



# IMO MEPC 79 Meeting Summary

December 30 2022

The 79th session of the IMO's Marine Environment Protection Committee (MEPC 79) was held 12-16 December 2022 in London, supplemented by hybrid (online) participation.

Among others, Liberia participated in the following groups in addition to the plenary:

Group	Subject
RG	Ballast Water Management (hybrid)
WG 1	Air Pollution and Energy Efficiency (hybrid)
WG 2	GHG Emissions from Ships (hybrid)

This report also includes the discussions during the thirteenth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 13), which was held 5-9 December 2022.

## Adoption of mandatory instruments

MEPC 79 adopted the following mandatory instruments for entry into force on 1 May 2024:

- Regional port reception facility arrangements within Arctic waters (MARPOL Annex I, II, and IV) (MEPC.359(79)), including the amendments to the 2012 Guidelines for the development of a regional reception facilities plan (MEPC.363(79));
- Garbage record book (MARPOL Annex V) (MEPC.360(79))
- Mediterranean Sea SO<sub>x</sub> Emission Control Area (MARPOL Annex VI, regulation 14 and Appendix VII) (MEPC.361(79));
- Bunker delivery note for inclusion of flashpoint (corresponding to the SOLAS amendments adopted by resolution MSC.520(106) (MARPOL Annex VI, Appendix V) (MEPC.362(79)); and
- Information to be submitted to the IMO on ship fuel consumption database (MARPOL Annex VI, Appendix IX) for inclusion of CII data.

For the new data format of ship fuel consumption reporting, MEPC 79 encouraged members to implement the amendments as soon as possible to align with entry into force of the CII requirements (Resolution MEPC.328(76)).

With regard to the Mediterranean Sea Emission Control Area, while the amendments legally enter into force on 1

May 2024, one year waiver will be given for actual enforcement in accordance with MARPOL Annex VI regulation 14.7.

## Ballast Water Management

### Ballast water record book (BWRB)

MEPC 79 approved the draft amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book) with a view to adoption by MEPC 80. The change included introducing code letters and other improvements for standardized entries.

While there was a proposal to introduce electronic BWRB, due to time constraints, MEPC 79 could not review the details of the proposal.

### Temporary storage of grey water and treated sewage in ballast tanks

MEPC 79 agreed that the Convention did not preclude the temporary storage of grey water or treated sewage in ballast tanks, and furthermore that this storage should be permitted and that guidance should be developed.

However, due to time constraints, MEPC 79 could not consider the details.

### Challenging water condition

MEPC 79 continued addressing the problem concerning ports with challenging water quality (PCWQ), which is local water that goes beyond the design limit of ballast water treatment systems, thus did not allow the normal

operation of Ballast Water Management (treatment) Systems (BWMSs).

Submission documents provided proposal/information included:

- the development of a water quality database for ports;
- operational procedure for inclusion in the Ballast Water Management Plan for approval by the flag Administration;
- a draft Guidance on application of ballast water exchange plus treatment (Ballast Water Exchange plus Ballast Water Treatment);
- to promote the development and use of robust BWMS.

Opinions were divided on the following points:

- whether taking challenging water was a contingency or anticipated operation due to the design limitation of the BWMSs;
- Notification to next port of call;
- When by-passing operation could be allowed; and
- Maintenance and training.

MEPC 79, while agreeing on a base document for the future guidance and high-level principles, could not conclude on this subject and the discussion will continue at MEPC 80.

### Interpretations

MEPC 79 approved BWM.2/Circ.66/Rev.4, which includes the following interpretations.

#### Calibration of BWMS

A question was submitted asking whether calibration at the renewal survey was required.

MEPC 79 agreed that the accuracy check/calibration should be done in accordance with the manufacturers' instructions.

#### Commissioning test

MEPC 79 approved the following interpretation:

“In case an installed BWMS on board a ship undergoes an upgrade or change to a major component as defined under paragraph 3.9 of the BWMS Code, the BWMS should be regarded as a newly installed BWMS. A commissioning test should be conducted in accordance with regulation E-1.1.5 of the BWM Convention and an International Ballast Water Management Certificate (IBWMC) for that ship should be re-issued accordingly.”

### Approval of BWMS

MEPC 79 reviewed the assessment of basic and final

approval under G9 guidelines (the systems that use active substances) and information submitted by the flag Administration on their approval under G8 guidelines.

