

A large, rusted metal sculpture of a ship's bow is the central focus, standing in a modern building with a glass and steel facade. A bronze statue of a worker in a hard hat and safety gear stands atop the bow. The sculpture is weathered and shows signs of age. The building's interior is visible through the glass walls, showing a modern office space with blue lighting. The overall scene is dramatically lit with blue and white light.

NEWS BRIEF

MEPC 79





NEWS BRIEF: MEPC 79

The IMO Marine Environment Protection Committee (MEPC) held its 79th session from December 12 to 16, 2022. This Brief provides an overview of the more significant issues progressed at this session.

KEY DEVELOPMENTS

- Revision of the IMO GHG Reduction Strategy
- Development of Marine Fuel Life Cycle Guidelines
- Adoption of the Mediterranean SOx ECA
- Proposal for a North-West Mediterranean PSSA
- Expansion of Garbage Record Book Requirement to Address Plastic Litter

ABS RESOURCES

- ABS Regulatory News ([link](#))
- ABS Global Sustainability Center ([link](#))
- ABS EEXI Services ([link](#))
- ABS CII Services ([link](#))
- ABS Environmental Monitor™ ([link](#))
- ABS Greenhouse Gas Inventory and Carbon Accounting ([link](#))
- ABS Rules and Guides ([link](#))

WORLD HEADQUARTERS

1701 City Plaza Drive
Spring, TX 77389 USA
P 1-281-877-6000
F 1-281-877-5976
ABS-WorldHQ@eagle.org
www.eagle.org

© 2022 American Bureau of Shipping.
All rights reserved.

CONTENTS (CLICK TO FOLLOW)

IMO STRATEGY ON GHG EMISSIONS

- **Revision of the IMO Strategy for GHG Reduction**
- **Further Enhancements to Energy Efficiency and Carbon Intensity**
- Revision/Additional Checkpoints for Levels of Ambition in GHG Reduction
- **Proposals for Additional Formulations of Levels of Ambition**
- **Candidate GHG Reduction Measures**
- **Revised Procedures for Impact Assessments**
- **Development of Marine Fuel Life Cycle Guidelines**
- **Discussion on Carbon Capture Technologies**

MARINE POLLUTION AND ENERGY EFFICIENCY

- **Designation of the Mediterranean Sea as an Emission Control Area for Sulphur Oxides**
- **Amendments to MARPOL Annexes I, II, IV, V and VI – Regional Arrangements for Port Reception Facilities in the Arctic**
- **Amendments to the 2012 Guidelines for Development of a Regional Reception Facility Plan (MEPC.221(63))**
- **Amendments to Appendix V of MARPOL Annex VI – Flashpoint Information on Bunker Delivery Note**
- **Amendments to Appendix IX of MARPOL Annex VI – Information to be Submitted to the IMO Ship Fuel Oil Consumption Database**
- **Revised Guidelines on the Energy Efficiency Design Index (EEDI)**
- **Amendments to Unified Interpretations of MARPOL Annex VI**
- **Discussion on Risks of EGCS Discharge Water**
- **Discussion on Impact of Black Carbon Emissions on the Arctic**

BALLAST WATER MANAGEMENT AND MARINE BIOSAFETY

- **Proposal to Designate the North-Western Mediterranean Sea as a Particularly Sensitive Sea Area**
- **Amendments to the BWM Convention – Form of the Ballast Water Record Book**
- **Unified Interpretations of the BWM Convention**
- **Temporary Storage of Grey Water or Treated Sewage in Ballast Tanks**
- **Application of the BWM Convention to Ships Operating at Ports with Challenging Water Quality**
- **BWM System Approvals**



CONTENTS (CONTINUED)

MARINE PLASTIC LITTER FROM SHIPS

- Amendments to MARPOL Annex V – Garbage Record Book
- Status of the IMO Study on Marine Plastic Litter

OTHER DEVELOPMENTS

- Amendments to the 2014 Standard Specification for Shipboard Incinerators (Resolution MEPC.244(66))
- Improvement of Effectiveness of Cargo Tank Stripping, Tank Washing and Pre-Washing Procedures
- Revision of Guidelines for Pollution Prevention for Machinery Space Bilges

IMO STRATEGY ON GHG EMISSIONS

Revision of the IMO Strategy for GHG Reduction

The Committee received numerous submissions related to its ongoing revision of the *Initial IMO Strategy on Reduction of GHG Emissions from Ships* (MEPC.304(72)). Member States extensively discussed the revision of ambition levels of the Initial Strategy towards decarbonization of shipping. The 2030 and 2050 revised targets are still being discussed, along with additional intermediate checkpoint leading up to 2050. In addition, the committee further discussed the implementation of a “basket of measures” in the Revised Strategy, to support achieving the GHG reduction goals. The revision of the Initial Strategy will continue to be discussed in the Intersessional Working Group on GHG Reduction (ISWG-GHG 14 in March 2023), and a Revised Strategy is expected to be adopted at MEPC 80 (July 2023).

