



EMSA Guidance on LNG Bunkering to Port Authorities/Administrations



Update to the 7th ESSF Plenary

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EMSA Guidance on LNG Bunkering to Port Authorities & Administrations

Introduction

Online Survey

Discussion Papers

EMSA Workshop

Updated Work Plan



Objectives

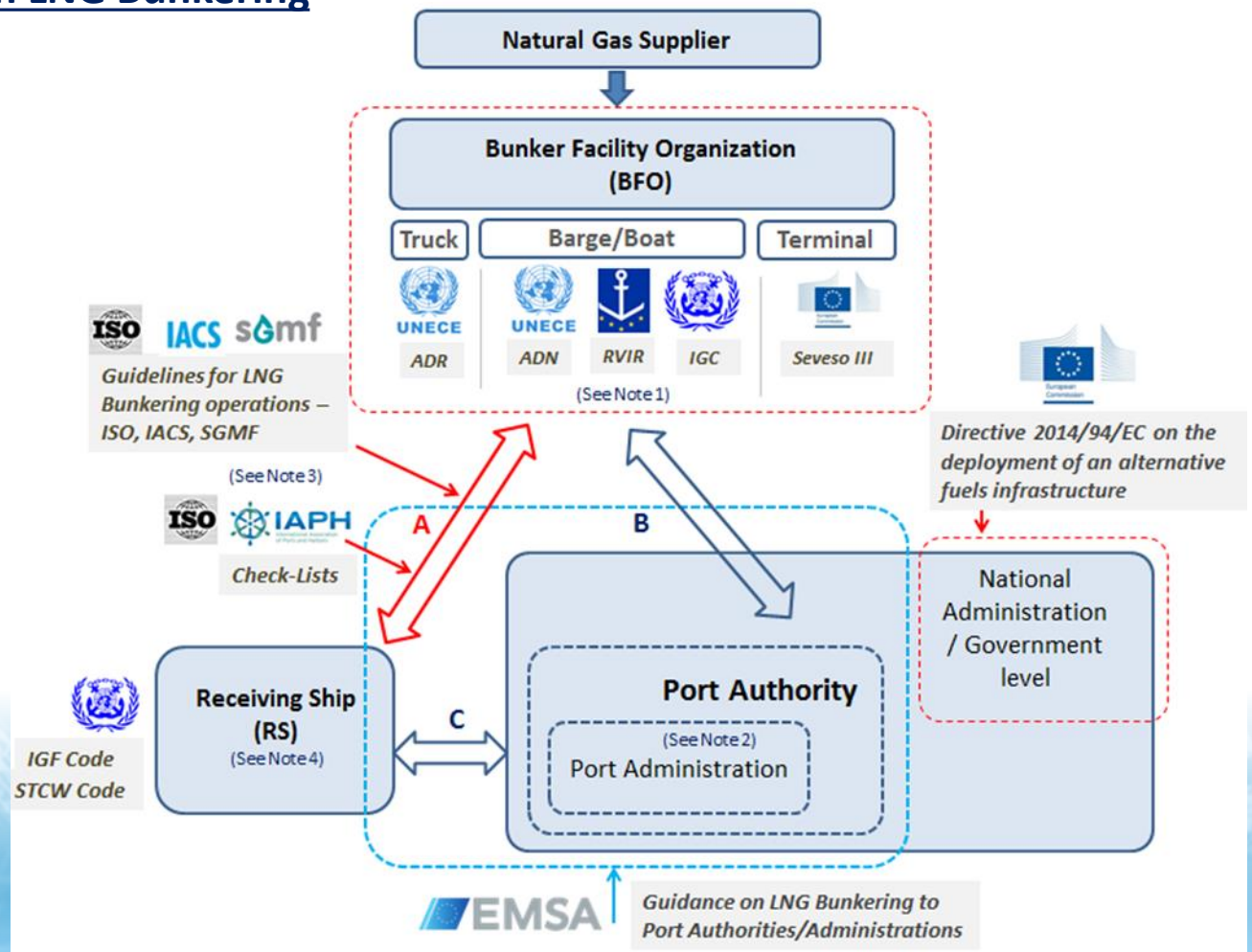
- Provide **Update to the ESSF Plenary** with the **status of development of the EMSA Guidance on LNG Bunkering** to Port Authorities/Administrations.
- **Summary result of the EMSA Online Questionnaire on LNG Bunkering**
- **Outcomes of the 1st Workshop on LNG Bunkering to Port Authorities.**
- **Updated Work Plan.**

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Why the EMSA Guidance on LNG Bunkering

