5th September 2014, Ronne, Denmark

Baltic Ports Conference

LNG in Baltic Sea Ports

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LNG in Baltic Sea Ports

Pro

HELSINGBORGS HAMN
PORT OF HELSINGBORG

AARHUS HAVN
PORT OF AARHUS

COPENHAGEN MALMÖ PORT

PORT OF HELSINKI

EUSBSR
EU STRATEGY FOR THE BALTIC SEA REGION
PRIORITY AREA 'SHIP'

PORT OF TALLINN
The Port of Good News

PORT OF TURKU
FINLAND

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LNG in Baltic Sea Ports

Baltic Ports Organization has initiated the development of LNG bunkering infrastructure in 7 ports within the Baltic Sea Region; supported by many industry organisations (ship-owners, national ports organisations and ESPO)

A positive decision at the TEN-T Financial Assistance Committee(30 January 2012)

- Focus on pre-investment studies such as environmental impact assessments, feasibility analyses for LNG terminals or bunkering vessels, project designs, regional market studies, safety manuals, etc.
- Project works include a so-called 'stakeholder platform' which will facilitate a discussion among; port authorities, shipowners, gas infrastructure providers, energy traders and bunkering companies.
- Project Budget - Around 3.5 mln. Euro- Jan. 2012 – Dec. 2014

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Activities - progress overview :

Port of Aarhus (Port of Aarhus, 2013)

➢ **Activity 1. LNG in Aarhus:**

✓ The activity in the Port of Aarhus consists of three sub-activities:

1. Feasibility study
2. Approval from the authorities
3. Pre-design

✓ The Feasibility Study has been now completed. The report has been elaborated, updated and is now finalized. The Port of Aarhus will now use the report and the findings as decision support for future investments in the port.

✓ The second sub-activity includes the EIA process, performing a risk assessment and looking into the finalized localization of the LNG terminal.

✓ The EIA process is being managed by the consultants, contacts are taken with authorities and they are given information about the project regularly.

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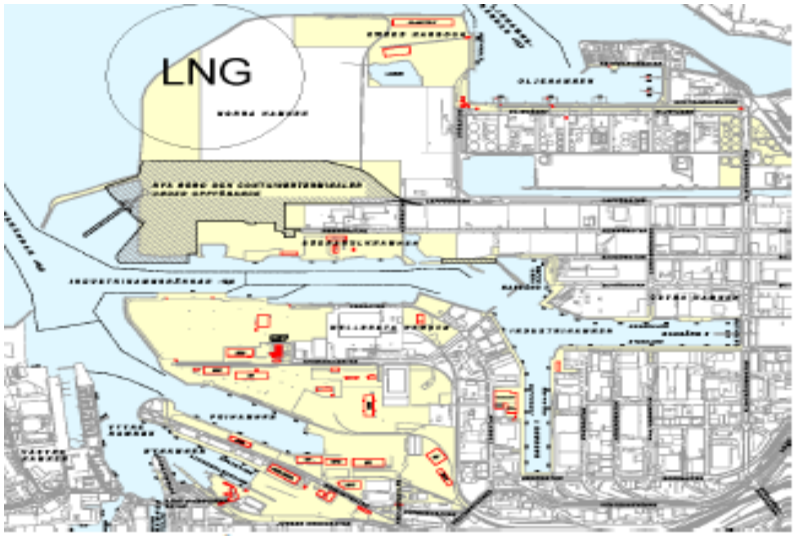
Activities - progress overview :

➢ **Activity 2. LNG in CMP:**



Possible localisation of LNG bunker filling station in Copenhagen & Malmö

- ✓ Sub-activity 1: completed - Gathering data related to shipping activities within the area; ship types; shipping routes within SECA Estimating future bunker volumes within the area.
- ✓ Sub-activity 2: completed - Localisation study including preferred location and layout of the terminal.
- ✓ Sub-activity 3: completed - Cost and market analysis study including operational costs and investment cost.

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Activities - progress overview :

- **Activity 3. LNG in Helsingborg:**
- ✓ The market study is ongoing - discussions with important stake holders (ship owners, ports, bunker companies e t c).
- ✓ The location study performed by SWECO is finalized. Sites on the south Swedish west coast have been analysed.
- ✓ A suitable location for LNG terminal in Helsingborg is within the industrial area of Industry Park Of Sweden (IPOS). The largest industry in the area is Kemira Kemi AB.

Helga - Visualisering av IPOS med LNG-terminalen

- ✓ The finalised studies have shown that there is no obvious showstopper for a terminal in Helsingborg, so the work with detailed design, and preparation of permit and tender documents shall proceed.

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Activities - progress overview :

➢ **Activity 3. LNG in Helsingborg:**

- ✓ The suggested design of a Jetty for feeder and bunker ship at Kemira has been discussed with the nautical council in Öresund (pilot's org.). The comments have resulted in a need for a deeper investigation.
- ✓ The project has studied different types of bunker ships. Two bunker companies have been approached: With them there have been a discussion regarding how a suitable bunker strategy for the market area can be arranged (technical and commercial).
- ✓ How to find a reliable and economical bunker infrastructure is still the most critical issue to solve and this is still of a great concern for the project.