The Revised Strategy is expected to include or address the following:

Further Enhancements to Energy Efficiency and Carbon Intensity

Several delegations are proposing:

- Carbon Intensity of the ships to continue to decline through the implementation of further phases of the energy efficiency design index (EEDI) for new ships;
- Carbon Intensity Indicator to be reduced 6 – 7 % annually to ensure a 1.5° C compatible improvement in the carbon intensity of the ships.

The proposals accelerate the GHG reductions currently detailed by these regulations. This more exacting approach will drive industry to adopt innovative and more efficient solutions.

Revision/Additional Checkpoints for Levels of Ambition in GHG Reduction

Many delegations insisted on raising the ambitions of existing check points of 2030 and 2050 along with introducing additional ambitions for 2040.

For 2030:	<ul style="list-style-type: none">• The carbon intensity of international shipping (CO₂ emissions per transport work) to be reduced by at least 40-60% compared to 2008;• The Lifecycle GHG emissions from international shipping to be reduced by at least 40% compared to 2008;• The energy used in international shipping to comprise at least 5 – 35% of zero/net – zero fuels on a Well-to-Wake lifecycle assessment basis.
-----------	---

For 2040:	<ul style="list-style-type: none"> Energy used by international shipping to comprise at least 50-75% of zero or near-zero emissions on a Well-to-Wake lifecycle assessment basis; Reduce CO₂ and/or lifecycle GHG emissions of international shipping by 50 and 88% respectively compared to 2008.
For 2050:	<ul style="list-style-type: none"> Phase out to zero/net zero GHG/CO₂ emissions at the latest and aim for a neutral fleet; Energy used by international shipping to comprise of at least 90% from alternative fuels.

Proposals for Additional Formulations of Levels of Ambition

Apart from the main objective of the reduction of CO₂/GHG emissions, many delegations have proposed additional levels of ambition such as:

- IMO is invited to establish certain green corridors by 2030, aim by 2035 to be present at all major trade routes and by 2040 to be completely decarbonized;
- Address safety, environmental and seafarers' training issues arising from the construction/conversion and operation of ships using alternative fuels by 2028;
- Make deep cuts to Black Carbon (BC) emissions in and near the Arctic and include BC in CO_{2e} metrics;
- Ensure that climate vulnerable nations are fully involved and enabled to participate in all aspects of the shipping industry's just and equitable green transition;
- Enhance collaboration between UN agencies and between UN and other national and international agencies to speed up climate action.

Candidate GHG Reduction Measures

While discussing the development of the Revised IMO Strategy on Reduction of GHG Emissions from Ships to be adopted at MEPC 80, numerous Member States expressed support for implementation of an integrated basket of measures to reduce GHG emissions, in which those measures implemented earlier (short-term measures) will serve to inform and target measures implemented later (mid- and long-term measures).

Approaches to GHG reduction which are being considered for inclusion in this basket of measures include:

- 1) Short-term measures already agreed (EEXI and CII)
- 2) Voluntary measures already agreed (Development of National Action Plans on GHG)
- 3) Global fuel standards and support for uptake of low-carbon and zero-carbon fuels
- 4) Market-based measures implementing a mandatory GHG levy

The Candidate Measures may directly reduce the GHG emissions from ships or be a supportive action to reduce GHG emissions from ships.

A. GHG Fuel Standard (GFS)

The GHG Fuel Standard is a regulatory mechanism that stipulates the amount of carbon or GHG equivalent permitted in marine fuels at a given period by requiring the use of fuels with a lower GHG footprint and progressively lower the GHG content. A standard methodology to quantify both Well-to-Tank (WtT) emissions and Tank-to-Wake (TtW) should be developed and agreed upon to enable such a GHG fuel standard. The Well-to-Wake (WtW) Lifecycle Approach (LCA) is critical to avoid stimulating fuel use that is attractive on a TtW basis while generating significant GHG emissions at the entire GHG footprint.

B. Revenue raising concept candidate mid-term measures

The proposed Market-Based Measures (MBMs) seek to establish financial mechanisms to support first movers for transitioning to low and near-zero fuels and to recognize the impact on States like the GHG emissions/fuel levy/feebate approach, the Emission Cap-and-Trade System (ECTS) or the funding/reward system based on ships performance benchmarking:

1. The GHG levy establishes a carbon/GHG price for emissions from international shipping and revenues are paid to a central fund manager. The funds would assist the acceleration of decarbonization efforts, applied R&D, assistance in supporting the green energy transition, fuel infrastructure development, and other purposes.
2. The ECTS establishes a carbon price applicable to all carbon or GHG emissions and allows market factors to determine price at a given time. A cap determines the total amount of greenhouse gases that ships can emit. Emission allowances can be traded as needed through auctioning or other allocation processes.
3. The funding/reward benchmarking proposal establishes financial costs on ships rated as E or D under the CII framework and offers funding for capacity building, R&D, and a variable reward for ships receiving A and B ratings under the CII.

