



MEPC 75 BRIEF

The IMO Marine Environment Protection Committee (MEPC) held its 75th session in virtual format from November 16th to 20th, 2020. This Brief provides an overview of the more significant issues progressed at this session. A full report of the meeting will be included in the next ABS International Regulatory News Update.

KEY DEVELOPMENTS

- Approval of Short-Term Measures for GHG Reduction
- Updated Guidelines for EEDI Calculation
- MARPOL Annex VI Amendments for Fuel Oil Sampling
- Updated Guidance Related to BWMS Commissioning Testing
- Draft Ban on HFO in Arctic Waters

ABS RESOURCES

- ABS Global Sustainability Center ([link](#))
- IMO DCS Services ([link](#))
- 2019 BWM Advisory ([link](#))
- ABS Regulatory News ([link](#))
- ABS Rules and Guides ([link](#))

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IMO STRATEGY ON GHG EMISSIONS

The Committee had for its consideration the first draft amendments to MARPOL Annex VI representing short-term measures for GHG emissions reduction, as noted in the *Initial IMO Strategy on Reduction of GHG Emissions from Ships*, MEPC.304(72). Prior to the adoption, the impact of the proposed amendments on Member States must be considered, and supporting technical guidance developed.

Draft Amendments to MARPOL Annex VI to Reduce the Carbon Intensity of Existing Ships

The Committee approved draft amendments to MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping, with a view to adoption at MEPC 76 scheduled for mid-June 2021. If adopted then, these amendments would enter into force on 1 January 2023.

The amendments, representing short-term measures for GHG emissions reduction, utilize a two-part approach to address both technical and operational aspects of limiting GHG emissions:

1) EEXI (Energy Efficiency Existing Ship Index)

Similar to current regulations on EEDI (Energy Efficiency Design Index), the EEXI regulations will establish a Required EEXI for specified ship types, and an Attained EEXI to be calculated for each ship. The calculation of Required EEXI will utilize the existing EEDI reference lines, with a table of reduction factors specific to the EEXI calculation.

Guidelines on the method of calculation of the EEXI, for use in calculating a vessel's Attained EEXI, are planned to be developed prior to entry into force of these amendments.

2) Annual Operational CII (Carbon Intensity Indicator)

New regulations will be introduced to establish a Required Annual Operational CII for specified ship types, and an Attained Annual Operational CII to be calculated for each ship. Utilizing the existing framework of the Ship Energy Efficiency Management Plan (SEEMP), on or before 1 January 2023 ships of 5,000 gross tonnage and above will need to revise their SEEMP to include:

- a) a description of the methodology to be used to calculate the ships Attained Annual Operational CII, and the process that will be used to report this value to the Administration;
- b) the Required Annual Operational CII for the next 3 years;



- c) an implementation plan documenting how the Required Annual Operational CII will be achieved during the next 3 years; and
- d) a procedure for self-evaluation and improvement.

The Confirmation of Compliance (CoC) and Statement of Compliance (SoC) which are associated with fuel oil consumption reporting (Regulation 22A) will be modified to also address the “Operational Carbon Intensity Rating,” both of which must be reported annually to the Administration. This will require new issuance of CoC and SoC documents when these amendments enter into force.

Each year, the Attained Annual CII shall be documented and verified against the Required Annual CII to determine an operational carbon intensity rating of A, B, C, D or E, indicating a major superior, minor superior, moderate, minor inferior, or inferior performance level for a vessel. A ship rated D for 3 consecutive years or rated as E, shall develop a plan of corrective actions to achieve the required annual operational CII. The corrective action plan is to be included in the SEEMP.

Guidelines on this rating system, and on the calculation of the Required and Attained Annual Operational CII, are planned to be developed prior to entry into force of these amendments.

Written into the text of these MARPOL Annex VI amendments is a requirement for a review of the effectiveness of these regulations that is to be completed by 1 January 2026 to determine if any further amendments are necessary.

