TECHNICAL REGULATORY NEWS No. 16/2022 – STATUTORY

IMO UPDATE: MARINE ENVIRONMENT PROTECTION COMMITTEE – MEPC 78

Relevant for ship owners and managers, equipment manufacturers, fuel suppliers

June 2022

The 78th session of the IMO's Marine Environment Protection Committee (MEPC 78) was held remotely from 6 to 10 June 2022. Highlights included the finalization of technical guidelines for the upcoming EEXI, CII and SEEMP regulations; approval of a proposal for a sulphur emission control area (SECA) in the Mediterranean Sea; and further discussions on the revision of the IMO GHG Strategy scheduled for 2023, and future technical and market-based measures.

Meeting highlights

- Finalization of guidelines for the EEXI, CII and SEEMP
- Consideration of revisions to the IMO GHG Strategy and future technical and market-based measures
- Approval of a new sulphur emission control area (SECA) expected to take effect from 1 July 2025, subject to final adoption at MEPC 79 in December 2022
- Adoption of amendments to MARPOL Annex I and the IBC Code on watertight doors
- Adoption of amendments to MARPOL Annex II on the Hazard Evaluation Procedure for chemical tanker products
- Extension of the ballast water experience building phase

Adoption of amendments to mandatory instruments

MEPC 78 adopted amendments to the following IMO instruments:

MARPOL Annex I and the IBC Code – watertight doors

Amendments to MARPOL Annex I and the IBC Code concerning watertight doors were adopted to harmonize the consideration of watertight doors in damage stability calculations with those in SOLAS. The amendments apply to all oil and chemical tankers and will not have any impact on existing ships.

The amendments will enter into force on 1 January 2024 and on 1 July 2024 respectively.

MARPOL Annex II – revised GESAMP Hazard Evaluation Procedure

Amendments to Appendix I of MARPOL Annex II related to the revised GESAMP Hazard Evaluation Procedure used for classification of new products carried on chemical tankers were adopted. Column E1 is reassigned for the rating of the flashpoint, and Column C3 concerning inhalation toxicity has been expanded to introduce sub-categorization with thresholds for mist and vapour concentrations.

The amendments will enter into force on 1 November 2023.

Harmful aquatic organisms in ballast water

Experience building phase (EBP)

The EBP for the Ballast Water Management (BWM) Convention was extended with a proposal to complete the EBP by autumn 2026. The non-penalization of early-movers provision is applicable for the duration of the EBP. A convention review plan will be prepared by a correspondence group reporting to MEPC 80 in July 2023, including the prioritized topics:

- Challenging uptake water quality for BWM systems
- Areas for improving BWM system performance and reliability, including crew training and maintenance
- The potential to verify BWM system performance outside of Port State Control

Ports with challenging water quality (PCWQ)

There was an exchange of views regarding operation in PCWQ with respect to:

- Challenging water quality identification (e.g. BWM systems not able to operate due to challenging water quality)
- Aspects of ballast water exchange plus treatment (BWE+BWT) (e.g. port/coastal state authorities determine where ballast water exchange could take place)
- Whether operation in PCWQ and subsequent BWE+BWT can be considered as a contingency measure or are part of anticipated operation which should be approved in the BWM Plan

Further discussions will take place at MEPC 79 in December 2022 if proposals are submitted.

Guidance on modifications to BWMS using active substances

Guidelines for re-evaluations when modifications are made to a BWM system using active substances was adopted. Re-evaluations by

GESAMP are applicable to modifications which could influence the outcome of the risk assessment for the environment, human health or ship safety (e.g. removal of filter or increased dose).

International Ballast Water Management Certificate (IBWMC)

MEPC approved a unified interpretation of Appendix I to the BWM Convention (form of the IBWMC). It clarifies how to issue certificates for other approaches to BWM, especially with respect to ships occasionally engaged in an international voyage, ships exempted due to voyages between specific ports or locations, and for ships with "other approach" in accordance with Regulations A-4, A-5, B-3.6 or B-3.7.