Revised Procedures for Impact Assessments

The Committee received the report of the Intersessional Working Group on GHG Reduction (ISWG-GHG 13) proposing a revised procedure for assessing impacts on States of candidate measures for GHG reduction in shipping. This procedure has been revised to more explicitly require that the impacts on States should be assessed before adoption of the measure, and also to detail the responsibilities of the IMO Secretariat to facilitate the comprehensive impact assessment.

The revised document will be issued as circular MEPC.1/Circ.885/Rev.1.

Development of Marine Fuel Life Cycle Guidelines

The Committee received an interim report from the Correspondence Group on Marine Fuel Life Cycle GHG Analysis, which was tasked by MEPC 78 with the development of draft guidelines on life cycle GHG intensity of marine fuels (LCA Guidelines). At the current stage, the Correspondence Group has made progress in developing a list of main initial fuel production pathways and feedstocks, for which they will develop methodologies that allow for the calculation of Well-to-Tank, Tank-to-Wake and entire Well-to-Wake GHG emissions default values for the fuels identified. Pathways have been assessed for many different fuel types to identify their feedstock, carbon source, process type and source of energy used in production.

The Correspondence Group also made progress on the development of the Fuel Lifecycle Label (FLL) as a technical tool to collect and convey information relevant for the lifecycle assessments. It was suggested that the FLL would be produced by fuel suppliers and delivered to ships with Well-to-Tank emission factors and minimum information necessary for calculating Tank-to-Wake emissions.

The Correspondence Group will continue work on development of the LCA Guidelines and is expected to submit a finalized report to MEPC 80 (July 2023)

Discussion on Carbon Capture Technologies

The Committee received several submissions related to recognition of Onboard Carbon Capture and Storage (OCCS) and Onboard Carbon Capture, Use and Storage (OCCUS) in relation to the EEDI / EEXI and CII frameworks. Member states recognized the importance of supporting this technological approach to reducing GHG emissions, as well as the importance of considering the accounting, verification and certification of such systems to

enable their use and to ensure responsible handling and storage of the captured carbon dioxide. Some delegations highlighted the link with the ongoing Correspondence Group on Lifecycle Guidelines and that the end usage of the captured carbon could be handled by these guidelines, and thus identified the need to postpone the discussion until the Correspondence Group has issued its final report. Due to time constraints and the already high workload of the Intersessional Working Group on GHG Reduction, further discussion on this subject will be postponed to MEPC 80 (July 2023).

MARINE POLLUTION AND ENERGY EFFICIENCY

Designation of the Mediterranean Sea as an Emission Control Area for Sulphur Oxides

The Committee adopted Resolution MEPC.361(79) establishing a new Emission Control Area (ECA) for the Mediterranean Sea as a whole. The approval of this new ECA would require vessels to utilize fuel oil of 0.10% m/m sulphur content when operating anywhere within the Mediterranean Sea. The resolution also provides amendments to MARPOL Annex VI that will acknowledge the Mediterranean Sea alongside other existing ECA's, provide a formal description of the ECA by coordinates, and confirm the requirement to utilize fuel oil of 0.10% m/m sulphur content when operating in this area.

These amendments will enter into force on 1 May 2024, but ships operating in this ECA will be exempt from compliance with the 0.10% m/m sulphur content standard for fuel oil during the first 12 months immediately following entry into force of the amendment (in accordance with MARPOL Annex VI / Regulation 14.7).



Figure 1. Contracting Parties to the Barcelona Convention (in grey) and proposed area of the Mediterranean SOx ECA (in blue) [Source: MEPC 78/11]

Amendments to MARPOL Annexes I, II, IV, V and VI – Regional Arrangements for Port Reception Facilities in the Arctic

The Committee adopted Resolutions MEPC.359(79), MEPC.360(79) and MEPC.362(79) containing several amendments to MARPOL which would allow States with coastline bordering Arctic waters to meet their obligations for providing adequate port reception facilities for disposal of ships' wastes. These amendments acknowledge the infrastructure limitations faced by ports in Arctic regions, and provide the option for States in these regions to provide adequate reception facilities by means of agreed regional arrangements. The implementation of such "Regional Arrangements" will require the development of a Regional Reception Facility Plan (RRFP) based on the *Guidelines for Development of a Regional Reception Facility Plan* (MEPC.221(63), as amended).