Conduct of a Comprehensive Impact Assessment of the Short-Term Measures Before MEPC 76

The Committee approved the terms of reference for the conduct of a Comprehensive Impact Assessment of the short-term GHG reduction measures noted in the MARPOL Annex VI amendments discussed above. As the IMO Secretariat initiates this assessment, a Steering Committee of Member States will be established to oversee this work. A final report on this Comprehensive Impact Assessment will be submitted to MEPC 76 for consideration.

Development of Technical Guidelines on Carbon Intensity Reduction

The Committee noted the work began at the 7th session of the Inter-Sessional Working Group on Greenhouse Gases (ISWG-GHG 7) with regard to the numerous guidance documents needed in order to implement the approved short-term measures on GHG reduction, for both EEXI and Operational CII. A correspondence group was established to carry on the work in developing these guidance documents. The work of this Correspondence Group on the Development of Technical Guidelines on Carbon Intensity Reduction will be submitted to ISWG-GHG 8 in May 2021 for review, and subsequently to MEPC 76 in June 2021 for approval.

Completion of the Fourth IMO GHG Study

Concluding work which began in August 2019, the Committee approved the final report of the 4th IMO GHG Study (2020), which will be published by the IMO Secretariat. While the report noted that carbon intensity has improved between 2012 and 2018, it also notes that emissions are projected to increase from about 90% of 2008 emissions (as of 2018) to 90-130% of 2008 emissions by 2050. This study will be used to inform future discussions on the effectiveness of short-term GHG reduction measures which have been approved, and what the form of future mid- and long-term GHG reduction measures should be.



Development of National Action Plans to Address GHG Emissions from Ships

In support of progressing the ambitious goals of the IMO Initial Strategy on GHG Reduction, the Committee adopted Resolution MEPC.327(75), *Encouragement of Member States to Develop and Submit Voluntary National Action Plans to Address GHG Emissions from Ships*. Noting that one aspect of the Initial Strategy was to strongly encourage Member States to implement national policies which support GHG reduction and address shipping-related sectors which are not necessarily covered by IMO conventions, some Member States have already begun taking actions at the national level to facilitate the reduction of GHG emissions from ships. Member States which have developed National Action Plans in this regard are invited to voluntarily submit these in order to promote experience and information-sharing. When such National Action Plans are submitted, the Committee intends to post information on these plans on the IMO website as well as inform the Committee.

AIR POLLUTION AND ENERGY EFFICIENCY

Amendments to MARPOL Annex VI

The Committee adopted Resolution MEPC.324(75) containing amendments to regulations 1, 2, 14, 18, 20 21 and appendices I and VI of MARPOL Annex VI which:

- Provide definitions of sulphur content, low flashpoint fuel, MARPOL delivered sample, in-use sample and on board sample.
- Require mandatory reporting of required and attained EEDI and other relevant information for ships subject to Regulation 21 (required EEDI).
- Accelerate EEDI Phase 3 in 2022 (from 2025) and increase the reduction factors for specific ship types/sizes as follows (**bold text** indicates amendment to table 1 or table 2 of Regulation 21):

Ship type	Starting year	Reduction rate
Gas carriers	2022 (≥15,000 DWT)	30% (retain)
	2025 (10,000 – 15,000 DWT)	30% (retain)
	2025 (2,000 – 10,000 DWT)	0 – 30% (retain)
Containerships	2022 (200,000 DWT and above)	50%
	2022 (120,000 – 200,000 DWT)	45%
	2022 (80,000 – 120,000 DWT)	40%
	2022 (40,000 – 80,000 DWT)	35%
	2022 (15,000 – 40,000 DWT)	30% (retain)
	2022 (10,000 – 15,000 DWT)	15% - 30%
General cargo ships	2022 (15,000 DWT and above)	30% (retain)
	2022 (3,000 – 15,000 DWT)	0% - 30% (retain)
Refrigerated cargo ships	2025 (5,000 DWT and above)	30% (retain)
	2025 (3,000 – 5,000 DWT)	0% - 30% (retain)
Combination carriers	2025 (20,000 DWT and above)	30% (retain)
	2025 (4,000 – 20,000 DWT)	0 – 30% (retain)
LNG carriers	2022 (10,000 DWT and above)	30% (retain)
Cruise passenger ships having non-conventional propulsion	2022 (85,000 GT and above)	30% (retain)
	2022 (25,000 – 85,000 GT)	0% - 30% (retain)