Temporary storage of treated sewage and grey water in ballast tanks

MEPC 78 discussed principles related to the temporary storage of treated sewage or grey water in ballast tanks. Ballast water discharges from ballast tanks used also for other purposes should be compliant with the BWM Convention, while other issues should be addressed in the context of MARPOL Annex IV. However, MEPC 78 did not confirm if temporary storage is acceptable in principle and deferred the matter to MEPC 79 in December 2022.

Air pollution and energy efficiency

Exhaust Gas Cleaning Systems (EGCS)

Guidelines for risk and impact assessment of the discharge water from EGCS were approved. The guidelines provide information on the recommended methodology for risk and impact assessment that member states should follow when considering local or regional regulations concerning EGCS discharge water.

Guidance regarding the delivery of EGCS residues to port reception facilities was approved. These best practises are intended to assist both ship operators and port states in assuring the proper management and disposal of EGCS residues and stored discharge water form EGCS into port reception facilities.

Reporting of flashpoint in the Bunker Delivery Note (BDN)

Following the approval of amendments to SOLAS Chapter II-2 by MSC 105 in relation to the flashpoint of oil fuel, amendments to Appendix V of MARPOL Annex VI (Information to be included in the BDN) were approved subject to adoption at MEPC 79. The following new item has been added to the BDN: "Flashpoint (°C) or a statement that flashpoint has been measured at or above 70°C".

Unified interpretations

MEPC approved a unified interpretation of Regulation 18.3 of MARPOL Annex VI with regard to the use of biofuels. The amendment clarifies that fuels with a biofuel content up to 30% in principle fall under the definition of marine fuel oil derived from petroleum refining (Regulation 18.3.1) and no further NO_x testing is required. For fuels with a biofuel content of more than 30%, it needs to be verified that the engine is not altered beyond the approved parts and settings of the NO_x Technical File (Regulation 18.3.2) in order to not require NO_x testing.

MEPC 78 also approved a unified interpretation of Paragraph 4.4.6.1 of the NO_x Technical Code 2008, clarifying the process for on-board testing, definitions of the engine family concept for engines with Selective Catalytic Reduction (SCR) systems, and interpreting requirements for parent engine NO_x tests.

Reduction of GHG emissions

Technical guidelines for the EEXI, CII and SEEMP

MEPC 78 finalized guidelines related to the EEXI, CII and SEEMP. With these guidelines adopted, the EEXI, CII and SEEMP are ready for implementation. The EEXI technical file needs to be approved before the first annual, intermediate or renewal IAPP survey or the initial IEE survey on or after 1 January 2023. The SEEMP Part III needs to be approved and on board by 1 January 2023. The first reporting of the CII based on 2023 data is due no later than 31 March 2024.

The following is a short summary of the main discussions and changes:

EEXI guidelines: Included option for in-service performance measurements.
CII calculation guidelines (G1): The capacity parameter for ro-ro cargo ships was changed to gross tons.
CII reference lines guidelines (G2): Reference lines for ro-ro cargo ships and ro-ro cargo (vehicle) ships were updated; the reference line for ro-ro passenger ships was split in two, with a separate line for high-speed craft (HSC) and an updated line for ro-ro passenger ships excluding HSC.
CII rating guidelines (G4): Updates to the rating thresholds for the ship types with updated reference lines.
Interim CII correction factor and voyage adjustment guidelines (G5): New guideline which includes correction factors and voyage adjustments for various ship types and circumstances. There was an extensive discussion on which corrections and adjustments to include. Corrections for adverse weather and extensive port and waiting time were not included at this stage and will need to be raised at the review in 2025.
DCS verification guidelines: Provisions for verification of the CII as part of the fuel data collection system (DCS) reporting.
SEEMP guidelines: Updated to include guidance on developing and verifying the SEEMP Part III (ship operational carbon intensity plan). There were minor adjustments to other parts of the guidelines.
Port State Control guidelines: MEPC 78 requested the sub-committee on Implementation of IMO Instruments (III 8) (July 2022) to consider if failing to implement the implementation plan in SEEMP Part III is a detainable deficiency.