Additionally, it was recognized that some Arctic states may have multiple coastlines, some of which do not border Arctic waters. The amended regulations would allow such states to enter into “Regional Arrangements” agreements, but only to support the needs of their ports in Arctic waters. Use of this “Regional Arrangements” concept cannot be applied to any ports outside of Arctic waters. Such States will still be obligated to provide adequate reception facilities for wastes at their non-Arctic ports.

These amendments will enter into force on 1 May 2024.

Amendments to the 2012 Guidelines for Development of a Regional Reception Facilities Plan (MEPC.221(63))

In relation to the MARPOL amendments noted above, the Committee also adopted Resolution MEPC.363(79) containing amendments to the *2012 Guidelines for Development of a Regional Reception Facility Plan (MEPC.221(63))*. Whereas these Guidelines previously only addressed small island developing States (SIDS), the amendments extend the guidelines to also apply to States with coastline bordering Arctic waters. The revised guidelines will become applicable upon entry into force of the above noted amendments to MARPOL Annexes I, II, IV, V and VI.

Amendments to Appendix V of MARPOL Annex VI – Flashpoint Information on Bunker Delivery Note

The Committee adopted Resolution MEPC.362(79) containing an amendment to Appendix V (“Information to be included in the bunker delivery note”) of MARPOL Annex VI to include flashpoint as mandatory information in the bunker delivery note. The draft amendment is intended to enhance the safety of ships related to use of fuel oil by addressing concerns regarding the verification of the flashpoint of bunkered fuel oil.

This amendment will enter into force on 1 May 2024.

Amendments to Appendix IX of MARPOL Annex VI – Information to be Submitted to the IMO Ship Fuel Oil Consumption Database

The Committee adopted Resolution MEPC.362(79) containing an amendment to Appendix IX (“Information to be Submitted to the IMO Ship Fuel Oil Consumption Database”) of MARPOL Annex VI to include reporting of information related to EEXI and CII and their associated guidelines. The amendment is intended to provide a more complete reporting of information to the IMO for future assessment of global trends in ship fuel efficiency. This amendment will enter into force on 1 May 2024.

The additional data to allow for demand-based measurements in the amended Appendix IX include:

- Year of vessel delivery
- Attained EEDI (if applicable)
- Attained EEXI (if applicable)
- For ships which Regulation 28 of MARPOL Annex VI applies:
 - Applicable CII
 - AER supply-based CII which uses DWT as the capacity; or
 - cgDIST supply-based CII which uses GT as the capacity
 - Required annual operational CII
 - Attained annual operational CII before any correction
 - Attained annual operational CII
 - Operational carbon intensity rating (A, B, C, D, or E)
- CII for trial purpose (none, one or more on voluntary basis – MEPC.325(78))
 - Energy Efficiency Performance Indicator EEPI (gCO₂/t/nm)
 - cbDIST (gCO₂/berth/nm) metric
 - cIDIST (gCO₂/m/nm) metric
 - Energy Efficiency Operational Indicator EEOI ((gCO₂/t/nm or others)

In addition, the Report of fuel oil consumption data submitted to the IMO Ship Fuel Oil Consumption Database in GISIS (Reporting year: 2021) highlighted that the Secretariat carried out a quality control and verification process of the data submitted to GISIS to identify missing ships and obvious errors in the submitted data. Among the identified errors were the duplication of reporting, incorrect ship type, unrealistic characteristics like the “hours under way”, incorrect reporting of the VLSFO and LFO under the “Other” category.

Revised Guidelines on the Energy Efficiency Design Index (EEDI)

The Committee adopted Resolution MEPC.364(79) containing the *2022 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships*, superseding the previous version of these guidelines. Updates to the guidelines include introducing ethane into the list of fuels and providing a conversion factor (C_F) for use in calculations, clarification of the maximum allowable deduction due to the shaft generator, and clarification to provide a consistent approach for treatment of multiple load lines.

The Committee also adopted Resolution MEPC.365(79) containing the *2022 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI)*, superseding the previous version of these guidelines. Updates to the guidelines were made to reference the latest version of the ITTC Recommended Procedure Regarding the Conduct and Evaluation of Speed/Power Trials. It is noted that the most current version of this standard at the time of sea trials is what will be applicable for each vessel.

Amendments to Unified Interpretations of MARPOL Annex VI

The Committee approved several new or revised Unified Interpretations related to the MARPOL Annex VI:

1) *Regulation 18.3 – Use of Synthetic Fuels*

An interpretation related to fuel oil blends containing biofuel was revised to extend this interpretation to also cover synthetic fuel. As with biofuels, the revised interpretation clarifies that

- a fuel oil which is a blend of not more than 30% by volume of synthetic fuel should meet the requirements of regulation 18.3.1 of MARPOL Annex VI, and
- a fuel oil which is a blend of more than 30% by volume of synthetic fuel should meet the requirements of regulation 18.3.2 of MARPOL Annex VI.