- d) Amend the EEDI reference line parameters for bulk carriers. (Increase the required EEDI for large bulkers above 279,000dwt). In table 2 of Regulation 21 (Parameters for determination of reference values for the different ship types), row 2.25 for bulk carriers is replaced by the following:

Ship type defined in regulation 2	a	b	c
2.25 Bulk carrier	961.79	DWT of the ship where $DWT \leq 279,000$ 279,000 where $DWT > 279,000$	0.477

- e) Amend the Supplement of the IAPP Certificate for confirmation of the designated sampling point.
 f) Simplify the verification procedure in appendix VI of MARPOL annex VI for the “MARPOL delivered fuel oil sample” and to add verification procedures for the “in-use sample” and the “on board sample”. To ensure a consistent approach to verifying the sulphur limit of the fuel oil delivered to, in-use or carried for use on board a ship until the entry into force of the adopted amendments, MEPC.1 Circular 882, approved at MEPC 74, allows the early application of the draft amendments in Regulations 14.8, 18.8.2 and Appendix VI, until they enter into force.

These amendments are anticipated to enter into force on 1 April 2022.

Furthermore, amendments to regulation 14 will also require installation of an in-use fuel oil sampling point (see MEPC.1/Circ.864/Rev.1), which for existing vessels must be installed before the first IAPP Renewal survey that occurs on or after 1 April 2023.

2020 Guidelines for On Board Sampling of Fuel Oil Intended to be Use or Carried for Use On Board a Ship

Taking into account the 1 January 2020 global implementation of 0.50% sulphur limit for the fuel oil used on board and the 1 March 2020 carriage ban of non-compliant fuel, the Committee approved Circular MEPC.1/Circ.889, *2020 Guidelines for On Board Sampling of Fuel Oil Intended to be Use or Carried for Use On Board a Ship*, which was created in order to provide guidance on the unique aspects of sampling fuel oil which may not be currently in use but is intended to be used. Such sampling may be done via the fuel oil transfer system or, in some instances, directly from the tank using specialized equipment. Some challenges of carrying out such sampling are discussed in this guidance. It is also noted in this circular that system tanks, such as settling or service tanks (i.e. in-use fuel oil) may be sampled using other guidance contained in the previously approved *2019 Guidelines for On Board Sampling for the Verification of the Sulphur Content of the Fuel Oil Used On Board Ships* (MEPC.1/Circ.864/Rev.1).

2020 Guidelines for Monitoring the Worldwide Average Sulphur Content of Fuel Oils Supplied for Use On Board Ships

In support of the IMO’s ongoing monitoring program of the worldwide average sulphur content of fuel oils supplied to ships (as required by Regulation 14.2 of MARPOL Annex VI), the Committee adopted Resolution MEPC.326(75) providing updates to the guidelines for this monitoring. These updates are intended to align with the recent entry into force of the 0.50% global sulphur limit for fuel oils, and they clarify that three categories should be used for monitoring the worldwide average sulphur content of fuel oil – fuel oil not exceeding 0.10%, fuel oil not exceeding 0.50% but above 0.10% and fuel oil exceeding 0.50%. The basis of monitoring is the calculation, on an annual basis, of the average sulphur content of residual fuel and distillate fuel in each of these three categories.



BALLAST WATER MANAGEMENT

Amendments to Regulation E-1 of the BWM Convention (including BWM System Commissioning Test)

The Committee adopted amendments to Regulation E-1 of the Convention to incorporate a requirement for a commissioning test at the time of system installation, as laid out in Resolution MEPC.325(75). This will be considered a requirement of the Initial or Additional Survey which grants issuance of certification reflecting D-2 compliance. The guidelines for this commissioning test have been provided in BWM.2 Circular 70, approved at the MEPC 73 session. The intent of this test is not to qualify the system's Type Approval certification, but to confirm that the system's method of treatment is effective in the installed configuration. The Committee also previously invited Member States to implement commissioning testing as soon as possible for vessels in their registry, and to provide written instructions to the Recognized Organizations which act on their behalf.

