The 75th session of the IMO Marine Environment Protection Committee (MEPC) took place remotely from November 16 to 20, 2020. Following the release of the final report from this meeting, MEPC 75 Outcome and Impact looks deeper into the implications of developments taking place and where they may lead. This edition focuses on action taken at MEPC 75, action scheduled for MEPC 76 (June 2021) and long-term plans under four main areas:

- **IMO Strategy on GHG Emissions**
- **Air Pollution and Energy Efficiency**
- **Ballast Water and Anti-Fouling Systems**
- **Amendments to Other IMO Instruments**

This Update provides additional information to that reported in the MEPC 75 Brief issued 23 November 2020 and insight as to what will be considered at the next MEPC 76 to be held in June 2021.

Also view our on-demand webinar MEPC 75: Outcomes and Industry Impact for further discussion on the latest environmental developments from IMO.

For further information, contact ABS Regulatory Affairs: 281-877-6000 | ABSRegAff@eagle.org
IMO STRATEGY ON GHG EMISSIONS

What to know…

- **For the Owner / Operator:** Pursuant to the IMO’s short-term targets for the reduction of greenhouse gas emissions in the shipping industry by 2030, the first-ever MARPOL Annex VI amendments have been approved by the MEPC for establishing mandatory goal-based technical and operational measures for new and existing ships to reduce carbon intensity of international shipping. Information on these measures can be found on ABS’ [EEXI Regulatory Debrief](#) webpage, and ABS’ [Pathways to Reduce Carbon Intensity](#) publication.

- **For the Designer / Shipyard:** The MARPOL Annex VI amendments which will introduce the *Energy Efficiency Existing Ship Index* (EEXI) and the *Carbon Intensity Indicator* (CII) for new and existing ships are currently scheduled to enter into force in January 2023. Preliminary information for EEXI compliance can be found in ABS’ [EEXI Cutsheet](#), and ABS’ [Guide for Sustainability Notations](#) remains a source of information on numerous environmental subjects.

- **For the Supporting Industry:** GHG reduction and decarbonization in the shipping industry will require a multi-faceted approach. The ABS publication [Setting the Course to Low Carbon Shipping](#) outlines the approaches being considered by industry and how this may affect industry needs over the next decade.

OUTCOME OF MEPC 75

Considering the 2030 emissions reduction targets adopted by the IMO, and also the timeline which governs the work of the IMO for approval, adoption and implementation of new regulations, at this session the Committee approved short-term measures for GHG emission reduction in international shipping.

After much deliberation, several amendments to Annex VI of the MARPOL Convention were approved in order to implement two methods of reducing carbon intensity in shipping:

1) a Carbon Intensity Indicator (CII) rating; and
2) an Energy Efficiency Existing Ship Index (EEXI).

Prior to their formal adoption at MEPC 76 in June 2021, the drafted amendments can be viewed in [Circular Letter No.4350](#).

The CII rating will involve the calculation of both a Required and Attained annual operational CII for specified ship types. The Attained annual operational CII will be compared to the Required annual operational CII, for the purpose of assigning a rating of A, B, C, D or E (indicating a major superior, minor superior, moderate, minor inferior, or inferior performance level, respectively). The rating level C will be the value equivalent to the Required annual operational CII. 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.

A more detailed explanation of the approved EEXI regulations can be found in the [EEXI Regulatory Debrief](#) published by ABS in December 2020.

As a Carbon Intensity Indicator enforcement mechanism, enhancements to the Ship Energy Efficiency Management Plan (SEEMP) will be required to describe the methodology that will be used to calculate an attained annual operational CII and a plan for how this will be achieved for a 3-year period. Ships will be required to annually report the attained operational CII to their Flag Administration. Each year, a “Statement of Compliance” is to be issued to each ship for confirmation of this
reporting, and it will be incorporated into the Statement of Compliance currently issued for annual reporting of Fuel Oil Consumption data.

In conjunction with this, the Committee also approved the Terms of Reference for a comprehensive assessment of the possible impacts of these short-term measures on States. The previously approved MEPC.1 Circular 885 Procedure for Assessing Impacts on States of Candidate Measures will be used as a basis for this impact assessment, which is to be carried out by the IMO Secretariat in consultation with other UN agencies.

Additionally, the Committee received and approved the results of the 4th IMO GHG Study 2020, which was initiated at the previous session. Under the direction of a steering committee comprised of Member States, development of the study progressed through 2019 and 2020. The study describes the observed increases in GHG emissions from shipping over the study period (2012-2018) and the projected increases in emissions and carbon intensity by 2050. This study will form the basis for a future revision to the IMO’s Initial GHG Strategy, including the establishment of updated emission reduction targets.

