

Workshop on GHG Emission On Ships

Co-organised by CL and MPA

By

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International Bunker Industry Association

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The Voice of the Global Bunker Industry

- IBIA represents members globally across the entire industry value chain
- IBIA has representative status at the IMO and actively lobbies on the industry's behalf
- Participate globally in a range of committees and correspondence groups covering every aspect of bunkering
- Members participate in developing strategy and operational plans through IBIA Working Groups
- Provide training on bunkering operations on quantity and quality plus best practises.

Membership Profile

- Members in over 80 countries
- Across the entire industry value chain
- Energy Majors, Refiners, Traders and Brokers
- Suppliers, Ship Owners, Charterers
- Port Authorities, Storage Terminals, Agents
- Credit Reporting Companies, Lawyers, P&I Clubs
- Equipment manufacturers, Journalists and Consultants



IBIA Partners with Industry Stakeholders



- IMO
- Governments
- Shipping Associations
- ICS, OCIMF, IPIECA
- IHMA, Nautical Institute, IMarEST
- SIGTTO & SGMF
- Port Authorities

Implication For Bunker Industry

- Challenges in the bunkering industry
- Practical issues faced by bunkering industry and availability of compliance fuel
- Challenges for smaller ports or countries

Challenges in the Bunker industry

With 2020 approaching, the bunker supply industry faces many issues, for now this are mostly operational, avails, specifications of compliance fuel, prices of compliance and alternative fuel.

- How will suppliers source and assure fuels supplied are compliance
- Avails of compliance fuel in smaller ports
- Cost of bunker fuel and increase in credit risk
- Quality of compliance fuel
- How will port state regulate or ensure compliance

Options and Considerations for vessels taking bunkers

- **OPTIONS**

- Compliant oil-based fuels: MGO, MDO, ULSFO, VLSFO
- LNG or other low FP fuels (methanol, LPG, other)
- Technology solutions: EGCS (scrubbers) – others?

- **CONSIDERATIONS**

- Price differentials: 0.10%S vs 0.50%S and HSFO
- Time spent in ECAs
- Investment & operational cost + operational complexity
- Fuel availability & technology reliability
- Potential changes in regulatory framework

Practical issues face by the bunker industry and availability of compliance fuels

- Many questions asked till today, including will 2020 be postponed
- How about its availability
- Concern about quality of compliance fuel oil
- Are they straight run fuel or blended fuel
- What specifications should we follow or when will ISO come out with new specifications for compliance fuel
- How about contaminations?
- How about specification for LNG, Methanol, LPG etc

CE Delft study for IMO conclusion: Sufficient avails for 0.5%S in 2020

*Assumes 0.10% to 0.50%S fuels will be blends

Fuel type	Demand forecast for 2020 (mill MT)
HFO (scrubbed)	36 (11%)
Max 0.10% sulphur fuels	39 (12%)
Fuels between 0.10% and 0.50% sulphur *	233 (73%)
LNG	12 (4%)
Total	320 (100%)

Do the numbers stack up?

- Scrubber & LNG uptake may be falling short of CE Delft study forecast
- Maybe 1,000 ships w/scrubbers by end of 2018? >>> 233 p/month in 2019 to reach 3,800 by 2020
- LNG & other fuel alternatives market share very limited
- Full global compliance in 2020 could mean around 95% reliance on LS oil-based bunker fuels



**Current focus on
LS oil-based fuels**

Carriage ban on bunker fuels with sulphur exceeding 0.50%

- Majority of countries at MEPC 73 express support
- Likely to enter into force 1 March 2020
- Simplifies enforcement as PSC no longer has to prove use, or intent to use, High Sulphur fuel in ship's bunker tanks

Carriage Ban Implications

- “We can buy and use HSFO until 1 March 2020”
- “HSFO ban makes scrubbers pointless”
- Will it affect carriage of HSFO as cargo?

Regulation 2.9 of MARPOL Annex VI fuel oil definition: *“Fuel Oil means any fuel delivered to and intended for combustion purposes for propulsion or operation on board a ship, including distillate and residual fuels.”*

The only real difference is facilitating enforcement



Challenges For Smaller Ports or Countries

- Third world country without or with little bunkering infrastructure
- Bunkering not main business
- Out of the normal trading route
- Fuel Oil storage?
- Distillate storage
- Vessels will have to take full bunkers
- Go for LSMGO

Some tricky questions

- **Q:** What happens if compliant fuel is not available?
- **A:** IMO to develop a standardized format to report non-availability as per Regulation 18.2 of Annex VI

Still leaves questions/issues:

- Will ships have to debunker non-compliant fuel?
- What if the BDN says the fuel is compliant but the ship's own test results suggest otherwise?
- What if the fuel is found to be marginally above the limit?
- Wording of new legal requirement for the BDN prevents supply of fuel above 0.50% to ships without scrubbers

IBIA efforts at IMO to reduce sulphur disputes

- MEPC 68 (May 2015): IBIA proposed to align MARPOL Annex VI sulphur verification process with ISO 4259
- PPR 4 (Jan 2017) Presentation at IMO
- Continued efforts to build understanding and prevent chaos in 2020

Test result analysis FACTS

- No test method can measure absolute/true value with 100% certainty, and their accuracy and precision differ
- Cases have been heard where a test result has been reported with 5 decimals - sulphur test result of e.g. 0.10245% regarded as non-compliant.
- ISO 4259 provides the industry with a statistical 95% confidence formula based on Reproducibility “R” - the variation in the test results when tests are conducted on the same sample in different labs by different operators using different apparatus
- 95 % confidence level = $0.59 \times R$ – for a single test result

IMO best practice guidance

FOR ASSURING THE QUALITY OF FUEL OIL USED ON BOARD SHIPS

- Guidance on best practice for fuel oil purchasers/users approved (MEPC 72)
- Guidance on best practice for fuel oil suppliers: IBIA proposal (MEPC 72) accepted as base for development of IMO guidance -> MEPC 73
- Guidance on best practice for Member States/coastal States – Aim for finalization and approval at MEPC 74

Conclusion

- Carriage ban likely from March 2020
- Comprehensive guidelines before 2020 (MEPC 74)
- IMO's 2020 decision is final and there will be no delay!
- Transition ends on 1 January 2020