#### Final approval (G9 guidelines)

- RADClean® BWMS
- ECS-HYCHLORTM 2.0 System

#### Information on the approval by the flag States (Type approval)

- Senza BWMS
- LanghBW
- BLUE OCEAN SHIELD
- HiBallast NFTM
- AQUASTAR™
- ARA Plus+ BWMS

#### Ship type exemption

MEPC 79 did not agree with the proposed exemption for tugs that engage in rescue and oil recovery operations.

## Air pollution prevention and energy efficiency

### Exhaust gas cleaning systems (EGCSs)

There was an intense discussion on the global prohibition on the use of EGCS, as it will present uncertainty for the industry, which has, in good faith, invested in EGCS technology in accordance with the provisions of MARPOL Annex VI.

MEPC 79 invited the IMO Secretariat to provide their legal opinion on this issue.

### Black carbon

Submission under this agenda item included the following views/opinions:

- ships should only use marine distillate fuel or other cleaner alternative fuels or methods of propulsion that are safe for ships when operating in or near to the Arctic.
- the push to reduce ships' Black Carbon emissions impacting the Arctic cannot rely on the Arctic waters HFO ban contained in MARPOL Annex I regulation 43A and showing that a new measure is now urgently needed.

MEPC 79 instructed the PPR Sub-Committee to consider these submissions.

### Fuel

Industry observers outlined information from fuel samples tested during 2020, especially the level of sulphur compliance for Very Low Sulphur Fuel Oil (VLSFO), including geographical differences, and proposed a mandatory

bunker supplier licensing scheme.

MEPC 79 did not agree on the bunker licensing scheme but encouraged Member States to make use of the revised Guidance for best practice for Member State/coastal State set out in circular MEPC.1/Circ.884/Rev.1 and invited interested Member States and international organizations to submit information on experience gained of the implementation of the guidance on best practice and relevant instruments to a future session.

### **Renewable fuel (on NOx emission)**

There were several submissions on the use of renewable fuel. MEPC 79:

- Did not agree on the need for standard NOx measurement test measures;
- Any version of ISO 8216 standard could be used for NOx (engine) testing purposes;
- Agreed to include synthetic drop-in fuels in the interpretation of NOx control for circulation as MEPC.1/Circ.795/Rev.7 in the same way interpreted for biofuel (30% limit or no alteration of the engine component, or onboard testing).

### **EEDI beyond phase 4**

The correspondence group presented the report to MEPC 76 in 2021, which addressed, among others, the following points:

- Lifecycle CO<sub>2</sub> emissions;
- New technology;
- Alternative fuel;
- Reduction of GHGs other than CO<sub>2</sub>;
- Use of battery technology;
- Alternative fuel; and
- Human element and safety regulations.

Submission to MEPC 79 further provided views on the significance of the Energy Efficiency Design Index (EEDI).

In addition, opinions expressed during the session were:

- To wait for the completion of LCA guidelines;
- EEDI Phase 4 should be part of a holistic review of GHG reduction measures;
- EEDI continue to play an important role for utilizing innovative technologies;
- EEDI should be a design index, thus, operational measures, including carbon capture onboard should be carefully considered;
- Further, EEDI should consider not only CO<sub>2</sub> but other GHG emissions; and
- Engine specific methane and ammonia slip should be addressed.

MEPC 79 agreed to not embark on the discussion on EEDI

phase 4, but to wait for the completion of Lifecycle Assessment Guidelines (LCA Guidelines).

### **Details on EEDI Calculations**

#### **Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI)**

MEPC 79 adopted 2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) (MEPC.364(79)).

Key changes were:

- Inclusion of a conversion factor for ethane;
- to clarify the maximum allowable deduction due to the shaft generator by changing the format of the equation without changing its calculation result; and
- to clarify multiple load lines, i.e., In case of a new ship with multiple load line certificates or with a load line certificate containing multiple summer load lines, the maximum summer draught should be used to calculate and verify the required and attained EEDI. For ships that may have previously received multiple EEDI assessments for several deadweights that correspond to multiple load lines, all those EEDI assessments should remain valid.

#### **EEDI Survey guidelines**

An observer presented the latest version of the procedure for speed trial result calculation. Subsequently, MEPC 79 adopted 2022 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI) (MEPC.365(79)).

#### **Engine power limitation for EEXI**

Liberia proposed guidance for Administrations in case of use of a power reserve by un-limiting the shaft / engine power limitation. There was not sufficient support or time to consider the draft guidance.

#### **Shaft power limitations for EEDI**

A Member State presented updates on the shaft/engine power limitation for EEXI requirements, a comparison with the corresponding concept for EEDI compliance was performed and similarities and differences were highlighted.