- Need to address the action of Port Authorities, being complementary to existing Industry Guidance
- Request from the European Commission, endorsed and agreed at the ESSF, at its 5th Session.
- Inscribed on the 2016 Work Program



EMSA Guidance on LNG Bunkering to Port Authorities & Administrations

Introduction

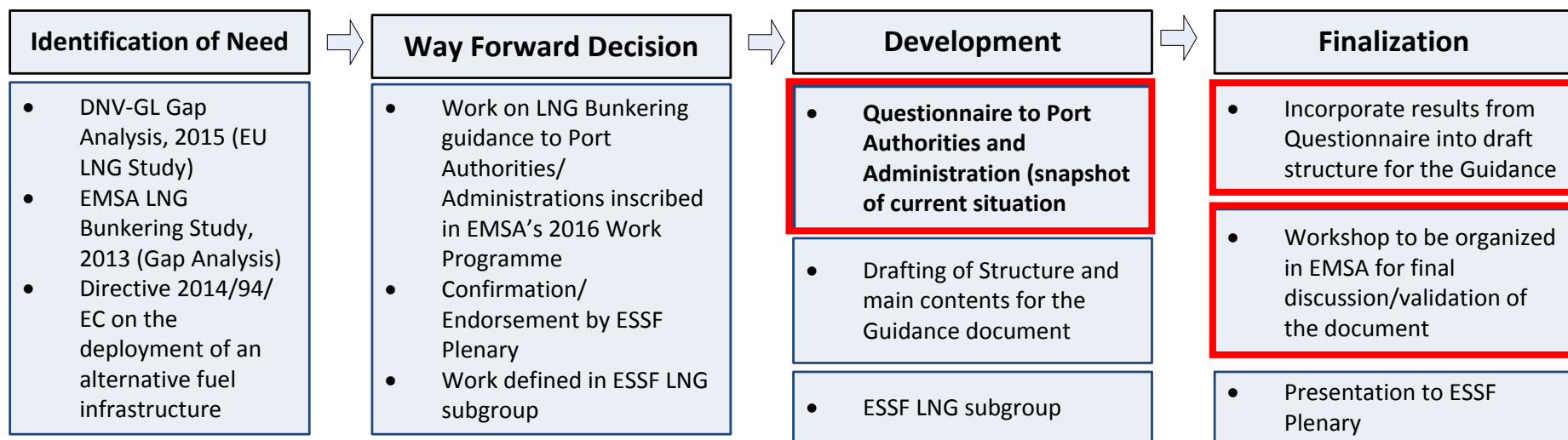
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EMSA Guidance – Development Plan



Development

- EMSA Online Questionnaire on LNG Bunkering to Port Authorities/Administrations .
- **Summary result of the EMSA Online Questionnaire on LNG Bunkering**
- **Outcomes of the 1st Workshop on LNG Bunkering to Port Authorities.**
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Questionnaire on LNG Bunkering to Port
Authorities/Administrations

Section "A" - Planning & Preparation

Pages

Start Welcome 1. Intro 2. Background 3. General 4. Guidance 5. Concepts 6. Policy Frameworks 7. Admin
8. Training 9. Feasibility 10. Risk 11. Location 12. Permit 13. Accreditation 14. Contact ID



Questionnaire on LNG Bunkering for Port Authorities and Administrations
Section "A" - Planning & Preparation

Section A - on LNG Bunkering Planning & Preparation -

<https://ec.europa.eu/eusurvey/runner/LNGBunkeringSurvey2016PartA> - to all port authorities / administrations **either already with LNG bunkering experience or still envisaging for its effective implementation**

Section B - on LNG Bunkering Operations -

<https://ec.europa.eu/eusurvey/runner/LNGBunkeringSurvey2016PartB> - in principle, only directed to those port authorities / administrations which **already have experience with actual LNG Bunkering Operations**, on whichever mode

Questionnaire on LNG Bunkering to Port
Authorities/Administrations

Section "B" - Operations

Pages

Start Welcome 1. Intro 2. Background 3. Section A 4. Op Env & Restrictions 5. Zoning 6. SIMOPS
7. Authorization 8. Emergency 9. Inc Reporting 10. Environment 11. Operations Contact Info



Questionnaire on LNG Bunkering for Port Authorities and Administrations
Section "B" - Operations

Still available online for your reference

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Invitations

Call for replies sent to
Member States
beginning September

Duration

Questionnaire was online
9SEP16-11NOV16 (including
2 extensions)