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Activities - progress overview :

- **Activity 4. LNG in Helsinki:**

- ✓ Feasibility study is completed as planned and will be updated if necessary.
- ✓ The most practical solution was found to be ship-to-ship bunkering, due to the several separate ports in Helsinki and their varying structures and usages, but also because of the flexibility of the method.

South Harbour and Katajanokka - Port of Helsinki - The West Harbour

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Activities - progress overview :

- **Activity 5. LNG in Stockholm:**

✓ Viking Grace arrived for the first time in Stockholm on her maiden voyage on 14th January 2013

Source -Per-Erik Adamsson/ Ports of Stockholm

✓ Truck-to-Ship bunkering has been performed at the beginning due to AGA's bunkering barge SeaGas was not ready.

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Activities - progress overview :

➢ **Activity 5. LNG in Stockholm:**

Source -Per-Erik Adamsson/ Ports of Stockholm

✓ **Since the beginning of April successful ship-to-ship bunkering with passengers on board has been undertaken.**

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Activities - progress overview :

➢ **Activity 6. LNG in Tallinn:**

✓ Act 6.1- Feasibility Study- tender was granted to "Pöyry". Feasibility study completed. According to the study, "LNG demand in the Port of Tallinn will develop over time as LNG-fuelled vessels become more common".

Location of the LNG terminal project of Elering and the Port of Tallinn in Muuga

✓ Act 6.2 General and Detailed Plan tender and Act 6.3 Environmental Impact Assessment reports tender documents were prepared in cooperation with the local authority, tender was delayed due to the slow proceed in the local authority.

✓ Due to the delays in general and detail planning and EIA validation processes, which are not under control of Port of Tallinn, some activities cannot be finished in the timeframe of the project.

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Activities - progress overview :

➢ **Activity 7. LNG in Turku:**

✓ LNG bunkering arrangements in the harbour area:
Discussed with relevant stakeholders about bunkering possibilities of LNG with trucks in port areas. Preliminary results were finalised in August 2013 and final report at the end of 2013.

✓ Plans and studies related to Pansio LNG import terminal:
The proposal of local detailed plan for Pansio LNG terminal area was accepted in June 2013 by the Board of Environment and City Planning. The operator (Gasum) has started detailed technical planning of LNG terminal. The Port of Turku will start the planning of the area around LNG terminal during autumn 2013.

✓ Due to the decision of approval the local detailed plan has been appealed to court, there is a delay in schedule regarding the planning of LNG terminal. The schedule is now dependent of court's appeal procedure and investment decision of Gasum

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Activity 8: Harmonization and Stakeholder Platform

- **Harmonization activity** will be reported and the completion of the harmonisation will result in the publication of a Handbook that will present Baltic Sea Region as a benchmark for implementation of LNG. The handbook will present guidelines to other ports, in the Baltic Sea Region but also in other parts of the EU on:
  - ✓ best practices on how to implement LNG in different types of ports (size, location, geographical circumstances);
  - ✓ how to develop the project and which private and public entities should be involved, taking into account the facilitating role of port authorities;
  - ✓ experience and recommendations on how to communicate with local communities.

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Activity 8: Harmonization and Stakeholder Platform

❑ Stakeholder Platform

- The main goal of the stakeholder platform is to secure the dialogue process and disseminate the information gathered between the various stakeholders and the participating actors within the action and beyond.

- Two groups of stakeholders have been identified:
  1) Key actors:
     - ✓ Ship owners, organisations of ship owners and shipping lines;
     - ✓ Gas traders, and LNG shipping companies, operators of gas infrastructure;
     - ✓ Bunkering companies.
  2) External actors
     - ✓ Various organisations (e.g. IMO and other organisation at European and national level)
     - ✓ EU/National/regional authorities

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Activities – planned and achieved so far

- ✓ Within the framework of the Stakeholder Platform, three seminars have been scheduled to be arranged up to end of 2014. An initial seminar with various stakeholders took place on 6th March 2013 in Gdańsk.

- ✓ The initial Harmonisation Meeting on 6th September 2013 in Klaipeda was dedicated to the *"Harmonization of the Technical aspects".* Second Harmonisation Meeting dedicated to *"H & S, Risk Assessments and Method Statements"* was held on 17th October 2013 in Tallinn. Third Harmonisation Meeting took place on 27th March in Helsingborrg and partners shared experience on the *"Internal and External Communication"*

- ✓ Second Stakeholder Platform Seminar was organised on 27th March 2014 in Helsingborg. Last LNG Seminar will be held in Tallinn on 25th September 2014. with arranged visit to the Muuga harrbour – possible location of the LNG Terminal

- ✓ The 'Closing' conference summarising the results of the project, along with the final Harmonisation Meeting *"Time frame for the availability of LNG"* has been scheduled for 3rd & 4th December 2014 in Stockholm/Turku (Viking grace).

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Thank you

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