The bunker delivery note must also indicate the identity and amount of synthetic fuel present in a delivered product. For the purposes of this interpretation, a synthetic fuel is a fuel oil from synthetic or renewable sources similar in composition to petroleum distillate fuels.

2) *Regulations 2, 27 and Appendix IX – Boil-off Gas Consumed On Board Ships*

An interpretation related to onboard consumption of boil-off gas (BOG) was revised to clarify that all BOG consumed on board for propulsion or operational needs is to be reported as fuel consumption in the IMO Data Collection System for fuel oil consumption of ships.

3) *Regulation 22.3 – Reporting of Attained EEDI*

A new unified interpretation was approved to address different scenarios the date upon which ships complete the initial survey under MARPOL Annex VI and clarify the date by which EEDI data and relevant information must be submitted to the IMO.

4) *Regulation 8.3 – Inclusion of Annual Operational CII and Rating in the Statement of Compliance*

A new unified interpretation was approved to address questions regarding the addition of the attained annual operational CII and the rating of ships to the form of the Statement of Compliance given in Appendix X of MARPOL Annex VI. It is clarified that the new form should be used from the entry into force date of the CII regulations (1 November 2022), but the new parts for the attained CII and rating will not be populated until 2024 when the relevant values are available.

5) *Regulation 26.3.1 – Ship Energy Efficiency Management Plan (SEEMP) Part III*

A new unified interpretation was approved to address different scenarios of the delivery date and the date upon which a ship changes company or Administration, as it pertains to the three-year implementation plan for achieving the required annual operational CII.

6) *Regulation 28 – Plan for Corrective Action to Achieve the Required Annual Operational CII*

A new unified interpretation was approved to clarify the timeline for implementing a Corrective Action Plan in cases where an inferior carbon intensity rating is assigned to a ship. In case an inferior rating is given for data collected in calendar year YYYY, the revised SEEMP, including the plan of corrective actions, should be verified in year YYYY+1, and it should be developed to achieve the required annual operational CII for data collected in the calendar year YYYY+2.

These revised interpretations will be included in MEPC.1/Circ.795/Rev.7.

Discussion on Risks of EGCS Discharge Water

Following the approval of circular MEPC.1/Circ.899 (*Guidelines for Risk and Impact Assessments of the Discharge Water from Exhaust Gas Cleaning Systems*) at the previous session, the Committee received several submissions related to further considerations of risks presented by the discharge of EGCS wastes into the marine environment. In discussing these submissions, some Member States supported establishing representative emission factors of substances found in the discharge water from EGCS, in order to support a more accurate risk assessment. Other Member States supported a view that the substances found in EGCS discharge water represented a source of pollution and thus conflicted with certain obligations under the United Nations Convention on the Law of the Sea (UNCLOS) requiring States to prevent marine pollution (Article 196) and preventing States from transforming one type of pollution to another (Article 195). Some delegations expressed the view that the use of EGCS scrubbers should be prohibited for this reason, while others stressed that a global prohibition would create uncertainty for the industry, which has in good faith invested in EGCS technology in accordance with the provisions of MARPOL Annex VI.

Following the discussion, the Committee determined to forward documents related to these opposing views to the PPR 11 sub-committee meeting (Spring 2024) to consider this matter further and advise the Committee accordingly.

Discussion on Impact of Black Carbon Emissions on the Arctic

The Committee received several submissions highlighting the commitment made by the Committee during MEPC 62 to address the impact of Black Carbon emissions on the Arctic, and that measures taken so far, such as the ban on heavy fuel oil in Arctic waters, have not provided any effective Black Carbon control measures. The submissions provided an outline for a path to reducing Black Carbon emissions by introducing amendments to MARPOL Annex VI which would mandate the use of marine distillate fuel or other cleaner alternative fuels or methods of propulsion on board ships operating in the Arctic.

Following the discussion, the Committee determined to forward this outline for amending MARPOL Annex VI to the PPR 10 sub-committee meeting (April 2023) to consider this matter further and advise the Committee accordingly.

BALLAST WATER MANAGEMENT AND MARINE BIOSAFETY

Proposal to Designate the North-Western Mediterranean Sea as a Particularly Sensitive Sea Area

The Committee agreed in principle to the designation of the North-West Mediterranean Sea as a Particularly Sensitive Sea Area (PSSA). This area is proposed to be established in order to protect cetaceans from the risk of ship collisions, ship-generated pollution and to increase awareness of a critically important area for the fin whale and the sperm whale.

