

# **The practicalities of embracing LNG as a clean and economical fuel for shipping**

**EUROPEAN COMMUNITY SHIPOWNERS ASSOCIATION**

**EMSA LNG EXPERT WG - 4 DECEMBER 2012**



# European Community Shipowners Associations

The European Community Shipowners' Associations was established in 1965 in Brussels. ECSA represents the interests of the national shipowners' associations of EU Member States and Norway.

ECSA works on daily basis with the EU institutions.

The European Shipping is a top provider for the European and the Global trade and is a key player in cross trades between different continents. About 22% of the world fleet are registered under EEA flag and the EEA controlled fleet represents 41% of the world fleet.

The EU shipping industry, as economic operators of the sea is advocating for the need for transparency, predictability, coherence and stability of whichever system is being used to support the planning and management of regional sea-basins, in the interest of sustainable economic growth.



## ECSCA LNG WG

### KEY POINTS OF DISCUSSION:

- ENVIRONMENTAL BENEFITS/LEGISLATION
- PRICE (at delivery to the ship)/COST OF LNG
- TECHNICAL CONSTRAINTS (IGF-code)
  - ↳ many pending issues (finalized in 2013 ?)
- PORT INFRASTRUCTURE & LNG AVAILABILITY
- BUNKERING (ECSCA LNG WG on bunkering 12/11/12 !)
- SAFETY



**ECSA**

European Community Shipowners' Associations

## JOINT LNG EMSA/ECSA WORKSHOPS



12/12/2012

# LNG DEVELOPMENT

## INCENTIVE TO SWITCH DEPENDS ON :

- **Type**
- **Size**
- **Age**
- **Speed**
- **% activity in ECAs**
- **Trade**
- **Price/Cost ! (LNG delivery to the ship/CAPEX)**
- **...**

## IN CASE OF:

- **short distances** ( = small tanks)
- **fixed trades** ( = certainty)
- **billateral agreements between states** (regulation not finalized)
- **good price** (= flexibility of suppliers)
- **(subsidies)**



## **BUSINESS CASE**

**e.g: Ro-Ro, Ro-pax ships**

**CLARITY ON REGULATION FOR MOBILE TANKS  
NECESSARY (= GAP 5)**



## KEY OUTCOME ECSA LNG WG ON BUNKERING (12/11/12) – INPUT TO EMSA/GL STUDY ON BUNKERING !

= **Task 2, GAP 1** (“The LNG bunkering procedure is not regulated by IMO requirements and standards”)

### **Fragmented rules and regulation** (= Task 2, GAP 9)

- Common EU wide regulatory guidance/guidelines are very much welcomed by ECSA (harmonization is key to minimize risks). **(Task 3)**
- Early development of comprehensive safety guidelines (customized to SSS in Europe) to help frontrunners is needed. **(Task 3)**
- Build on experience in the EU (e.g. bunkering of Viking Grace) with the final aim at establishing internationally agreed standards and use existing recommendations (e.g. from SIGTTO).
- Any guidance/guidelines developed at regional level must easily be transposed to an international standard.
- Bottom-up initiatives from ports (e.g. Antwerp, Rotterdam, Hamburg, ...) to develop guidelines are very helpful and interaction between ports and shipowners is necessary (EMSAs' facilitating role is considered to be very useful).

### **Different safety regimes for different ship types**

- Bunkering during loading/unloading operations (e.g. containerships) or while passengers are on board should be considered with caution.
- A differentiation in approach could be envisaged for different loading/unloading operations (appropriate procedures to be looked at a case by case).
- EU common guidance (e.g. a list of all aspects that need to be taken into consideration to minimize risks during bunkering) on this issue would be helpful. **(Task 3, Annex A of guideline)**

## KEY OUTCOME ECSA LNG WG ON BUNKERING

### **Liability ports/suppliers during bunkering operations (≈ Task 2, GAP 3)**

e.g methane release during bunkering (≈ Task 2, GAP 16)

### **Training of suppliers and crew (= Task 2, GAP 10)**

STW (Standards on Training and Watchkeeping subcommittee of the IMO) will wait for the IGF-code to be finalized before starting to work on standards. Until then, STW will not do anything regarding training of personnel on LNG fuelled ships.

### **Enforcement (≈ Task 2, GAP 12 & 13)**

The proper enforcement of MARPOL Annex VI/Sulphur Directive requirements was considered by some a prerequisite for shipowners to invest in LNG (or scrubbing technology).

### **LNG quality (= Task 2, GAP 11)**

The LNG quality should meet the engine specific requirements and a defined quality range should be guaranteed by suppliers (LNG terminal operators, bunker barges, trucks, etc ...). A quality standard might be necessary. ISO has started to pick this up.

## KEY OUTCOME ECSA LNG WG ON BUNKERING

### **International harmonisation (= Task 2, GAP 2)**

The work of ISO was welcomed by the WG. BUT: ISO is not aiming for a legal binding international standard (at first) but a guideline (due to lack of experience on LNG bunkering). It was unclear if this will be strong enough.

### **LNG bunkering must be competitive to normal fuel oil bunkering (Task 3: 8.1.1.3)**

Flexibility during bunkering will be necessary for the further development of LNG (now bunkering is done at dedicated terminals).

---

### **New industry body**

There might be a need for an industry body/forum to broadly consider economic, safety and technical aspects of LNG bunkering. Involvement of organisations such as SIGTTO in developing guidance is crucial.

### **Frontrunners**

Of primordial importance is for frontrunners to be able to get subsidies as the price of LNG at delivery to the ship, is still a counterproductive element working against the development of LNG as alternative fuel.



## **OTHER GAPS**

### **EMSA/GL STUDY**

- ▶ **GAP 4 - A CONCEPTUAL DELINEATION BETWEEN TRANSFER OF LNG AS CARGO AND BUNKERING OF LNG AS FUEL IS MISSING**
- ▶ **GAP 8 – DESPITE THE LARGE VARIETIES IN TERMS OF NATIONAL LEGISLATION, FURTHER GUIDANCE OR STANDARD FOR SMALL SCALE LNG BUNKERING STATIONS COULD BE DEVELOPED LOOKING INTO CURRENT BEST PRACTICES**
- ▶ **GAP 9.1 - COMMON CRITERIA FOR THE RISK ASSESSMENT APPROACH AND RISK ACCEPTANCE CRITERIA FOR LNG BUNKER PROCEDURES ARE MISSING WHICH REQUIRES EACH PORT TO DEVELOP ITS OWN STANDARDS WITH POTENTIAL DIFFERENTIATIONS AS A RESULT.**
- ▶ **GAP 9.2 – INDICATORS FOR DETERMINING COMMON SAFETY DISTANCES AND IDENTIFICATION OF LNG BUNKERING PROCESSES ARE CURRENTLY MISSING**
- ▶ **GAP 9.3 - COMMON SAFETY ACCREDITATION CRITERIA FOR LNG BUNKER COMPANIES ARE MISSING**
- ▶ **GAP 9.4 – ADDITIONAL MEASURES FOR LNG BUNKER OPERATIONS WITHIN EMERGENCY PLANS SHOULD BE CONSIDERED**

# Thank you

[www.ecsa.eu](http://www.ecsa.eu)