Regulatory compliance to ensure your fleet sails

14 December 2020
15:00-15:45 SGT • 07:00-07:45 GMT

Presentation documents:
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#maritimeairpollutionasia
Introduction to UNCLOS
- The Constitution of the Seas

• “UNCLOS” (The United Nations Convention on the Law Of the Sea) is a convention created under the UN and it is often referred to as “The Constitution of the Sea”.

• UNCLOS is a framework convention, which codifies general accepted principles within International Law (e.g. right to innocent passage”) and creates new enforcement principles (e.g. of environmental legislation).

• UNCLOS also establishes the jurisdictional basis for what legislation States can prescribe and enforce on the seas, for example;
  • Flag States having full jurisdiction over vessels flying their flags
  • Port States having the right to investigate and sanction non-compliant vessels voluntary at berth in a port under their jurisdiction.
UNCLOS

• A flag State has jurisdiction over ships flying its flag on the high seas – This is a basic principle in international law also known as the “flag state principle” codified in art. 92-94 of UNCLOS.

• However, port States can – through part XII of UNCLOS – acquire jurisdiction over foreign Ships on the high seas when enforcing certain international legislations for protection of the marine environment.

• This encompasses polluting emissions as regulated in MARPOL Annex VI as “Pollution of the marine environment” is defined in art. 1(4) of UNCLOS; As pollution which inter alia can damage human health and other living resources,

• The jurisdictions of a State also relates to sanctioning (imposing fines)

• Special jurisdiction within part XII of UNCLOS relating to enforcement of environmental regulations.
High Sea jurisdiction
- Flag States have extended obligations to enforce IMO’s environmental legislation

- **Art. 217(1);** The flag State is **obligated to effectively enforce** environmental legislation (such as MARPOL) over ships flying its flag, irrespectively of where the ship is sailing, e.g. on the **high seas.**

- Flag States effective enforcement” should, as a minimum, **remove all savings form the violations** and **discourage future violations** and **should entail significant increase in case of repeated violations** cf. art. 18.2 of the Sulphur Directive

- **Art. 217 also** obligates the flag State to:
  - **Investigate any reports from other states** (i.e. from PSC/ coastal State surveillances etc.) on violations committed by vessels flying their flag, e.g. on the high seas (cf. art. 217.6)
  - **To inform other states** and the **IMO** of the **efficient enforcement** (cf. art. 217.7)
  - **To ensure that the flag States national legislation allows for violations to be sanctioned so severely that the sanctions can discourage violations** wherever they may occur (cf. art. 217.8)
High Sea jurisdiction
- Port State jurisdiction on the high seas (art. 218.1)

• **Art. 218(1)** of UNCLOS provides port States with a broadened jurisdiction over foreign vessels when they voluntarily call a port or off-shore terminal of the port State.

• This provision gives port State jurisdiction to “investigate and institute proceedings in respect of any discharge committed outside the States internal waters, territorial sea or exclusive economic zone”

• This establishes a legal basis for port State enforcement of foreign vessels violations on the high seas, provided it can be deemed a *discharge* violation.

• UNCLOS does not define the term “discharge”, wherefore the legal scope of art. 218 (1) should be interpreted in accordance with general legal interpretational principles.

*All forms of discharge are covered by art. 218(1)*

• Art. 218(1) gives port States a jurisdiction over foreign vessels for *any discharge* violation, which indicates that the term (discharge) in this article should be interpreted to encompass all aspects of the discharge-concept, as other provisions of UNCLOS refer to specific forms of discharge, e.g. “discharge of substances into the sea”, whereas art. 218(1) is the only article that refers to “any discharge”
The “discharge-term” cf. art. 218(1) encompass (SOx) emissions:

- Art. 31(1) of VCLT (Vienna Convention on the Law of Treaties) states that when interpreting the meaning (and scope) of a word, the normal meaning and understanding of the word should be applied, i.e. as it is defined in an English dictionary. Oxford, Cambridge and Webster’s dictionaries defines “discharge” as, inter alia, meaning; “emitting”, “emissions”, “allowing a liquid, gas, or other substance to flow out”, and as “discharging exhaust fumes.

The MARPOL Convention defines “discharge”

- This interpretation corresponds with the broad definition of the word “discharge” in MARPOL art. 2.3.a, which also defines the term to include “emitting”

MARPOL Annex VI already uses the “discharge”-term to cover (ODS) emissions:

- The “discharge term” is already used in MARPOL’s Annex VI to cover emissions into the atmosphere as reg. 12.7.3 refers to “discharge of ozone-depleting substances to the atmosphere”.

Conclusion:

- There is a legal basis for using UNCLOS art. 218.1 on “emissions”, e.g. SOx emissions cf. reg. 14.1 in MARPOL Annex VI
- This means that port States can assert jurisdiction over these violations which allows them to impose fines that remove the savings from such SOx-violations on the high sea.
Regulatory Compliance To Ensure Fleet Sails Webinar

14 December 2020

Presented by:
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IMO STRATEGY ON GHG REDUCTION

- **Reduction of CO2 emissions per transport work (carbon intensity)**, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 20% by 2050, compared to 2008.