The proposed PSSA is limited by the coastline of France, Italy, Monaco and Spain and includes areas under the jurisdiction of coastal States. The large size and high shipping traffic of this PSSA was acknowledged, but it was also noted that due to the significance of the ecological, socio-economic and scientific values of the area, several existing national and international protective measures are already implemented in this area. The designation of a PSSA and the additional associated measures will contribute to protecting cetaceans, minimizing the risk of ship strikes and support scientific research on the matter.

The Committee's formal approval for designation of the North-West Mediterranean Sea PSSA will be subject to further development and approval of associated protective measures (APMs) to be developed by the NCSR Sub-Committee. The proposed APMs include recommendations on:

- 1) navigating with caution within the PSSA when and where large and medium cetaceans are present
- 2) limiting speed to between 10 and 13 knots as a voluntary speed reduction
- 3) keeping an appropriate safety distance or speed reduction measures adapted to existing conditions
- 4) reporting and broadcasting of navigational warnings related to cetaceans
- 5) watchkeeping arrangements for cetacean presence or movement
- 6) dissemination of information in order to raise awareness of the protection of the marine environment and the PSSA with a particular emphasis on cetaceans.

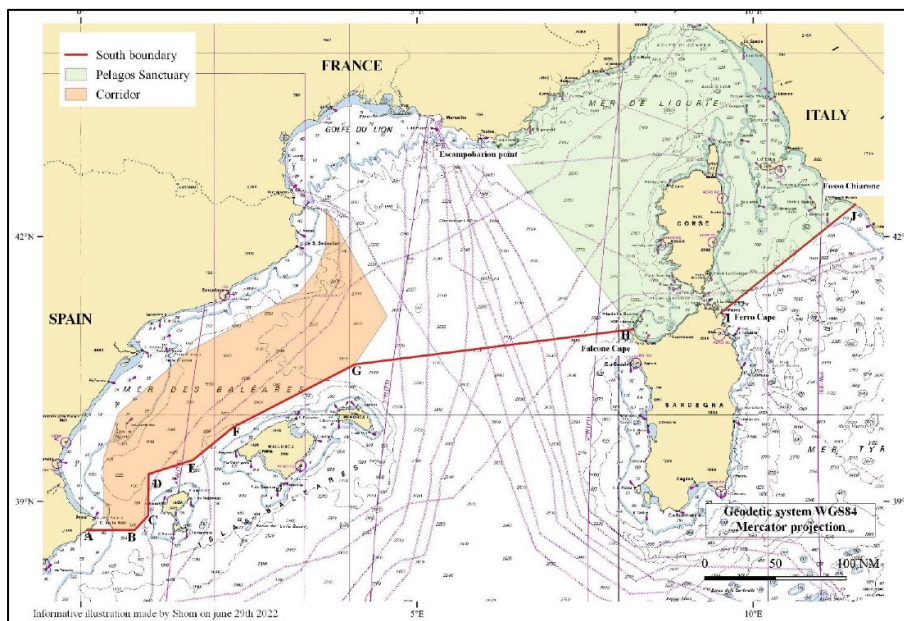


Figure 2. Proposed North-West Mediterranean Sea PSSA [Source: SHOM; MEPC 79/10]



Amendments to the BWM Convention – Form of the Ballast Water Record Book

The Committee approved amendments to Appendix II of the Annex to the BWM Convention which introduce changes to the form of the Ballast Water Record Book (BWRB). These changes are intended to make the form of this record book comparable to that of the Oil Record Book discussed in MARPOL Annex I, and require a more detailed and standardized reporting of ballast water operations. The reformatted BWRB provides a more detailed list of codes (by letter) and items (by number) which should be used to codify entries made in the BWRB. The codes by which ballast activities are categorized are:

- (A) When ballast water is taken on board from the aquatic environment (ballasting operation)
- (B) When ballast water is discharged into the aquatic environment (deballasting operation)
- (C) Whenever ballast water is exchanged, circulated or treated for ballast water management purposes
- (D) Uptake or discharge of ballast water from/to a port-based or reception facility
- (E) Accidental discharge/ingress or other exceptional uptake or discharge of ballast water
- (F) Failures and inoperabilities of the ballast water management system
- (G) Ballast tank cleaning/flushing, removal and disposal of sediments
- (H) Additional operational procedures and general remarks

These amendments will be subject to adoption at MEPC 80 (July 2023).

Further proposals related to the Ballast Water Record Book were considered as follows:

- A proposal was considered to mandate a second part of the BWRB (BWRB Part II) containing a Ballast Water Log in which shipboard ballast water operations would be accounted for on a tank-by-tank basis. However, it was decided that such a detailed log should not be made mandatory by inclusion within the BWM Convention.
- Proposals were noted relating to use of electronic Ballast Water Record Books, but could not be considered at this session due to time constraints, and will be considered at MEPC 80 (July 2023).
- Preliminary discussion was had, and further submittals are expected to be received at MEPC 80, supporting the development of Guidance for the Recording of Operations in the Ballast Water Record Book.