The Committee also adopted resolution MEPC.327(75) encouraging Member States to develop their respective National Action Plans to address GHG emissions from ships, and to share those plans with the IMO for the benefit of other States and supporting industry. It is intended that submitted National Action Plans will become available in the future on a dedicated page on the IMO website.

UPCOMING AT MEPC 76 (JUNE 2021)

At MEPC 76, the Committee is expected to receive the final report from the IMO Secretariat assessing the impact on States of the short-term measures for GHG emission reduction in international shipping. Provided that the outcome of the comprehensive impact assessment is favorable with respect to the above-mentioned approved MARPOL Annex VI amendments, these amendments are scheduled to be adopted at MEPC 76. If adopted, the amendments are scheduled to enter into force on 1 January 2023. By that same date, ships would need to have an approved SEEMP onboard which incorporates the amendments related to calculation, verification and reporting of the Carbon Intensity Indicator.

Similarly, the verification that a ship’s Attained EEXI does not exceed its Required EEXI shall take place at the first IAPP Annual, Intermediate or Renewal survey after entry into force of the MARPOL Annex VI amendments.

Following the approval of MARPOL Annex VI amendments at MEPC 75 concerning CII and EEXI, guidance to support the framework of the new EEXI and the CII regulations is under development. A correspondence group has been established to develop the following guidelines for consideration at MEPC 76:

1) draft guidelines on the method of calculation of the attained EEXI;
2) draft guidelines on survey and certification of the attained EEXI;
3) draft guidelines on the Shaft/Engine Power Limitation System to comply with the EEXI requirements and use of a power reserve;
4) draft guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines);
5) draft guidelines on the reference lines for use with operational carbon intensity indicators (CII Reference line guidelines);
6) draft guidelines on the operational carbon intensity reduction factors relative to reference lines (CII Reduction factor guidelines); and
7) draft guidelines on the operational carbon intensity rating of ships (CII Rating guidelines).

The 8th session of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG) is planned to meet again in May 2021. This meeting will carry on the work of the Correspondence Group, as agreed at MEPC 75, to further progress the above draft guidelines, for submittal to the MEPC 76 meeting.

Additionally, in relation to the adopted resolution MEPC.327(75) encouraging Member States to develop their respective National Action Plans to address GHG emissions from ships, Norway submitted the Norwegian National Action Plan for Green Shipping to the MEPC 75 committee meeting. This document was deferred to MEPC 76, where it may be commented on by Member States and initiate the public archiving of such National Action Plans by the IMO.

WORK IN PROGRESS

At this session, it was noted by Member States that the program of follow-actions of the Initial IMO Strategy of
The IMO Initial Strategy on reduction of GHG emissions from ships (which was agreed back in 2018 at MEPC 73) originally called for proposals on mid-and long-term GHG reduction measures to be considered during the MEPC 74 and 75 meetings. This has not yet happened, due largely to the disruption of regular IMO meetings in 2020. Consideration of GHG reduction measures may be postponed further to allow for the completion of all technical guidelines, survey guidance, and port state control instructions related to EEXI and CII implementation to be completed.

It is also being discussed whether some or all of the guidance documents being developed for EEXI and CII implementation should be consolidated and published as a mandatory Carbon Intensity Code. This approach will be considered further at the ISWG-GHG 8 meeting.

Future work on mid- and long-term measures will be continued some time after MEPC 76, and will be based on the submittal of proposals under the procedures for assessment of candidate measures.

**LONG-TERM PLANS**

Under the objectives of the IMO Initial Strategy for Reduction of GHG Emissions from Ships, it is directed that short-term measures would need to be implemented before 2023 in order to achieve the 2030 emission reduction goals. Provided the MARPOL Annex VI amendments discussed above proceed to adoption at MEPC 76, the IMO will be on track to maintain this schedule. Imbedded within the amendments approved for Chapter 4 of MARPOL Annex VI is a regulation which will require the IMO to conduct a review of the EEXI and CII regulations, to determine their effectiveness in reducing carbon intensity of international shipping. This review is to be completed by 1 January 2026.

With short-term GHG reduction measures making progress toward implementation by 2023 in an effort to achieve the 2030 emission reduction goals, attention will turn to consideration of mid- and long-term measures for reducing GHG emissions in shipping.

Mid-term measures for reducing GHG emissions in shipping would be those measures which could potentially be finalized in the 2023-2030 period and may include new emission reduction mechanisms and market-based measures to incentivize GHG reduction, among other things.

Long-term measures would be those measures requiring development and innovation beyond 2030 and may include the support of developing zero-carbon fuels (including access to such fuels), among other steps towards further decarbonization of the shipping industry.

