LNG bunkering infrastructure in the Baltic ports

LNG Stakeholders Platform Seminar
LNG in Baltic Sea Ports Project

25th September 2014
Tallinn, Estonia

Bogdan Ołdakowski
Secretary General,
Baltic Ports Organization
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.
Content

- Introduction to Baltic Ports Organization
- BPO Policy towards Sulphur Directive and LNG as fuel for shipping
- BPO Report on TEN-T Motorways of the Sea Programme
- LNG Ports in the Baltic Sea Region
- Summary
BPO is very concerned about the impact of the Sulphur Directive:
- Cancelation of routes
- Modal shift from sea to land
- Competitiveness of the BSR

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


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
- European Sustainable Shipping Forum
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...
Report:
Baltic Ports in TEN-T Policy – achievements and future challenges, August 2014
- carried out by BPO Office, distributed among the BPO members

• 47 MoS projects financed under the TEN-T 2007-2013 period;

• 27 (out of 47) projects involve Baltic countries;
  • 17 out of these 27 projects involve only Baltic countries;
  • 7 projects are joint actions of Baltic and North Sea countries
  • 3 projects are joint actions of Baltic, North Sea and other EU countries;

• total cost of these 27 projects amounts to EUR 1,226.6 million (77% of the total cost of all TEN-T MoS projects);

• BPO appreciates this EU support for maritime transport
## LNG in Baltic Sea Ports

<table>
<thead>
<tr>
<th>Budget:</th>
<th>Total project cost covered by this Decision:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action promoter: EUR 1,697,020</td>
<td>EUR 3,394,040</td>
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</table>

<table>
<thead>
<tr>
<th>EU contribution:</th>
<th>Percentage of EU support:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR 1,697,020</td>
<td>Studies: 50%</td>
</tr>
</tbody>
</table>

### Map

Source: TEN-T Executive Agency
**LNG in Baltic Sea Ports II**

<table>
<thead>
<tr>
<th>Total project cost covered by this Decision:</th>
<th>EUR 1,664,646</th>
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<tbody>
<tr>
<td>EU contribution:</td>
<td>EUR 832,323</td>
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<table>
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<tr>
<th>Percentage of EU support:</th>
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<tbody>
<tr>
<td>Studies:</td>
<td>50%</td>
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</table>
LNG Rotterdam Gothenburg

**Budget:**
- Action promoter: EUR 137,088,000

**Total project cost covered by this Decision:**
- EUR 171,360,000

**Percentage of EU support:**
- Works: 20%
  - EU contribution: EUR 34,272,000
### Kvarken Multimodal Link – Midway Alignment of the Bothnian Corridor

<table>
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<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 14,445,000</td>
<td>EUR 20,574,000</td>
<td>Studies: 50%</td>
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<tr>
<td></td>
<td></td>
<td>Start-up aid: 30%</td>
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<tr>
<td></td>
<td>EU contribution: EUR 6,129,000</td>
<td>Works: 20%</td>
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</tbody>
</table>

**EU contribution:** EUR 6,129,000
Methanol: the marine fuel of the future

<table>
<thead>
<tr>
<th>Budget: Action promoter: EUR 11,251,000</th>
<th>Total project cost covered by this Decision: EUR 22,502,000</th>
<th>Percentage of EU support: Studies: 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU contribution: EUR 11,251,000</td>
<td></td>
<td>EU contribution: EUR 11,251,000</td>
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</table>

Source: TEN-T Executive Agency
Sustainable Trelleborg-Świnouśjcie MoS services

<table>
<thead>
<tr>
<th>Total project cost covered by this Decision:</th>
<th>Percentage of EU support:</th>
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</thead>
<tbody>
<tr>
<td>EUR 11,129,592</td>
<td>Mixed: 20%</td>
</tr>
<tr>
<td>EU contribution:</td>
<td></td>
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<tr>
<td>EUR 2,238,518</td>
<td></td>
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Plus other initiatives:

News from Finland: The Ministry of Employment and the Economy granted EUR 65.2 million in three new LNG terminals

On 18th September 2014, The Ministry of Employment and the Economy announced that it has committed a total of EUR 65.2 million in energy subsidies for three liquefied natural gas (LNG) terminals. With the help of this support, Manga LNG Oy, Skangass Oy, and Oy Aga Ab will build LNG terminals in Tornio, Pori and Rauma respectively. These new terminals will help facilitate a move to significantly reduce the industrial use of fuel oil and liquid petroleum gas (LPG) in Finland.
LNG Ports in the Baltic Sea: LNG Terminals
LNG Ports in the Baltic Sea: LNG Bunkering
TEN-T Policy, CEF for 2014-2020

The indicative budget of the MoS part of the 2014-2020 Multi-Annual Work Programme has been estimated at EUR 250 million in the general envelope and EUR 100 million in the cohesion envelope.

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

*BPO will encourage Baltic ports and initiate new projects including new initiative focusing in LNG bunkering.*
Summary:

Baltic ports are preparing for LNG bunkering
Summary:

LNG bunkering is already taking place in Stockholm.

Source: Port of Stockholm
Summary:

.... and Helsinki

Source: Port of Helsinki
Summary:

LNG as an energy source is „slowly” coming to the Baltic.

It is hard to predict the market volumes, very much will depend on the price of LNG.

Costs of logistic from LNG hubs to end users is crucial.
Summary:

With the increase of LNG demand in the BSR a new logistic market will be growing, eg.:

- shipping,
- ports,
- storage,
- land transportation.

It is a cost for end users but opportunity for logistic players.
LNG Conference  
2-4 December 2014, Stockholm  
- Hilton Stockholm Slussen  
- On-board Viking Grace

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09:00-09:30</td>
<td>Registration and welcome coffee</td>
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<tr>
<td>09:30-10:00</td>
<td>Official opening address</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>LNG outlook in EU and Baltic</td>
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<tr>
<td>10:30-11:00</td>
<td>LNG Small Scale infrastructure and demand in the Baltic</td>
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<tr>
<td>11:00-11:30</td>
<td>Coffee break/networking/business cards exchange</td>
</tr>
<tr>
<td>11:30-12:00</td>
<td>Costs and support programmes associated with LNG infrastructure</td>
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<tr>
<td>12:00-12:30</td>
<td>LNG shipping demand in short and long term</td>
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<tr>
<td>12:30-13:00</td>
<td>Case Study</td>
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Session I: Development of LNG Network in the Region  

- EU LNG Infrastructure Outlook  
- Ongoing developments and barriers  
- Possible initiatives in the Baltic  
- LNG as a fuel for transport  
- LNG bunkering in the future  
- LNG Distribution in the Baltic  
- Main drivers for alternative fuels  
- LNG as a potential for growth for the operators

Session II: LNG Supply and Bunkering in the Region  

- LNG bunker fuel pricing and trading  
- Factors and mechanisms affecting the fuel price  
- LNG Supply chain and impact on end users’ price  
- LNG bunkering in the future  
- LNG bunkering vessels – is it the way to go?  
- Pros and cons of floating bunkering  
- LNG bunkering in the Baltic  
- Norwegian LNG example – is it applicable in the Baltic?  
- LNG vessels – what is the future?

Environmental and H & S perspective  

- Benefits of LNG as a fuel for the port’s transport  
- LNG bunkering H&S procedures  
- Working with the local communities towards new environmental requirements

LNG Case Study - Noatum Ports, Valencia, Spain  

- Key factors to get LNG value chain
Thank you

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http://www.bpoports.com