Resolution MEPC.325(75) also includes an amendment to the form of the International Ballast Water Management Certificate, which will add a field to acknowledge "Other" alternative ballast water management approaches employed on board that satisfy the objectives of the Convention (in addition to the methods given in Regulations D-1, D-2 and D-4).

The amendments noted above are anticipated to enter into force on 1 June 2022 in accordance with requirements for amending the BWM Convention.

Revised Guidance on BWM System Commissioning Testing

The Committee approved the revised *Guidance for the Commissioning Testing of Ballast Water Management Systems*, which will be released as BWM.2/Circ.70/Rev.1. The revised guidance correlates with the amendments to Regulation E-1 of the Convention which are discussed above, and also provides clarification on several details of the commissioning test, including the source and quality of the uptake water, the total sample volume to be taken for analysis, the size classes of organisms to be analyzed and guidance on who may perform the commissioning test.

Revised Guidance on Ballast Water Sampling and Analysis for Trial Use

The Committee approved the revised *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, which will be released as BWM.2/Circ.42/Rev.2. The revisions to this Guidance include updates to the tables in BWM.2/Circ.42 which provide guidance on acceptable methodologies for determining compliance with the D-2 standard, for both indicative analysis methods (Table 4) and detailed analysis methods (Table 5) for sample testing.

BW Management System Approvals

Final Approval was granted by the Committee for CleanBallast® - Ocean Barrier System submitted by Norway. CleanBallast – Ocean Barrier System treats ballast water by filtration and in-line electrochlorination during uptake and neutralization with sodium thiosulfate at discharge.

Final Approval was granted by the Committee for SeaCURE® Ballast Water Management System submitted by Liberia. SeaCURE® Ballast Water Management System treats ballast water by filtration and disinfection with sodium hypochlorite, followed by neutralization using dichlorination chemicals at discharge.

Final Approval was extended by the Committee for the EcoGuardian™ Ballast Water Management System, the HiBallast™ ballast water management system, and the Electro-Cleen™ System for use in fresh water, submitted by the Republic of Korea.



Final Approval was extended by the Committee for the BALPURE® ballast water management system and the NK-O3 BlueBallast II Plus Ballast Water Management System for use in fresh water, submitted by the United Kingdom and by Liberia, respectively.

Final Approval was not granted for FlowSafe® Ballast Water Management System that uses a combination of two methods for treatment, Sea Water Conditioning Unit (SWCU or Trident Unit) and Electro Chlorination Unit (ECU), submitted by Cyprus.

MISCELLANEOUS

Ban on HFO in Arctic Waters

The Committee approved draft amendments to MARPOL Annex I to incorporate a prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters. Under the provisions of the draft amendments (to be given in a new Regulation 43A in MARPOL Annex I), the prohibited fuel oils are described as “oils, other than crude oils, having a density at 15°C higher than 900 kg/m³ or a kinematic viscosity at 50°C higher than 180 mm²/s”. The use and carriage for use as fuel of these heavy fuel oils would be prohibited in Arctic waters on and after 1 July 2024. For ships to which Regulation 12A of MARPOL Annex I (Oil fuel tank protection) is applicable, this prohibition would be effective on and after 1 July 2029.

Notwithstanding the above, Administrations with coastlines that border on Arctic waters would have leeway to temporarily waive the requirements of this prohibition for vessels under their registry while operating in waters under the jurisdiction of that Administration, up until 1 July 2029, after which no such waivers may be issued. These approved amendments to MARPOL Annex I are to be formally adopted at MEPC 76.