Revision of the Fuel Data Collection System

MEPC 78 approved amendments to Appendix IX of MARPOL Annex VI to include information related to the EEXI and CII in the fuel data collection system (DCS). Further revisions the DCS will considered, including transparency of data and cargo data.

Revision of the IMO GHG Strategy

There was an extended exchange of views on the scheduled revision of the IMO GHG Strategy, but with no new decisions being made. The main divergence in views between countries is the split between those calling for full decarbonization by 2050, and those calling for further assessments on feasibility and impacts on states before such a decision can be made.

The MEPC will adhere to the established workplan on this matter and make its decision at MEPC 80 in July 2023. Further discussions will take place at an intersessional meeting agreed to be held back-to-back with MEPC 79 in December 2022. There is also the expectation that an intersessional meeting will be held in the spring of 2023 dedicated to this matter.

Mid and long-term measures to reduce GHG emissions

There was an extensive discussion on potential mid and long-term measures at the intersessional meeting held two weeks prior to MEPC 78. At this meeting, proposals for various market-based measures were discussed:

- **A levy system** based on absolute well-to-wake GHG emissions. The GHG price is determined by the IMO.
- **A levy system** based on CII performance, where ships with CII performance below a benchmark pay a contribution per tonne CO_2, and ships with performance above the benchmark receive a reward. The contribution is determined by the IMO, while the reward depends on the level of achievement of the fleet.
- **A levy system** based on absolute tank-to-wake CO_2 emissions where the revenues are partly used to provide a direct rebate to zero-emission vessels. The CO_2 price and rebate are determined by the IMO.
- **An emissions cap-and-trade system,** similar to the EU ETS, where the well-to-wake GHG emission level is set by the IMO and allowances are auctioned out. The carbon price is then determined by the market.

Additionally, there were discussions on a proposed technical measure in the form of a well-to-wake GHG intensity fuel standard.

MEPC 78 did not develop these proposals further, and discussions will continue at an intersessional meeting prior to MEPC 79 and following meetings. The decision on which measures to develop into regulations will be made at MEPC 80 in July 2023.

On-board CO_2 capture

Due to time constraints, only a very brief discussion was held on provisions for taking into account on-board CO_2 capture in instruments such as the EEDI and CII. The topic will be discussed further at future meetings.

Lifecycle GHG/carbon intensity for marine fuels

An intersessional working group prior to MEPC 78 developed draft guidelines on lifecycle GHG/carbon intensity for marine fuels. The work will continue through a correspondence group reporting to MEPC 80 in July 2023.

Marine plastic litter

Marking of fishing gear

MEPC 78 discussed whether the marking of fishing gear should be made mandatory under MARPOL Annex V or if a voluntary approach should be pursued. It was concluded to make marking of fishing gear mandatory through MARPOL and to develop a circular as a short-term measure to promote the implementation of fishing gear marking.

Garbage record book

Amendments to MARPOL Annex V to make the Garbage Record Book mandatory also for ships of 100 gross tonnage and above and less than 400 gross tonnage were approved with a view to adoption at MEPC 79.

Pollution prevention and response

Following the adoption of the amendments to the Anti-Fouling System (AFS) Convention to include controls on cybutryne adopted at MEPC 76, three revised guidelines were adopted at this session concerning the sampling, inspection and survey of anti-fouling systems.

Draft amendments to MARPOL Annexes I, II, IV, V and VI concerning regional reception facilities in the Arctic were approved together with amendments to the 2012 Guidelines for the development of a regional reception facility plan (Resolution MEPC.221(63)). The amendments are subject to adoption at MEPC 79.

In connection with the revision of the Integrated Bilge Water Treatment System (IBTS) guidelines at PPR 7, it was questioned whether forced evaporation by heating of oily bilge water for the purpose of disposal is acceptable. MEPC was asked to clarify this and after discussing the issue, it was concluded that in principle forced evaporation by heating of oily bilge water is acceptable as a means of disposal and delegations were invited to submit proposals to PPR 10 for amending MARPOL Annex I to reflect this.