Unified Interpretations of the BWM Convention

The Committee approved two new Unified Interpretations related to the BWM Convention:

- 7) *BWM Convention, Regulation E-1.1.5 and Appendix I – Date to be used for determining implementation of mandatory commissioning testing of individual BWMS in accordance with Resolution MEPC.325(75)*

The Committee approved interpretations related to commissioning tests of BWMS undergoing a major modification or an upgrade on board an existing ship. The interpretation clarifies that if a 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.

- 8) *BWMS Code, Paragraph 4.10 – Requirements for calibration of BWMS components that take measurements*

The Committee approved an interpretation to clarify that for BWMS components that take measurements, the interval for accuracy checks for calibration or replacement of sensors should not be mandatorily linked to the survey scheme for the BWMS. The accuracy check of BWMS components that take measurements should be performed in accordance with the calibration procedure at intervals specified in the manufacturer's instructions. A validity check of calibration certificates should be conducted at BWM annual, intermediate and renewal surveys.

These interpretations will be included in BWM.2/Circ.66/Rev.4.



Temporary Storage of Grey Water or Treated Sewage in Ballast Tanks

The Committee discussed several proposals related to the development of guidance on the use of ballast tanks for temporary storage of grey water and treated sewage in the context of the BWM Convention. In discussion, it was agreed that this practice is not prohibited by the BWM Convention or MARPOL Annex IV and is among several options utilized by operating ships in certain situations. This having been established, it was agreed that there is a need to develop guidelines for this practice in order to ensure that it is undertaken in an environmentally sound manner and facilitates compliance with D-2 biological standards when ballast tanks are returned to ballast water storage. Proposals for the content of these guidelines were received at this session, but could not be considered due to time constraints, and will be considered at MEPC 80 (July 2023).

Application of the BWM Convention to Ships Operating at Ports with Challenging Water Quality

The Committee considered several proposals regarding how compliance with the BWM Convention should be addressed for ships operating at ports where properties of the local water quality are not conducive to successful ballast water treatment by the specific BWMS installed onboard. In discussion, the Committee was unable to agree on whether such situations should be treated under contingency measures, or should be treated as operational matter to be addressed through new guidance. The Committee also discussed how “challenging water quality” should be defined, and whether the use of proactive measures should be required for ships planning to attend ports of water quality that is historically known to be challenging to their specific BWMS to treat.

At this stage, the Committee concluded by inviting submissions to MEPC 80 (July 2023) with concrete proposals for guidance to ships encountering challenging uptake water, with an emphasis that BWMS bypass should only be considered as a last resort.

BWM System Approvals

Final Approval was granted by the Committee for RADClean® BWMS, submitted by the Islamic Republic of Iran. RADClean treats ballast water by filtration and electrochlorination during uptake and neutralization with sodium thiosulfate prior to discharge.

Final Approval was granted by the Committee for ECS-HYCHLORTM™ 2.0 System, submitted by the United Kingdom. The ECS-HYCHLORTM 2.0 System treats ballast water by electro-chlorination, followed by neutralization during discharge using sodium thiosulfate prior to discharge.

Basic Approval was not granted by the Committee for AirTree BWMS ABWOT, submitted by Germany. This system design treats ballast water with mechanical filtration at ballast water uptake, in-tank treatment by ozone during the voyage, and neutralization with sodium thiosulfate at discharge when needed.

MARINE PLASTIC LITTER FROM SHIPS

Amendments to MARPOL Annex V – Garbage Record Book

The Committee adopted Resolution MEPC.360(79) containing amendments to MARPOL Annex V to expand the requirement for a garbage record book by lowering the threshold down to ships of 100 gross tonnage and above (from the current threshold 400 gross tonnage and above). This has been done in an effort to expand tracking and reporting of accidental discharges to the sea that may involve plastics. Additionally, the IMO Secretariat has



previously been requested to compile a list of guidelines requiring consequential amendments due to the draft amendments to MARPOL Annex V regarding the garbage record book.

These amendments will enter into force on 1 May 2024, and consideration will be given to revising guidelines associated with garbage record books during PPR 10 (Apr-2023).

Status of the IMO Study on Marine Plastic Litter from Ships

Following the Committee's adoption at MEPC 77 of the *Strategy to Address Marine Plastic Litter from Ships* (MEPC.341(77)) to guide and monitor the effective implementation of the Action Plan, the Committee has taken steps to initiate a comprehensive study on marine plastic litter from all ships, including macro and microplastics. The IMO Secretariat provided an update on this effort, with a report from an external consultant providing feedback on the terms of reference for this study. The feedback identified several issues that must be addressed in order for the study to yield useful information, including the following:

- 1) Lack of validation and standardization in data on marine plastic litter, preventing an accurate global assessment
- 2) Difficulties in distinguishing the origin of plastic litter (sea-based vs. land-based)
- 3) A need to consider a risk-based, regional approach to reducing marine plastic litter from ships, given the obstacles to conducting a global assessment of this pollution type

This assessment concluded that it may not be feasible at this stage for a single study to provide a global assessment of inputs of plastic waste into the marine environment from sea-based sources, but a multi-step approach may help to build up the necessary components to facilitate a global assessment of this pollution type.