Amendments to AFS Convention

The Committee approved draft amendments to Annexes 1 and 4 of the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS Convention) which establish controls on the use of cybutryne as an anti-fouling system. Cybutryne acts as a biocide in an anti-fouling system, but has been observed to demonstrate leaching into surrounding waters and thereby harming aquatic life. The amended Annex 1 of the AFS Convention establishes controls which prohibit from applying or re-applying anti-fouling systems which contain cybutryne as of 1 January 2023. For ships which bear an anti-fouling system containing cybutryne in the external coating layer on or after 1 January 2023, these controls require that the ship either remove the anti-fouling system or apply a sealant which prevents leaching. In either case, this must take place at the next scheduled renewal of the anti-fouling system after 1 January 2023, but no later than 60 months following the last application to the ship of an anti-fouling system containing cybutryne.

In addition, the amended Annex 4 of the AFS Convention provides a revised model form of the International Anti-Fouling System Certificate. The section of this certificate which addressed compliance options for controlled anti-fouling systems has been updated to address cybutryne. Ships which are affected by this ban on cybutryne must receive an updated IAFS Certificate no later than 2 years after the entry into force of these amendments. Ships which are not affected (i.e. with anti-fouling systems which do not contain cybutryne) must receive an updated IAFS Certificate at the next AFS application to the vessel.

These approved amendments to the AFS Convention are to be formally adopted at MEPC 76.



Revised Carriage Requirements for Methyl Acrylate and Methyl Methacrylate

After the finalization of the 2019 Amendments to the IBC Code (entering into force on 1 January 2021), concern was raised regarding the revised carriage requirements for two specific products, Methyl Acrylate and Methyl Methacrylate. It was noted that these two products have a tendency to undergo polymerization at elevated temperatures (despite having additives in order to mitigate this tendency), and therefore their shipment should include special requirements to address this. The Committee endorsed Circular PPR.1/Circ.9 to recommend use of a revised set of carriage requirements for these products, to be used in lieu of the requirements in chapter 17 in the 2019 Amendments to the IBC Code.

Resubmission of Products Listed in Lists 2 and 3 of the MEPC.2 Circular

The Committee endorsed Circular PPR.1/Circ.10, related to the recent IBC Code amendments adopted at MEPC 74 related to discharge of cargo residues and tank washings containing persistent floating products. This circular requires that products contained in Lists 2 and 3 of the MEPC.2/Circular on *Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code* should also be reassessed in the similar manner as the products contained in chapter 17 and 18 of the Code. All products in List 2 and 3 of the MEPC.2/Circular must be reassessed in these terms by 31 December 2025. Any product that has not been reassessed by the deadline will be deleted from the List and can no longer be shipped.

Replacement of International Certificates of Fitness for the Carriage of Dangerous Chemicals in Bulk

In light of recent amendments to the IBC Code, the Committee approved circular MSC-MEPC.5/Circ.7/Rev.1, *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code*, which revokes the previous version of this circular and makes reference to the most recent IBC Code amendments.

Postponement of Agenda Items

Due to closure of the IMO Building and limitations of the virtual meeting format utilized at this session, the Committee agreed to postpone consideration of several significant proposals and work items, including the following. Related submissions will be referred to MEPC 76.

- 1) Application of BWM Convention to specific ship types (Agenda Item 4)
- 2) Approval of the revised *2020 Guidelines for Exhaust Gas Cleaning Systems* (Agenda Item 5)
- 3) Approval of the draft revised MEPC circular on *Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the EGCS Guidelines*, for dissemination as MEPC.1/Circ.883/Rev.1 (Agenda Item 5)
- 4) Approval of the draft MEPC circular on *Unified interpretations to the NOX Technical Code 2008, as amended* (Agenda Item 5)
- 5) Preliminary overview of data collection and analysis under Regulation 18 of MARPOL VI (Agenda Item 5)
- 6) Action Plan to Address Marine Plastic Litter from Ships (Agenda Item 8)
- 7) Approval of the revised *2020 Guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS)*, and associated amendments to MARPOL Annex I. (Agenda Item 10)
- 8) Proposals for a review of the 2014 Guidelines for the Reduction of Underwater Noise from Commercial Shipping (Agenda Item 14)