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EU Strategy for the Baltic Sea Region
2nd International Steering Committee Meeting

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

CMP
COPENHAGEN MALMÖ PORT

PORT OF HELSINKI

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

SIH

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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- Objectives:

✓ Development of the infrastructure in the ports for LNG bunkering, thus making possible to use LNG as fuel for the shipping industry in the future. This will decrease the emission to the atmosphere and make sea transport more environmentally friendly.

  ✓ The project will result in jointly developed operational ships bunkering installations in ports that can serve as objects of reference to other ports in the Baltic Sea region and to other regions in EU.

- The wider benefits of the project are to:

✓ Foster innovation and deployment of necessary infrastructure for LNG bunkering facilities and to increase faster implementation of new technical developments in the maritime sector of the Baltic Sea Region;

  ✓ Contribute to the promotion of efficient, safe and environmentally sound maritime transport in the Baltic Sea by creating a harmonised infrastructure for bunkering LNG in the Baltic Sea region.

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Activities – progress overview :

Port of Aarhus (Port of Aarhus, 2013)

➢ Activity 1. LNG in Aarhus:

✓ The LNG study in Aarhus has been undertaken by SSPA Sweden AB in November 2012

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

✓ The risk analysis has been finalized in December 2013, results to follow soon.

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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 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.
- ✓ Bunkering from the shore, where the LNG is fed to the ship from a fixed or portable container, is too restrictive for bunkering the ship flexibly. Ship-to-ship bunkering does not require any investments in the dock structures of the port.

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

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Activities – progress overview :

Source -Per-Erik Adamsson/ Ports of Stockholm

- ➢ Activity 5. LNG in Stockholm:
- ✓ Viking Grace arrived for the first time in Stockholm on her maiden voyage on 14th January 2013
- ✓ Truck-to-Ship bunkering has been performed at the beginning due to AGA's bunkering barge SeaGas was not ready

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

- ✓ All sub-activities in Stockholm have been successfully completed - Safety Manual was delivered on 31st October, and the Feasibility Study (Strategic planning for infrastructure, localization and ship bunkering on 5th December.

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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.

✓ Acts 6.4, 6.5, 6.6 -Layout Options, Tender documents and Design activities are most likely to be postponed due to delays in general and detail planning and EIA validation processes, which are not under control of Port of Tallinn.

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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.

✓ Safety manual for bunkering and use of LNG in port areas Draft of Safety manual is ready and it has been sent for comments to regional rescue services. Safety manual has been finalised during autumn 2013.

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Activity 8: Harmonization and Stakeholder Platform

- Harmonization activity

- The harmonization process is supervised by the Steering Committee and it is assisted by BPO Office. The aim of the harmonization process is to secure a common approach between the pre-investment studies in the different ports and to obtain common understanding among the public and private parties, thereby encouraging a smooth implementation of LNG as a fuel for ports and shipping business in the Baltic Sea Region.

  - Harmonization process should cover the following aspects:
    - ✓ Technical aspects
    - ✓ Health and Safety
    - ✓ Communications
    - ✓ Time framework of the LNG availability in the ports

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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.

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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Thank you

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