- **Reduction of the total annual GHG emissions** from international shipping by at least 50% by 2050 compared to 2008 levels.

- Requirement for a mix of **technical, operational and innovative solutions** applicable to ships.

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Measures to Reduce GHG

- Improve the existing energy efficiency framework with a focus on EEDI and SEEMP
- Address emissions of methane and further measures for volatile organic compounds
- Ongoing R&D into marine propulsion, low and zero carbon fuels and energy efficiency
- Encourage port developments and activities globally to facilitate reduction of GHG emissions from shipping
- Incentivize first movers to develop and deploy new technologies
- Develop robust lifecycle GHG/carbon intensity guidelines for all types of fuel

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<td>MGO</td>
<td>42.7</td>
<td>36.6</td>
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<td>18.6</td>
<td>12.7</td>
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<td>Liquid hydrogen</td>
<td>120</td>
<td>8.5</td>
<td>1</td>
<td>-253</td>
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<tr>
<td>Compressed hydrogen</td>
<td>120</td>
<td>7.5</td>
<td>700</td>
<td>20</td>
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*MGO: Marine gas oil  
LNG: Liquefied natural gas  
LHV: Lower heating value
Technical, Operational & Innovative Solutions

- Further technical and operational energy efficiency measures for both new and existing ships
- Use of speed optimization and speed reduction
**IMO MEPC 75**

**GHG emissions** – The Fourth IMO GHG Study was approved together with the draft amendments to MARPOL Annex VI for the reduction of carbon intensity of existing ships.

- **Energy Efficiency Existing Ship Index (EEXI):** will impose a requirement equivalent to Energy Efficiency Design Index (EEDI) Phase 2 or 3 (with some adjustments) to all existing ships regardless of the year of build and is intended as a one-off certification. The EEXI is to be verified and a new Energy Efficiency Certificate issued no later than the first annual International Air Pollution Prevention (IAPP) survey on or after 1 January 2023.

- All cargo and cruise ships above 5,000 GT need to calculate a CII (e.g. Annual Efficiency Ratio [AER]) given in grams CO2 per dwt-mile) and will be given an annual rating of A to E. The rating thresholds will be increasingly stringent towards 2030. For ships that achieve a D rating for three consecutive years or an E rating in a single year, a corrective action plan needs to be developed as part of the SEEMP and approved.

- On or before 1 January 2023, all ships above 400 GT need to have an approved SEEMP onboard, and the implementation of the SEEMP will be subject to audits. For ships above 5,000 GT, the SEEMP also needs to include mandatory content, such as an implementation plan on how to achieve the CII targets.
Actual Case – Joint Development Project (Nov 2020)

One Coat System of High Solid Volume Ratio ecofriendly epoxy paints
- Technological Development
- Reduction in volatile organic compounds (VOCs)


ABS, Hyundai Heavy Industries Group and the Marshall Islands Registry JDP Creates Coating Needing Just One Application

ABS, Hyundai Heavy Industries (HHI Group) and the Marshall Islands Registry (MIR) have completed a joint development project (JDP) to create an environmentally friendly, solvent-free coating for water ballast tanks that only requires one coat.

ABS completed the Product Design Assessment on the epoxy paint, while MIR granted the system Approval in Principle (AiP).

The system is designed to offer ship owners equivalent corrosion prevention performance and reduced costs, when compared to traditional two coat systems, while ensuring compliance with international regulations.
THANK YOU

www.register-iri.com
Regulatory Compliance to ensure your fleet sails

Anuman Ghosh
Director Risk Assessment,
Thomas Miller
Decarbonising Shipping

**Regulations**
- Technical details still unclear.
- How will the Carbon Intensity Indicators be calculated?
- Uncertainties.

**Options**
- Speed reduction, EPL, Energy saving technology, alternative fuel??

**Planning**
- Confirm EEXI for each existing vessel, new building, vessel sale/purchase affected

**Varying requirements**
- EU and IMO targets not in sync, base lines different.
- MRV/DCS alignment not there
<table>
<thead>
<tr>
<th>EU ETS</th>
<th>Emission trading scheme, Japan/South Korea/China and many others against. Varying enforcements levels between individual states?</th>
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<td>Other GHG’s?</td>
<td>Nothing yet regarding Methane slip and VOC.</td>
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P&I Risks

P&I
- Fines, arrests, delays
- Casualty

Defence
- Contractual disputes: New fuel Quality/Retrofit/Performance issues
P&I risks-2030 and beyond

- New Engine types and Fuel systems
- Competent crew
- Catastrophic failures, fires
- Training needs
- Bunkering
- New fuel handling risks
Thank you!!
www.ukpandi.com