During MEPC 75, the Committee discussed at length a proposal to establish an international maritime research and development board (IMRB) for the development of a research and development program to accelerate the introduction of low-carbon and zero-carbon technologies and fuels. This board would be in charge of funding, overseeing and coordinating specific R&D projects related to zero-carbon technologies. It was acknowledged that the proposal faced certain legal and governance challenges, and Member States have been invited to submit further proposals on this at the next session of the Committee.

---

**ABS RESOURCES – GHG EMISSIONS**

- ABS Sustainability Services website [link](link)
- ABS Environmental Monitor™ [link](link)
- ABS Sustainability White Paper – Methanol as Marine Fuel [link](link)
- ABS Sustainability White Paper – Ammonia as Marine Fuel [link](link)
- ABS Sustainability White Paper – LNG as Marine Fuel [link](link)
OUTCOME OF MEPC 75

MARPOL Annex VI – Fuel Oil Sampling

At this session, the Committee made progress in support of the continued enforcement of the IMO 2020 Global Sulphur Cap for fuel oil sulphur content. Resolution MEPC.324(75) was adopted at this session, introducing amendments to MARPOL Annex VI which further distinguish between “in-use” and “on board” fuel oil sampling. This was done in order to clarify the use of in-use fuel oil service tanks as well as fuel oil storage tanks (or the ship’s fuel oil transfer system) as sources from which sampling may be done for the purpose of confirming fuel oil sulphur content. Two circulars are available for guidance on this sampling:

1) For guidance on “On Board” sampling: MEPC.1/Circ.889, 2020 Guidelines for On Board Sampling of Fuel Oil Intended to be Used or Carried for Use On Board a Ship; and
2) For guidance on “In-Use” sampling: MEPC.1/Circ.864/Rev.1, 2019 Guidelines for On Board Sampling for the Verification of Sulphur Content of Fuel Oil Used On Board Ships.

Appendix VI of MARPOL Annex VI (Fuel verification procedure for MARPOL Annex VI fuel oil samples) has also been revised to incorporate these guidelines and provide better guidance for sample handling. Within the revised Appendix VI, it has been clarified that the sulphur content measured in Onboard and In-Use samples will have a test margin value that allows up to 0.53% sulphur content, based on ISO standards (while testing of the “MARPOL delivered sample” received from the fuel oil supplier does not have this test margin and must not exceed 0.50% sulphur content).

Furthermore, the resolution presents amendments to Regulation 14 of MARPOL Annex VI which will require the installation of designated sampling points from which fuel oil may be taken for the purpose of testing for sulphur content. The amendments contained within this resolution will enter into force on 1 April 2022. Ships constructed on/after 1 April 2022 will be required to be fitted with designated sampling points and ships constructed before 1 April 2022 will be required to be fitted with designated sampling points not later than the first IOPP Renewal survey on or after 1 April 2023.

AIR POLLUTION AND ENERGY EFFICIENCY

What to know…

• For the Owner / Operator: To support the enforcement of the IMO’s 0.05% global limit on fuel oil sulphur content, new guidance has been issued on sampling of fuel oil from ships’ fuel oil tanks. This guidance clarifies “In-Use” and “Onboard” fuel oil sampling by Port States for the purpose of confirming the fuel oil sulphur content, and advises on both the procurement and processing of samples taken.

• For the Designer / Shipyard: To support the enforcement of the IMO’s 0.05% global limit on fuel oil sulphur content, ships will be required to install designated sampling points from which fuel oil may be taken for the purpose of testing for sulphur content. For a ship constructed before 1 April 2022, the sampling points must be fitted not later than the first IOPP Renewal survey on or after 1 April 2023.

• For the Supporting Industry: In several mid- and long-term initiatives, the IMO will be assessing the current state of in-service energy efficiency improvements and available technologies. These assessments will influence the implementation of EEDI Phase 4, which the IMO anticipates will have a positive effect on their long-term GHG emission reduction targets.
Additionally, the Committee adopted resolution MEPC.326(75) 2020 Guidelines for Monitoring the Worldwide Average Sulphur Content of Fuel Oils Supplied for Use On Board Ships. These guidelines are intended to provide an agreed basis by which the IMO will globally monitor the sulphur content of fuel oils being supplied to ships by fuel oil suppliers. This resolution recognizes the three current providers of sampling and testing services and establishes that the MEPC will need to approve any additional sampling and testing service providers that apply for this purpose. Those service providers will provide an annual report to the MEPC by 31 January, advising on worldwide average sulphur content of fuel oil supplied for use on board ships (both residual and distillate fuels). These guidelines have revoked the previous version of these guidelines given in resolution MEPC.192(61).

