

## DECISIONS

28 May 2010

**Our reference:**

Case

File

Centre for Maritime

Regulation

/HKN

### **EU Strategy for the Baltic Sea Region – feasibility study on an LNG filling station infrastructure for short sea shipping**

On Wednesday 26 May 2010, the kick-off meeting for the flag ship project “a feasibility study on LNG infrastructure for short sea shipping” was held at the premises of the Danish Maritime Authority (DMA) in Copenhagen, Denmark. 21 persons representing shipowners, ports, LNG providers and states participated in the meeting.

As an inspiration for the discussion about a possible feasibility study on an LNG filling station infrastructure, Arne Mikkelsen from the Danish Shipowners’ Association, Aksel Skjervheim from Gasnor and Oskar Levander from Wärtsilä gave presentations reflecting the point of view of respectively the shipowners, the providers and the engine manufacturers on the use of LNG.

The discussion touched upon several issues regarding LNG fuelling, e.g. that LNG is an environmental friendly fossil fuel, that pilot oil and lube oil create environmental harms and that economies of scale are important.

#### **Central outcomes from the discussions**

From an action point of view, the discussions concentrated on a feasibility study for an LNG filling station infrastructure in the Baltic Sea and possible pilot actions.

#### Ad. the feasibility study

LNG as a fuel has been discussed and studied from different angles, but not from the point of view of an LNG filling station infrastructure.

A holistic paper on this issue is needed and it must be relevant for:

- Shipowners;
- Ports;
- LNG providers;
- States; and
- EU.

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The paper must focus on critical enablers for the establishment of an infrastructure.

The following enablers were discussed:

1. *Safety* from a ship, a port and an LNG provider perspective. Regulations are on their way in the IMO and the classification societies for LNG fuelled ships. The safety situation for land-based installations and the loading of LNG from terminals to ships<sup>1</sup> does not seem clear. As for the ships, common regulations are preferable here.
2. *Public awareness* has a close connection to safety. The move from a highly specialized LNG-industry with large terminals and ships to a more decentralized industry creates a new situation which has to be explained to the public. Risk-based approaches seem appropriate and it is important to involve the various industrial organizations.
3. *Technical possibilities* for fuelling *ship engines with LNG* today, in the short term and in the medium term – new ships as well as for retrofitting (today and in the short term).
4. LNG filling stations
  - Different *layouts*, from mobile – land as well as sea – to fixed stations.
  - *Scaling possibilities* for LNG filling stations according to the development in the demand for LNG.
  - *Operational models*.
  - *Financial models* – investment and running expenses,
  - ...
5. The expected development (scenarios) in *the price of LNG* compared to 0.1% sulphur oil (the ECA demand for marine fuel or equivalent solutions).
6. The *potential for using LNG*
  - Existing lines in the Baltic.
  - Ship characterization – age, size etc. for these lines.
  - The age profile of the ships.
  - ...
7. *Economy* from a ship, a port and an LNG provider perspective
  - The importance of economies of scale.

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<sup>1</sup> The Swedish representatives gave information on coming draft guidelines for loading LNG to ferries.

- The problem of a modal back shift for cargo because of the new ECA regulations.
  - ...
8. What are the expectations of states/the EU with regard to creating *a framework fostering an LNG filling station* infrastructure?
- Market driven.
  - State planning.
  - A co-operative/mixed strategy.
  - Incentives for promoting the LNG option, including economic issues at the local and state level as well as the EU level.
  - Infrastructure/general facilitation must be the driving force.

Finally, this leads to discussions on:

*Alternative strategies* for the development of an *LNG filling station* infrastructure.

A lot of the above topics have been studied already and there are practical experiences from Norway. This means that a major part of the work will have the character of stock-taking and scoping to the present work.

Furthermore, the question of education was discussed, from the point of view of both seafarers and LNG filling station workers. It did not seem necessary to include this question as it was not considered a critical enabler. It was stressed that education and safety were closely interrelated. Especially, as mentioned above, when the use of LNG moves from a highly specialized industry with large terminal and ships to a more decentralized industry.

#### Ad. pilot actions

Today, the expertise as regards LNG filling stations and LNG fuelling of ships is a Norwegian speciality and *international experiences are needed*.

The participants found that possible pilot projects were available and economic incentives could bring them forward.

#### **The TEN-T<sup>2</sup> Motorways of the Sea (MoS) Call 2010 as a vehicle for further work on the LNG issue**

The recent TEN-T call on Motorways of the Sea opens up for studies as well as for pilot actions. Both studies and pilots can be financed by up to 50 %.

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<sup>2</sup> Trans European Network Transport.

In practice, there is an indicative amount of 2 mill. euro per submission with regard to eligible costs. A feasibility study will be only a minor part of this.

Consequently, it is possible to formulate an LNG proposal containing both a feasibility study and pilot actions.

The call is published as follows:

[http://tentea.ec.europa.eu/en/apply\\_for\\_funding/follow\\_the\\_funding\\_process/motorways\\_of\\_the\\_sea\\_mos\\_call\\_2011.htm](http://tentea.ec.europa.eu/en/apply_for_funding/follow_the_funding_process/motorways_of_the_sea_mos_call_2011.htm)

For TEN-T submissions under Motorways of the Sea calls it is a prerequisite that proposals are submitted to the involved member states. The proposals will be evaluated jointly by the involved ministries and authorities.

The countries bordering the Baltic Sea and Norway published local preparatory calls for submission of Motorways of Sea proposals in November 2009.

Furthermore, the call texts give an overview of potential sources of financial investment support for Motorways of the Seas projects.

In the call text it is stated: *If you are thinking of submitting a proposal we would encourage you to make early contact with the relevant contact point in your country to discuss the proposal.*

The involved member countries will coordinate a feasibility study and pilot projects into a common proposal on the LNG issue.

As the Commission call closes on 31 August 2010, time is short for potential LNG projects contained in one proposal. So it is important that potential applicants take contact to the relevant national contact points as early as possible.

### **Is the Baltic Sea too small a geographical area for a pilot study on an LNG filling station infrastructure?**

The participants found it natural to consider an expansion of the scope to the North Sea and the English Channel as ECA areas; both for the feasibility study and pilot projects.

### **The way ahead**

The outcome from the meeting should be developed further. The Danish Maritime Authority would, in close contact with the Ministry of Transport – which is the TEN-T responsible authority in Denmark – facilitate an outline for a proposal on a feasibility study and pilot projects. The

time limit is the end of July/beginning of August 2010. At that time, a decision will be taken with regard to the necessity to hold a new meeting on an LNG submission.

Further it was agreed:

- The participants in the meeting would come up with further input, including pilot projects – **as fast as possible!** This invitation counts for all the participants invited to the meeting!
- The Danish Maritime Authority would discuss the outcome of the meeting with the Commission, EMSA and the North Sea/English Channel countries. Up to now, contacts had been established with Flanders and the Commission<sup>3</sup>. The aim of these discussions is to develop the thinking further.
- Further potential partners will be included in the discussions.

Finally, it was made clear that a feasibility study demanded financial means, but it seemed immature for the individual countries etc. to take a position on finance until the project was further developed<sup>4</sup>.

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<sup>3</sup> Probably through the North Sea Task Force for Motorways of the Sea. The experience with regard to the Baltic Task Force on Motorways of the Sea has shown a very little overlap of participants between the LNG question and MoS. But the call texts on MoS from the countries involved shall facilitate this possibility.

<sup>4</sup> The non EU funding of the Baltic Outlook 2006 was financed by most of the countries around the Baltic. The same financial model is used for the current study on the Baltic Transport Outlook.