In this regard, there was general support for the inclusion in the EEDI framework, and MEPC 79 invited interested Member States to prepare draft amendments to the EEDI calculation guidelines.

#### **Interpretations**

The following interpretations were agreed on and included in MEPC.1/Circ.795/Rev.7.

#### **Boil off gas data**

MEPC 79 agreed to include additional interpretation (see

underlined part below):

For Data relating to Boil-off Gas (BOG) consumed on board the ship for propulsion or operation (e.g. BOG used for propulsion, operational needs such as in a boiler, or burnt in a Gas Combustion Unit (GCU) for cargo tank pressure control or other operational purposes) is required to be collected and reported as fuel as part of the Data Collection System for fuel oil consumption of ships.

### Major conversion

MEPC 79 agreed the unified interpretation for ships that had undergone major conversion before 1 April 2022. In the proposed interpretation, the event should be reported within 7 months after 1 April 2022. Any conversion after that date should be reported within 7 months.

### SEEMP Part III

MEPC 79 clarified that

- "3 years" starts from the date of delivery, change of the management company etc if that happens on or after 1 January 2023, i.e. not all ships are bound by 2023-2025 period.
- Next three year is a rolling three year (YYYY+1 and YYYY+2)

### Corrective action plan

MEPC 79 agreed that if a poor CII rating is given to a ship (3 consecutive D or E), a revision to SEEMP and corrective action plan should be verified in the following year (year plus 1) for achieving the required CII rating in the next year (year plus 2).

## Reduction of GHG emissions

### GHG Strategy

In 2018, the IMO adopted the Initial IMO Strategy on reduction of greenhouse gas emissions from ships (the 'Initial IMO Strategy') (MEPC.304(72)). The Initial IMO Strategy requires that a Revised Strategy should be adopted in 2023.

Key discussions through ISWG-GHG 13 and MEPC 79 were as follows:

#### Vision

At ISWG-GHG 13, the Group agreed that the vision in the revised strategy would have to be aligned with the levels of ambition of the Revised Strategy, and therefore the vision statement would be considered at a later stage.

#### Level of ambition

Views were expressed on:

- to further enhance energy efficiency and/or carbon intensity;
- the 2030 level of ambition, including 5% take-up of alternative fuel by 2030;
- the 2050 level of ambition;
- other possible mid-point target years; and
- additional formulations.

However, the meeting could not come to a solid agreement.

### List of candidate measures

Section 4 of the strategy lists candidate measures. There was convergence, in general, keeping the structure of the Initial Strategy on candidate measures.

### Green corridor

MEPC 79 agreed on the voluntary introduction of the Green corridor concept into a national action plan or voluntary cooperation between the ports and shipping sector.

However, introducing the same into the IMO Strategy was debated intensively, as some members saw this initiative as "unilateral action" by selected States and Regions.

There was no clear agreement on this point.

### Mid-term measures

While EEXI and CII are the short-term measures for enforcement on 1 January 2023, mid-term (2023-2030) and long-term (beyond 2030) measures were also under consideration.

MEPC 76 (June 2021) decided to take the following phased action for developing the mid-term measures:

- Phase I (Spring 2021 – Spring 2022): Collation and initial consideration of proposals for measures.
- Phase II (Spring 2022 – Spring 2023): Assessment and selection of measures(s) to further develop and select measures identified by phase I and prioritize them.
- Phase III: Development of (a) measure(s) to be finalized within (an) agreed target date(s).

### Feasibility of proposed measures

Many delegations expressed support for the levy-based mechanism as a feasible measure, but no firm conclusion was reached.

### Effectiveness

In general, the global fuel standard (limiting carbon amount in maritime fuels) was considered an effective measure for GHG emission control.

In considering the effectiveness of a "levy", "reward", "feebate" or "flat rate contribution" approach, several

delegations highlighted that such a mechanism could be effective in reducing the price gap between conventional and zero-carbon fuels, while the other delegations stressed that a "levy" type measure alone, unless with a very high carbon price, would not enable to close the price gap.

### **Impact on States**

Concerns were expressed that a levy-based mechanism would transfer the cost to consumers.

### **The way forward**

The discussion will continue toward MEPC 80.

### **GHG lifecycle Assessment guidelines**

#### **Interim report of the correspondence group**

The Group reviewed the interim report of the correspondence group and relevant submissions. Key issues were:

- **Scope of GHG:** CO<sub>2</sub> only or to include other gases and Black Carbon;
- **Methane slip:** Further information on methane slip onboard was provided; and
- **List of fuel and pathways:** So many identified pathways (101 of them) might overwhelm future discussion.