Replies

110 Replies (91 to Part A and
19 to Part B)

Support/Dissemination

Support in dissemination
from the ESSF LNG, ESSF
Plenary, ESPO, IAPH, BPO

Results

Quantitative Analysis
Concluded (Annex1 Paper 8b)
Qualitative analysis ongoing

Who Replied

Port Authorities, Terminal
Operators, Bunker suppliers

Problem issues

- Permitting
- Risk Assessment/ Criteria
- Simultaneous Operations
- Safety distances

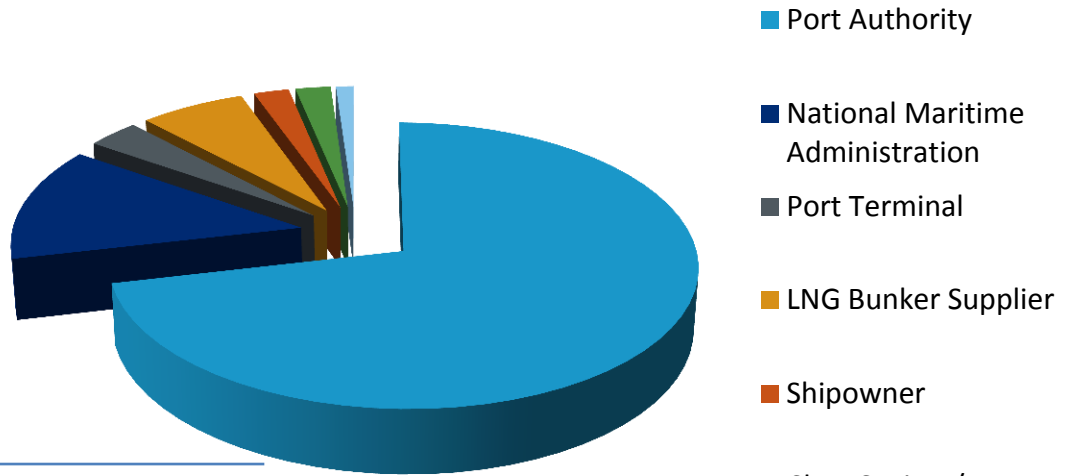
Conclusions in a “Nutshell”

1. LNG Bunkering Guidance for Port Authorities is much needed
2. No harmonized guidance is today followed by Competent Authorities
3. Industry Guidance does not cover Authority-specific provisions
4. Identified clear points were **harmonization should be improved**
5. **High interest** demonstrated from all Respondents

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Section A Planning & Preparation



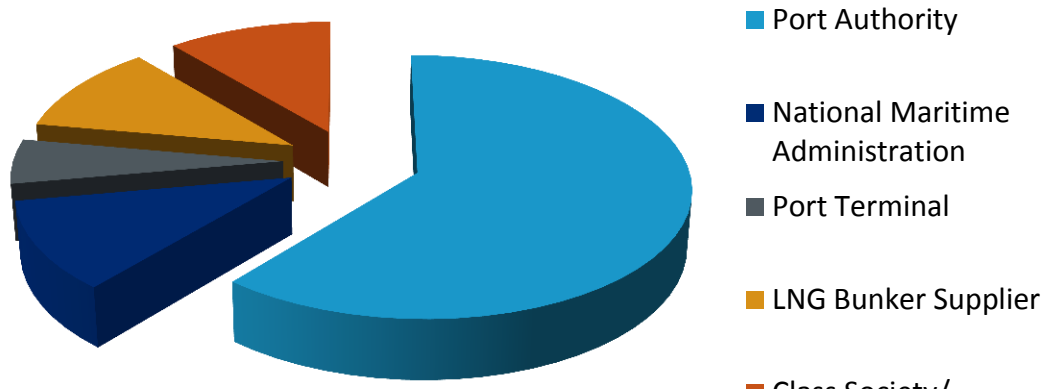
| Questionnaire - Section A | |
|----------------------------------|-----------|
| Port Authority | 65 |
| National Maritime Administration | 12 |
| Port Terminal | 3 |
| LNG Bunker Supplier | 6 |
| Shipowner | 2 |
| Class Society/ Consultancy | 2 |
| Other | 1 |
| Total | 91 |



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Section B Operations



| Questionnaire - Section B | |
|----------------------------------|-----------|
| Port Authority | 11 |
| National Maritime Administration | 2 |
| Port Terminal | 1 |
| LNG Bunker Supplier | 4 |
| Class Society/ Consultancy | 1 |
| Other | 0 |
| Total | 19 |

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Discussion Papers developed

Discussion paper 1

Small Scale LNG
bunkering - SEVESO
applicability

Discussion paper 2

Safety Distances –
Methods for calculation
and Criteria

Discussion paper 3

Permitting &
Authorization – Multi-
layer procedure

Discussion paper 4

Simultaneous Operations
– Suggested Procedure
for SIMOPS approval

Objectives for Discussion papers:

- Address **main challenges for harmonization** identified in the EMSA online questionnaire.
- **Identify options for best practice guidance** to be included in EMSA document, in line and in context with all the developments in ISO, Industry/SGMF.
- Prepare for the **EMSA Workshop** on the technical aspects that will be the centre for discussion with Member States.