Identification and protection of special areas, ECAs and PSSAs

MEPC 78 considered and approved a proposal for a Sulphur Emission Control Area (SECA) to be established in the Mediterranean Sea. The proposal is subject for adoption at MEPC 79 in December of this year, and is expected to take effect from 1 July 2025. The requirement will be the same as for other SECAs, mandating the use of fuel oil with a sulphur content of 0.10% or of an EGCS.

Work programme

MEPC 78 agreed to new or amended outputs to the work programme as follows:

A new output on the development of a practical guide on the development of local-level marine spill contingency plans to support key authorities in effectively implementing the OPRC Convention.

Amend the title of the existing output 1.26 to “Revision of MARPOL Annex IV and associated guidelines” and expand the scope to amend

the definition of "person" as provided in MARPOL Annex IV, taking into account persons other than the crew and passengers.

Recommendations

DNV recommends that our customers evaluate possible technical and operational modifications to comply with the upcoming GHG requirements and, when applicable, to prepare and submit an EEXI Technical File and a SEEMP Part III for verification.

For more information about decarbonizing shipping and about the relevant DNV services relating to GHG emissions, visit:

- www.dnv.com/decarbonize-shipping
- www.dnv.com/cii
- www.dnv.com/eexi
- www.dnv.com/seemp3

Provisional list of resolutions and circulars

Please note that the list and document references below are provisional:

Resolution MEPC.343(78)
Amendments to MARPOL Annex I (watertight doors)

Resolution MEPC.344(78)
Amendments to MARPOL Annex II (abbreviated legend to the revised GESAMP Hazard Evaluation Procedure)

Resolution MEPC.345(78)
Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) (watertight doors)

Resolution MEPC.346(78)
2022 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)

Resolution MEPC.347(78)
Guidelines for the verification and company audits by the administration of Part III of the Ship Energy Efficiency Management Plan (SEEMP)

Resolution MEPC.348(78)
2022 Guidelines for administration verification of ship fuel oil consumption data and operational carbon intensity

Resolution MEPC.349(78)
2022 Guidelines for the development and management of the IMO ship fuel oil consumption database

Resolution MEPC.350(78)
Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI)

Resolution MEPC.351(78)
2022 Guidelines on survey and certification of the attained Energy Efficiency Existing Ship Index (EEXI)

Resolution MEPC.352(78)
2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)

Resolution MEPC.353(78)
2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2)

Resolution MEPC.354(78)
2022 Guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4)

Resolution MEPC.355(78)
2022 Interim guidelines on correction factors and voyage adjustments for CII calculations (CII guidelines, G5)

Resolution MEPC.356(78)
2022 Guidelines for brief sampling of anti-fouling systems on ships

Resolution MEPC.357(78)
2022 Guidelines for inspection of anti-fouling systems on ships

Resolution MEPC.358(78)
2022 Guidelines for survey and certification of anti-fouling systems on ships

BWM.2/Circ.61/Rev.1
2022 Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems

BWM.2/Circ.66/Rev.3
Unified interpretations to the BWM Convention

BWM.2/Circ.13/Rev.5
Methodology for information gathering and conduct of work of the GESAMP-BWWG

MEPC.1/Circ.895/Rev.1
Unified interpretations to the NOx Technical Code 2008, as amended

MEPC.1/Circ.795/Rev.6
Unified interpretations to MARPOL Annex VI

MEPC.1/Circ.899
2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems

MEPC.1/Circ.900
2022 Guidance regarding the delivery of EGCS residues to port reception facilities

MEPC.1/Circ.901
Guidance for submission of data to the IMO data collection system of fuel oil consumption of ships from a State not Party to MARPOL Annex VI

MEPC.1/Circ.902
Guidance on methods, procedures and verification of in-service performance measurements

MSC-MEPC.1/Circ.5/Rev.3
Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies

FAL.2/Circ.133-MEPC.1/Circ.903-MSC.1/Circ.1646-LEG.2/Circ.4
List of certificates and documents required to be carried on board ships, 2022

Contact

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