As the report was "interim", no conclusion was made but opinions expressed during the meeting were communicated to the correspondence group.

#### **Biofuel (in relation to GHG reduction)**

Opinions were divided on whether to develop guidelines for recognizing biofuel for its contribution to the reduction of GHG emissions or wait for the completion of the Lifecycle Assessment Guidelines.

### **IMO Ship Fuel Oil Consumption Data Collection System (IMO DCS)**

A Group of Member States jointly suggested amendments to appendix IX of MARPOL Annex VI for regarding data anonymization, rounding and accessibility, with a view to optimizing the use of the DCS.

The paper stressed the need of reporting cargo data and other higher granularity of the fuel consumption reporting:

- split of fuel consumed per the main category of combustion systems (i.e. main engine(s), auxiliary engine(s)/generator(s), oil-fired boilers), and
- split of fuel consumption assigned to port operations while the ship is not underway under its own propulsion.

In addition, it is suggested to consider full public access to

the DCS in a non-anonymized form.

### **Detailed data submission**

Some delegations expressed concerns that if fuel consumption in a more granular way, distinguishing the different uses of the fuel, is required, that would impact ships that are not equipped with flowmeters.

ISWG-GHG 14 scheduled for March 2023 will address the issue

### **Disclosure of the data**

One delegation stressed that the IMO DCS data was already widely in use in industry therefore, could be considered de facto in the public domain. The other delegation stated that EU MRV data had been available to the public for the past four years without major concerns.

Several delegations, recalling regulation 27 of MARPOL Annex VI, expressed concerns about public access to the data.

The matter will be addressed at a future session of the Committee (or intersessional working group meeting) if there is additional submission on this.

### **Route-based actions**

A group of member States and observers proposed route-based actions (RAs) for developing green corridors for distributing low and zero emission fuels. Subsequently, MEPC 79 adopted the amendments to the following resolutions to encourage voluntary participation in the scheme.

- Amendments to MEPC.323(74) on Invitation to Member States to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships and to resolution (MEPC.366(79)); and
- MEPC.327(75) on Encouragement of Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships (MEPC.366(79)).

A few members, including Liberia, requested a cautious approach for using these tools for incentivising ships to aim A or B of CII rating as there are still issues to be resolved in CII ratings, including the definition of low-zero emission fuel until LCA guidelines are completed.

### **Carbon capture**

There were four submission papers for possible accreditation of carbon capture technologies in calculating EEDI, EEXI and CII. Liberia sponsored one of these submissions.

While many delegations expressed the urgency of the matter, several other delegations, stressed that a holistic



approach and careful consideration would be required on this complex issue, such as accounting, storage and disposal, and relevant certification schemes, to ensure effective implementation so that carbon captured would not be released back into the atmosphere. Those delegations emphasized that it would be preferable to finalize the development of the LCA Guidelines before initiating a comprehensive consideration of how to integrate onboard CO<sub>2</sub> capture in the various IMO Instruments.

MEPC 79 decided to defer the discussion to MEPC 80.

### Short-term measures

There were several submissions requesting a review of short-term measures, including correction factors for CII ratings. Due to time constraints and a lack of available slots in the working group, MEPC 79 deferred the discussion to MEPC 80 for detailed discussion by the Air Pollution and Energy Efficiency Working Group.

### PSC actions

MEPC 79 noted the discussion at III 8 on the implementation of CII that not undertaking a corrective action plan by a ship rated D for three consecutive years, or rated as E, will not automatically constitute detainable deficiencies as may be justifiable reasons for not doing so.

### Work toward MEPC 80

Two ISWG-GHG meetings had been authorized by the IMO Council (C 127), and MEPC 79 agreed on the following TOR:

- IMO Strategy on reduction of GHG emissions from ships
- Selection of mid-term measures (not finalizing but just selection)
- IMO DCS data improvement (granularity and data disclosure)
- LCA guidelines (review the work of CG at ISWG-GHG 15)

ISWG-GHG 14 is scheduled for 20-24 March 2023, and ISWG-GHG 15 is scheduled for 26-30 June 2023.

## Plastic litter

Key issues at MEPC 79 were how to undertake the study on plastic litter pollution.

During the discussion, cooperation with other regional regime and UN bodies were emphasised.

MEPC 79 agreed to address the issue further at MEPC 80, and invited members to submit proposals, in particular:

- identify priority areas to be addressed by sub-

projects;

- propose revised terms of reference for the IMO Study on marine plastic litter; or
- comment on how the GloLitter Partnerships Project could contribute towards the fulfilment of the terms of reference for the study.