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ESSF LNG (10th Subgroup Meeting – 10NOV16):

- First presentation of the Discussion Papers
- Discussed at the



EMSA Workshop (1-2DEC16):

- Discussion papers on the basis of the Workshop
- Agreement **in principle** in solutions for all discussed key problems.

EMSA Guidance on LNG Bunkering to Port Authorities & Administrations

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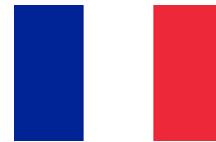
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- **EMSA Workshop on LNG Bunkering to Port Authorities/ Administrations – 1-2DEC16**
- Workshop in EMSA gathered 35 participants from 13 EU MS, Norway and 6 Organizations.
- **Discussion of the main subjects emerged from the EMSA online survey.**
- **Agreement in principle on the problems identified in the Discussion Papers presented.**
- **2nd Workshop to be organized in June 2017 for finalization.**



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- SEVESO applicability **shall not** be addressed by the EMSA Guidance – From earlier discussion there is no legal grounds to apply this to trucks, ships or any other type of mobile bunkering facilities (only to fixed installations)
- Application of requirements similar to those of SEVESO for cases **where Bunkered LNG Quantities/Frequencies are such that the bunkering location can be considered a location handling hazardous substances.**
- Threshold values/Quantities/Frequencies – EMSA Guidance **should not provide indicative thresholds** – just indicate that there shall be a function between the number of deliveries/quantities and the safety related requirements for the Operator.

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Discussion paper 4
Simultaneous Operations
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- The EMSA Guidance **shall not discuss on the merits of the existing methodologies** (ISO Technical Standard).
- Port Authority shall be **responsible for approval of Safety Zone**.
- Instead the EMSA Guidance shall **inform** on:
 - Existing Methodologies and Industry Guidance
 - The necessary factors to take into account for the determination of Safety Distances:
 - Environmental Factors (Wind and Temperature)
 - Release elevation; Bunker line Pressure
 - Transfer Rate; Trapped Volume; Possible Confined Space trapping
 - Other Factors (Physical Barriers, SIMOPS)
- **Advantages and Limitations of QRA** approach to be highlighted

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Simultaneous Operations – Suggested Procedure for SIMOPS approval

- Permitting procedures will be a function of different National, Regional, Municipality, Port, and other requirements, on a country specific case. The EMSA Guidance shall not define a standard Permitting procedure.
- As a Best Practice approach relevant International Standards on LNG Bunkering should be taken into consideration.
- **Information** on the different Processes and Streamlining of procedures for LNG Bunkering Permit should be ensured.
- A dedicated Focal Point is needed (Facilitation role to be ensured by the Focal Point)
- MAIN PRINCIPLES TO DEVELOP: Information, Transparency, Coordination, Communication
- A Centralized Desk/ Single-Desk approach should be favoured, as a Best Practice for Permitting.

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- SIMOPS definition shall make the distinction between the **different possible types of onboard, interface and shore operations** that may directly or indirectly have an impact on the LNG bunkering operation.
- During SIMOPS the important fundamental aspects to ensure are Shared Awareness, Alarm Dissemination, Communications, and Supervision.
- Whenever interface-shore SIMOPS take place: **The PIC shall not be responsible for the overview of all SIMOPS.** A SIMOPS Supervisor should be defined (additional role) – (Suggested the Receiving Ship).
- Whenever onboard SIMOPS take place: **The Receiving Ship/Master shall be responsible**

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| | Nov16 | Dec16 | Jan17 | Feb17 | Mar17 | Apr17 | May17 | Jun17 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| ESSF LNG 10 | ● | | | | | | | |
| 1st Workshop EMSA (1DEC) | | ● | | | | | | |
| Preparation for Correspondence Work | | ▬ | | | | | | |
| Revised Work – Status update (Plenary) | | | ● | | | | | |
| Corrspondence Work | | | ▬ | | | | | |
| 1st Draft (15MAR) – ESSF LNG 11 | | | | | ● | | | |
| Correspondence Work | | | | | ▬ | | | |
| 2nd Workshop EMSA | | | | | | | ● | |
| Plenary (Final Draft) | | | | | | | | ● |



Thank you!

emsa.europa.eu

