EU Policy framework and what BPO is doing concerning LNG bunkering infrastructure

LNG Training for Port Communities
LNG in Baltic Sea Ports II Project

22nd April 2015
Klaipeda, Lithuania

Bogdan Ołdakowski
Secretary General,
Baltic Ports Organization
Content

- Introduction of Baltic Ports Organization
- TEN-T / CEF Motorways of the Sea Programme
- LNG Ports in the Baltic Sea Region
- Summary
About BPO

The organization's mission is to contribute to sustainable development of maritime transport and the port industry in the Baltic Sea Region, thereby strengthening its global competitiveness.

BPO is registered in Estonia (Port of Tallinn headquarter) and operates according to the Estonian Law on Non-profit Associations. BPO Secretariat at Actia Forum Ltd, Gdynia, Poland
About BPO

**BPO represents** the interests of the Baltic Sea ports towards EU institutions and other relevant organizations.

**BPO contributes** to the clean environment of the Baltic Sea, promotes environmental management in the ports and plays an active role in international dialogs where the environment is concerned (BPO Environmental Working Group).

**BPO organizes** dedicated conferences, seminars, study visits, dealing with questions in the area of port operation and management, and the environmental impact of port activities.

**BPO supports** and plays an active role in research, science and training which lead to a better understanding of the transport sector in the region and to study future challenges.
- BPO is a regional ports association
- Non-Profit Networking organization
- 45 of the most significant ports in nine countries
- Promoting Environmental management in the ports
- Contributing to the clean and sustainable development of the BSR
- Lobbying for port sector in EU bodies
BPO has been very concerned about the impact of Sulphur Directive:
- Cancelation of routes
- Modal shift from sea to land
- Competitiveness of the BSR

but
- BPO has been taking pro-active approach.
Sulphur Directive and LNG as fuel for shipping

Maritime Stakeholder Event:
“Clean Air at sea: promoting solutions for sustainable and competitive shipping”,
Brussels, 1 June 2011

LNG in particular has the potential to be an environmentally friendly and viable alternative to marine fuel oil and marine gas oil, particularly at the beginning for short sea shipping.

By Mr Siim Kallas,
Vice-President of the European Commission
Sulphur Directive and LNG as fuel for shipping

EU Policy and regulations:

- New TEN-T Policy/CEF
- Clean Fuel Strategy
- Directive on the deployment of alternative fuels infrastructure
  - ‘A core network of refuelling points for LNG at maritime and inland ports should be available at least by the end of 2025 and 2030, respectively.’
- European Sustainable Shipping Forum
EU Commission – Clean Fuel Strategy Development

- Ships: LNG refueling installations in all 130 maritime and inland ports on the Trans European Core Network (2025 – 2030)

- Long Haul Trucks: LNG refueling installations every 400 km along the roads of the Trans European Core Network (2020)
Infrastructure build-up by 2025/2030

- Minimum number of **recharging points for EVs** reaches set values per MS, with at least 10% publicly accessible
- Minimum number of **hydrogen refuelling stations** to connect those already existent in MS, with maximum distances of 300 km to allow the circulation of HFC vehicles
- **LNG refuelling points for waterborne vessels** in all maritime ports and inland ports of the TEN-T Core Network
- **LNG refuelling points for road transport vehicles** along the TEN-T Core Network with a maximum distance of 400 km
- Sufficient **CNG refuelling points** with maximum distances of 150 km to allow the circulation of CNG vehicles
Sulphur Directive and LNG as fuel for shipping

Therefore; BPO has initiated development of LNG bunkering infrastructure in the Baltic ports

and

In September 2011 the project LNG in the Baltic Sea Ports was delivered to TEN-T EA for co-financing by EC within TEN-T/MoS Program 2011 and accepted after evaluation.

In March 2014 the project LNG in the Baltic Sea Ports II was delivered to TEN-T EA for co-financing by EC within TEN-T/MoS Program 2013 and accepted after evaluation.

Moreover, there are other initiatives focusing on LNG...
LNG Ports in the Baltic Sea: LNG Terminals
LNG Ports in the Baltic Sea: LNG Bunkering
LNG Infrastructure and Shipping Fleet

- MS Viking Grace – bunkering in Port of Stockholm
... and Helsinki

Source: Port of Helsinki
### 58 LNG fuelled ships in operation worldwide (2/2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Type of vessel</th>
<th>Owner</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Gas carrier</td>
<td>SABIC</td>
<td>BV</td>
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<tr>
<td>2014</td>
<td>PSV</td>
<td>Remøy Shipping</td>
<td>DNV</td>
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<td>Egil Ulvan Rederi</td>
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<td>2015</td>
<td>PSV</td>
<td>Harvey Gulf Int.</td>
<td>ABS</td>
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</tbody>
</table>