## Report of sub-committees

### 8th meeting of the Sub-Committee on Ship System and Equipment

MEPC 79 adopted resolution MEPC.368(79) on amendments to the 2014 Standard specification for shipboard incinerators, which removed fire safety elements from the resolution to avoid duplication/contradiction with the SOLAS requirements.

### 8th meeting of the Sub-Committee on Implementation of IMO Instruments

MEPC 79 noted the following:

- Current and improvement work of functionality and the interoperability of the port reception facility module in GISIS

And agreed:

- that the Harmonized System of Survey and Certification (HSSC) only contain survey items emanating from the mandatory instruments;

And endorsed:

- AFS Convention does not require type approval for coating paints

### 8th meeting of the Sub-Committee on Carriage of Cargoes and Containers

MEPC 79 noted the progress on the work on alternative fuels.

## Special Areas, ECAs and PSSAs

A group of Member States suggested the designation of a particularly sensitive sea area (PSSA) in the North-Western Mediterranean Sea. The designation of a PSSA and the additional associated measures will contribute to protecting cetaceans, minimizing the risk of ship strikes and supporting scientific research on the matter.

Recommended measures included:

- Speed reduction (10-13 knots);
- Notified observed cetaceans; and
- Use of night vision or infrared camera.

MEPC 79 agreed in principle to the designation of the North-Western Mediterranean Sea as a PSSA and

instructed the Sub-Committee on Navigation, Communication and Search and Rescue (NCSR) to address the associated protective measures proposed for the area.

### New work programme

#### **MARPOL Annex II**

A Group of Member States proposed the revision of MARPOL Annex II in order to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity. The work addresses improving the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity. The new output will complement and strengthen the implementation of MARPOL Annex II, regulations 12 and 13, and resolution MEPC.315(74).

While many concerns were expressed on the additional energy needed for the operation, MEPC 79 approved the proposal for inclusion in the post biennial item for the PPR Sub-Committee.

#### **Pollution prevention equipment in engine rooms**

A Member State proposed a new output to amend relevant paragraphs of the Revised guidelines and specifications for pollution prevention equipment for machinery space bilges of ships (resolution MEPC.107(49)) to ensure the proper functioning of onboard pollution prevention equipment.

MEPC 79 approved the proposal for inclusion in the post biennial item for the PPR Sub-Committee.

### Ongoing military conflict

Many delegations expressed concerns over actions to evade sanctions through ship-to-ship transfers of gas, oil and other natural resources taking place in the Black Sea region and associated increased risks to the marine environment and safety of navigation.

### FURTHER INFORMATION

For further information please contact: [imo@liscr.com](mailto:imo@liscr.com)

## MEPC 79 – Summary of Major Decisions

### PROVISIONAL LIST OF DRAFT RESOLUTIONS AND CIRCULARS

Resolution/Circular ID	Title
MEPC.359(79)	Amendments to MARPOL Annexes I, II and IV concerning regional reception facilities within Arctic Waters and form of IOPP certificate and supplements
MEPC.360(79)	Amendments to MARPOL Annex V concerning regional reception facilities within Arctic waters and Garbage Record Book
MEPC.361(79)	Amendments to MARPOL Annex VI concerning a Mediterranean Sea Emission Control Area for sulphur oxides and particulate matter
MEPC.362(79)	Amendments to MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the Bunker Delivery Note (BDN) and information to be submitted to the IMO Ship Fuel Oil Consumption Database
MEPC.363(79)	Amendments to the 2012 Guidelines for the development of a regional reception facilities plan (Resolution MEPC.221(63))
MEPC.364(79)	2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships
MEPC.365(79)	2022 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI)
MEPC.366(79)	Invitation to Member States to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships
MEPC.367(79)	Encouragement of Member States to develop and submit voluntary national action plans to address GHG emissions from ships
MEPC.368(79)	Amendments to the 2014 standard specification for shipboard incinerators (Resolution MEPC.244(66))
BWM.2/Circ.66/Rev.4	Unified interpretations to the BWM Convention
MEPC.1/CIRC.795/Rev.7	Unified Interpretations to MARPOL Annex VI
MEPC.1/Circ.885/Rev.1	Revised procedure for assessing impacts on states of candidate measures
MSC-MEPC.1/Circ.5/Rev.4	Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies
MSC-MEPC.2/Circ.15/Rev.2	Guidelines for the development, review and validation of model courses