At this stage, the Committee concluded by inviting submission of proposals to MEPC 80 (July 2023) on how to progress the IMO Study on Marine Plastic Litter from Ships, taking into account the recommendations of the consultant's report. This may involve changes to the study's terms of reference, or proposals on how the GloLitter Partnerships Project could contribute towards the fulfilment of the terms of reference.

OTHER DEVELOPMENTS

Amendments to the 2014 Standard Specification for Shipboard Incinerators (Resolution MEPC.244(66))

The Committee approved amendments to the *2014 Standard Specification for Shipboard Incinerators* (resolution MEPC.244(66)), which were aimed toward correcting discrepancies between the 2014 Standards and SOLAS Chapter II-2 regarding fire protection requirements for incinerators and waste stowage spaces. It was agreed that Annex 2 of MEPC.244(66) ("Fire Protection Requirements for Incinerators and Waste Stowage Space") should be removed from the resolution, as the content of this annex was not necessarily a part of the technical specifications of the incinerator itself. The fire safety requirements of SOLAS Chapter II-2 are considered sufficient for incinerator and waste stowage spaces and should be applied accordingly.

The revised standards will be issued as Resolution MEPC.368(79).

Improvement of Effectiveness of Cargo Tank Stripping, Tank Washing and Pre-washing Procedures

The Committee received a proposal for a new output for the revision of MARPOL Annex II 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. This proposal was made because of observations by Member States that cargoes with high melting points or high viscosity will harden when coming into contact with water, and many of



these substances float on the water and present a pollution hazard to wildlife and the environment. As of 1 January 2021, most paraffin-like substances in Pollution Category Y fall under new regulation 13.7.1.4 of MARPOL Annex II and a prewash is mandatory after the unloading of these cargoes in North Western European ports. However, some products that are not subject to this pre-wash requirement do exhibit paraffin-like properties and would be better addressed by enhanced cargo tank cleaning requirements.

Development of this proposal will be assigned to the PPR Sub-Committee, with two sessions to complete their work for the Committee's approval.

Revision of Guidelines for Pollution Prevention for Machinery Space Bilges

The Committee received a proposal for a new output to amend the Revised Guidelines and Specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships (Resolution MEPC.107(49)), for the purpose of improving the performance of the 15ppm bilge alarm. It was noted that in instances when the sample water pipe is blocked and no sample water is able to reach the 15ppm bilge sensor, the 15ppm bilge separator could still work normally and allow untested oily water to be discharged overboard. It was therefore suggested that a flow or pressure sensor be installed so that an alarm can sound in the event that the 15ppm bilge sensor is not receiving sample water.

Development of this proposal will be assigned to the PPR Sub-Committee, with two sessions to complete their work for the Committee's approval.



CONTACT INFORMATION

NORTH AMERICA REGION

1701 City Plaza Dr.
Spring, Texas 77389, USA
Tel: +1-281-877-6000
Email: ABS-Amer@eagle.org

SOUTH AMERICA REGION

Rua Acre, nº 15 - 11º floor, Centro
Rio de Janeiro 20081-000, Brazil
Tel: +55 21 2276-3535
Email: ABSRio@eagle.org

EUROPE REGION

111 Old Broad Street
London EC2N 1AP, UK
Tel: +44-20-7247-3255
Email: ABS-Eur@eagle.org

AFRICA AND MIDDLE EAST REGION

Al Joud Center, 1st floor, Suite # 111
Sheikh Zayed Road
P.O. Box 24860, Dubai, UAE
Tel: +971 4 330 6000
Email: ABSDubai@eagle.org

GREATER CHINA REGION

World Trade Tower, 29F Room 2906,
500 Guangdong Road, Huangpu District,
Shanghai, China 200000
Tel: +86 21 23270888
Email: ABSGreaterChina@eagle.org

NORTH PACIFIC REGION

11th Floor, Kyobo Life Insurance Bldg.
7, Chungjang-daero, Jung-Gu
Busan 48939, Republic of Korea
Tel: +82 51 460 4197
Email: ABSNorthPacific@eagle.org

SOUTH PACIFIC REGION

438 Alexandra Road
#08-00 Alexandra Point, Singapore 119958
Tel: +65 6276 8700
Email: ABS-Pac@eagle.org

© 2022 American Bureau of Shipping.
All rights reserved.