#### Ships in operation

- **2000**: Car/passenger ferry — Fjord1, DNV
- **2003**: PSV — Simon Møkster, DNV
- **2003**: PSV — Eidesvik, DNV
- **2006**: Car/passenger ferry — Fjord1, DNV
- **2007**: Car/passenger ferry — Fjord1, DNV
- **2007**: Car/passenger ferry — Fjord1, DNV
- **2007**: Car/passenger ferry — Fjord1, DNV
- **2007**: Car/passenger ferry — Fjord1, DNV
- **2008**: PSV — Eidesvik Shipping, DNV
- **2009**: PSV — Eidesvik Shipping, DNV
- **2009**: Car/passenger ferry — Tide Sjo, DNV
- **2009**: Car/passenger ferry — Tide Sjo, DNV
- **2009**: Car/passenger ferry — Tide Sjo, DNV
- **2009**: Patrol vessel — Remøy Management, DNV
- **2010**: Patrol vessel — Remøy Management, DNV
- **2010**: Patrol vessel — Remøy Management, DNV
- **2010**: Patrol vessel — Remøy Management, DNV
- **2010**: Car/passenger ferry — Fjord1, DNV
- **2010**: Car/passenger ferry — Fjord1, DNV
- **2011**: PSV — Fosen Namsos Sjo, DNV
- **2011**: Oil/chemical tanker — Tarbit Shipping, GL
- **2011**: Car/passenger ferry — Fjord1, DNV
- **2011**: PSV — Solstad Rederi, DNV
- **2012**: Car/passenger ferry — Fjord1, DNV
- **2012**: Car/passenger ferry — Fjord1, DNV
- **2012**: PSV — Fjordline, DNV
- **2012**: PSV — Eidesvik Shipping, DNV
- **2013**: PSV — Incheon Port Authority, KR
- **2013**: RoPax — Fjordline, DNV
- **2013**: High speed RoPax — Buquebus, DNV
- **2013**: Tug — CNOCOCC, CCS
- **2013**: Tug — CNOCOCC, CCS
- **2013**: Tug — CNOCOCC, CCS
- **2013**: Car/passenger ferry — Norled, DNV
- **2014**: Car/passenger ferry — Norled, DNV
- **2014**: Tug — Bøkker & Berging, DNV
- **2014**: Tug — Fjordline, DNV
- **2014**: Patrol vessel — Finnt Border Guard, GL
- **2014**: Tug — Bøkker & Berging, DNV
- **2014**: Car/passenger ferry — Veder Rederijzaken, BV
- **2014**: Gas carrier — Veder Rederijzaken, BV
- **2014**: Gas carrier — Veder Rederijzaken, BV

**Updated 10.03.2015**

**Global development - ships in operation**

- [Norway](#)
- [Europe](#)
- [America](#)
- [Asia & Pacific](#)

**Excluding LNG carriers and inland waterway vessels**

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• **58 LNG ships**
76 confirmed LNG new builds and global development

### Confirmed orderbook

<table>
<thead>
<tr>
<th>Year</th>
<th>Type of vessel</th>
<th>Owner</th>
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<td>2016</td>
<td>Car/passenger ferry</td>
<td>Seaspan Ferries Corp.</td>
<td>LR</td>
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<td>Rederi AB Gotland</td>
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<td>2017</td>
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<td>Groupe Desgagnés</td>
<td>BV</td>
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<td>Østensjø Rederi</td>
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<td>Matson Navigation</td>
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</tbody>
</table>

### Global development - confirmed orderbook

- **Norway**
- **Europe**
- **America**
- **Asia & Pacific**
134 confirmed LNG fueled ship projects currently
TEN-T Policy, CEF for 2014-2020

- 26 billion Euro for transport infrastructure

High priority of environmental issues of the MoS development, referring to implementation of the Sulphur Directive including LNG bunkering infrastructure

- Many new applications on LNG bunkering has been delivered for last call (February 2015)
Summary:

Baltic ports are preparing for LNG bunkering
Summary:

*BPO has been initiating a cooperation between ports to increase preparedness for LNG bunkering*

*BPO will furthure encourage Baltic ports and initiate new projects focusing in LNG bunkering*
Thank you

Bogdan Ołdakowski
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Visit our homepages:
http://www.bpoports.com
LNG in Baltic Sea Ports

<table>
<thead>
<tr>
<th>Budget:</th>
<th>Total project cost covered by this Decision:</th>
<th>Percentage of EU support:</th>
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<tbody>
<tr>
<td>Action promoter: EUR 1,697,020</td>
<td>EUR 3,394,040</td>
<td>Studies: 50%</td>
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<tr>
<td></td>
<td>EU contribution: EUR 1,697,020</td>
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</tr>
</tbody>
</table>
**LNG in Baltic Sea Ports II**

Total project cost covered by this Decision: EUR 1,664,646

EU contribution: EUR 832,323

Percentage of EU support:

Studies: 50%