

## OCEANS BUSINESS WEEK 2016

### **1<sup>st</sup> Conference on Shipbuilding, Ship Repair and Conversion**

#### **Challenges of the maritime industry in the Motorways of the Sea**

**2<sup>nd</sup> June 2016 – Lisbon Congress Center - Junqueira**

This Conference embraces all the maritime industries and problematics of the Motorways of the Sea, where Portugal plays a relevant role. The conference addresses the actual problematics of IMO MARPOL VI, the technologies involved for its satisfaction as well as the technical challenges and opportunities for the marine actors, like shipyards, authorities, ship owners and operators as well as knowledge centers like universities, institutes and governments (pollution control policies). Very demanding problems need to be addressed by advancing environmentally friendly solutions like LNG and other marine renewable fuels to mitigate the effect of the intense marine traffic of these Motorways of the Sea.

#### **Programme:**

##### **14:30 h – Opening**

**Mr. Frederico Spranger** (*AI NAVAIS*)  
**Mr. Nogueira Leite** (*FÓRUM OCEANO*)  
**Mrs. Andreia Ventura** (*Arsenal do Alfeite, SA*)\*  
**Mr. Pedro Duarte** (*West Sea Shipyards*)

#### **1. Challenges of the maritime industries**

**Moderator: Mr. Nogueira Leite** (*FÓRUM OCEANO*)

14:45 – 15:00 h: Evolution, challenges and threats of the European maritime technology sector – **Mr. Christophe Tytgat** (*SEA EUROPE*)  
15:00 – 15:10 h: Polish shipyard policy toward sustainable development - **Mr. Krzysztof Kozłowski** (Undersecretary of State)  
15:10 – 15:20 h: State of art in the Portuguese sector – **Mr. Ventura de Sousa** (*AI NAVAIS*)  
15:20 – 15:30 h: Innovation in Shipbuilding, ASV – Air Supported Vessel – **Mr. Bruno Costa** (*AESHIPBUILDING*)  
15:30 – 15:40 h: Specialized tug construction project to the Port of Lisbon – (*NAVALTAGUS*)  
15:40 – 16:00 h: Open discussion

#### **2. Challenges of the maritime industry in the Motorways of the Sea**

**Moderator: Mr. Jorge Antunes** (*TECNOVERITAS*)

16:00 – 16:20 h: Conversion to LNG fuel – environmental and economic benefits, technical challenges and safety considerations – **Mrs. Torill Osberg** (*DNV GL*)  
16:20 – 16:35 h: GAIN4MoS – Improving the EU network of MoS - **Mr. Lynce de Faria** (*APSS*)  
16:35 – 16:50 h: Deep Blue Atlantic Retrofitting (of an existing ship) - **Mr. Martim Spratley** (*Mutualista Açoreana*)  
16.50 – 17:05 h: Back to the Ocean LNG shipping hub in the Atlantic corridor – **Mrs. Micaela Silva** (*OZ Energy*)  
17.05 – 17:30 h: Open discussion

#### **3. ROUND TABLE**

\* - To be confirmed

## Abstracts of interventions

### **Evolution, challenges and threats of the European maritime technology sector** - Christophe Tytgat (SEA EUROPE)

The points of this presentation will be as follows:

1. SEA Europe – Membership, mission and purpose – role in Brussels
2. The European Maritime Technology Sector: definition and current market developments
3. Challenges:
  - a. Overcapacity in shipping
  - b. Oversupply of shipbuilding capacity
  - c. Low oil prices – decrease on demand for offshore vessels and technologies
  - d. Skills – need to ensure a highly skilled workforce to keep on leading the innovation and developing new markets
  - e. Finance – lack of liquidity in Europe
  - f. Unfair Competition from 3<sup>rd</sup> countries, trade barriers and national protective policies (+ concrete examples)
4. Opportunities:
  - a. New markets – Blue growth (take the advantage of the EU’s promotion and focus on the Blue Growth)
  - b. Jones Act negotiations

### **Conversion to LNG fuel- environmental and economical benefits, technical challenges and safety considerations** - Torill Grimstad Osberg, Head of Section, “LNG, Cargo Handling and Piping Systems”, DNV GL, Norway

LNG is a very interesting fuel for ships. Until now almost 80 ships (not counting inland waterway ships and gas carriers) are in operation worldwide with LNG fuel, starting with the Norwegian car ferry Glutra back in year 2000. Four of these vessels are converted to LNG fuel.

Natural gas is free from sulphur, the particle emissions are as good as eliminated, and the emissions contain less CO<sub>2</sub>. Combustion of natural gas also gives great reductions in NO<sub>x</sub> emissions.

The economy of conversion to LNG fuel is of course greatly affected by the oil prices, but even with today’s low oil prices there can be some scenarios where a conversion from conventional fuel oil to dual fuel operation with LNG is feasible.

### **GAINN4MOS**

As part of the GAINN global project, GAINN4MOS project aims to support policy makers in the EU Member States, ports and shipping companies operating in the Atlantic and the Mediterranean countries, to comply with current environmental regulations in the most efficient manner, and aims to improve the network of motorways of the sea in six Member States, defining the institutional framework for the development of LNG refueling facilities in their respective countries and conducting engineering studies and pilot projects to adapt and refitting vessels.

Under APSS’ coordination, and with an overall budget of € 8,8M in the context of a global bid of around € 40M, the national consortium partners have chosen to focus on three projects, namely those presented by the ports of Madeira (*Madeira Intermodal Logistical Project*), Douro and Leixões (*LNG in the Port of Leixões Fleet*) and the Azores (*Deep Blue Atlantic Retrofitting*).

### **Deep Blue Atlantic Retrofitting**

Mutualista Açoreana and Portos dos Açores, S.A. lead the “Deep Blue Atlantic Retrofitting” project, which aims to provide the retrofitting of a ship that makes the regular transport of goods between Azores and Portugal’s mainland. The objective of the Pilot is to guarantee that merchandises transportation between the Azores and Portugal’s mainland is in line with a clean source of energy.

The project has begun with the technical and viability studies of the solution, and the result of this first stage shall determine the advance to the retrofitting of one of the ships that assure the regular transport of goods between the Azores archipelago and Portugal’s mainland. The project also aims to prepare the Azores readiness for the LNG reality. Therefore it is necessary to develop the logistics in order to provide the availability and reliability of LNG bunkers as soon as the retrofitting is complete, proceeding to resume the regular shipping line between Azores and the Mainland.

### **Back to the Ocean - LNG – The new paradigm for environmental sustainability**

OZ Energia is in a special position to leverage a challenge made by EU for environmental sustainability. The development of new energy sources for shipping was the kick off for OZ Energia to develop a Small Scale LNG Storage.

Having in mind the strategic position at the entrance of Tagus River, right across Lisbon, OZ Energia sea terminal will be able to perform bunkering throughout the Portuguese coast from 2020 onwards.