **Blue: Max Likelihood** is the traffic forecast as result of the infrastructure development for increasing the ports’ capacity
North Adriatic: One sea, two markets
North Adriatic: one sea, two markets
North Adriatic: one sea, two markets
North Adriatic Ports: Combining traditional and innovative terminal operational schemes
MEGA SHIPS
18.000/22.000 TEUs

VENICE
(ONSHORE TERMINAL)

CHIOGGIA
(ONSHORE TERMINAL)

RAVENNA
(ONSHORE TERMINAL)

OFFSHORE TERMINAL

MEGA SHIPS
18.000/22.000 TEUs

TRIESTE

KOPER

RIJEKA

«ONE CALL»
OFFSHORE-ONSHORE
INNOVATIVE
WEST TERMINAL MODEL

«MULTI CALL»
TRADITIONAL EAST
TERMINAL MODEL

«ONE CALL»
OFFSHORE-ONSHORE
INNOVATIVE
WEST TERMINAL MODEL

VENICE
(ONSHORE TERMINAL)

CHIOGGIA
(ONSHORE TERMINAL)

RAVENNA
(ONSHORE TERMINAL)

OFFSHORE TERMINAL

MEGA SHIPS
18.000/22.000 TEUs

TRIESTE

KOPER

RIJEKA

«MULTI CALL»
TRADITIONAL EAST
TERMINAL MODEL
North Adriatic Ports: Infrastructure Developments
Adapting for the «multi-call» traditional model
Future actions and investments: Port of Trieste
Adapting for the «multi-call» traditional model

Future actions and investments: Port of Koper

Construction of port facilities to support the development of container traffics supported by intermodal infrastructure;

new capacity **1,3 million TEU/year**
Adapting for the «multi-call» traditional model

Future actions and investments: Port of Rijeka

Construction of the new container terminal Zagreb pier involves the total area of the future container terminal of 25 hectares will be composed of approximately 10 ha of new areas that will be created by embanking the seashore.
North Adriatic Ports: the innovative Venice Offshore Onshore Port System
Adapting to the «one-call» offshore-onshore innovative model: Port of Venice
Adapting to the «one-call» offshore-onshore innovative model: Port of Venice

Offshore container and energy terminal
Adapting to the «one-call» offshore-onshore innovative model: Port of Venice

Breakthrough innovations: Mama Vessel and Cassettes
THANK YOU FOR YOUR ATTENTION!

Prof. Paolo Costa
President
Venice Port Authority