MARPOL Annex VI – Energy Efficiency

In addition to the amendments on fuel oil sampling discussed above, the adopted resolution MEPC.324(75) also contains amendments to Tables 1 and 2 of Regulation 21 in MARPOL Annex VI, which accelerate the implementation of EEDI Phase 3 from 2025 to 2022 for the specific ship types and sizes shown in blue text in the following table:

<table>
<thead>
<tr>
<th>Ship type</th>
<th>Starting year</th>
<th>Reduction rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas carriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (≥15,000 DWT)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>2025 (10,000 – 15,000 DWT)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>2025 (2,000 – 10,000 DWT)</td>
<td>0 – 30% (retain)</td>
<td></td>
</tr>
<tr>
<td>Containerships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (200,000 DWT and above)</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>2022 (120,000 – 200,000 DWT)</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>2022 (80,000 – 120,000 DWT)</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>2022 (60,000 – 80,000 DWT)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>2022 (15,000 – 40,000 DWT)</td>
<td>15% - 30%</td>
<td></td>
</tr>
<tr>
<td>2022 (10,000 – 15,000 DWT)</td>
<td>0% - 30% (retain)</td>
<td></td>
</tr>
<tr>
<td>General cargo ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (40,000 DWT and above)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>2022 (25,000 – 40,000 DWT)</td>
<td>0% - 30% (retain)</td>
<td></td>
</tr>
<tr>
<td>Refrigerated cargo ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (5,000 – 15,000 DWT)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>2022 (1,000 – 5,000 DWT)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>Combination carriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (20,000 DWT and above)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>2022 (10,000 – 20,000 DWT)</td>
<td>0 – 30% (retain)</td>
<td></td>
</tr>
<tr>
<td>LNG carriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (10,000 DWT and above)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>Cruise passenger ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (85,000 GT and above)</td>
<td>30% (retain)</td>
<td></td>
</tr>
<tr>
<td>non-conventional propulsion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 (25,000 – 85,000 GT)</td>
<td>0% - 30% (retain)</td>
<td></td>
</tr>
</tbody>
</table>

Additionally, the following revisions for Table 2 will increase the required EEDI for large bulkers above 279,000 dwt:

<table>
<thead>
<tr>
<th>Ship type defined in regulation 2</th>
<th>2D</th>
<th>3D</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.25 Bulk carrier</td>
<td>961.79</td>
<td>279,000 where DWT &gt; 279,000</td>
<td>0.477</td>
</tr>
</tbody>
</table>

Further, Regulation 20 of MARPOL Annex VI was also amended to add a requirement for Member States (or Recognized Organizations acting on their behalf, if authorized) to report the Required and Attained EEDI values for new and existing ships. The reporting of this information must be done:

1) Within 7 months of completing the IAPP Initial Survey on Attained EEDI (Regulation 5.4), for new construction;
2) Within 7 months following 1 April 2022 for ships delivered prior to 1 April 2022.

UPCOMING AT MEPC 76 (JUNE 2021)

Several draft amendments to MARPOL Annex VI were approved at MEPC 75 and are scheduled for adoption at MEPC 76, along with several guidance documents.

MARPOL Annex VI – Air Pollution Prevention Exemption

Amendments related to unmanned non-self-propelled (UNSP) barges are also scheduled to be adopted at MEPC 76, to clarify that such ships may be exempted from the survey and certification requirements (Regulations 5.1 and 6.1) of MARPOL Annex VI. UNSP barges have been defined as barges that:

1) Are not propelled by mechanical means;
2) Have no systems, equipment and/or machinery fitted that may generate emissions regulated by MARPOL Annex VI; and
3) Have neither persons nor living animals onboard.

A new Appendix XI to MARPOL Annex VI will be adopted as well, providing a specific “IAPP Exemption Certificate for Unmanned Non-self-propelled Barges” in order to document such exemptions and to ensure that conditions onboard the barge which merit this exemption are confirmed at least every 5 years. Prior to their formal adoption at MEPC 76, these draft amendments affecting UNSP barges can be viewed in Circular Letter No.4350.

Additionally, drafted revisions to the 2015 Guidelines for Exhaust Gas Cleaning Systems (Resolution MEPC.259(68)) were originally planned to be considered at MEPC 75, but were delayed due to time limitations of the virtual meeting. This resolution will be taken up at MEPC 76 for proposed adoption, tentatively titled as the 2020 Guidelines for Exhaust Gas Cleaning Systems.
MARPOL Annex VI – Energy Efficiency

Due to time limitations of the MEPC 75 Committee meeting, the majority of submittals to MEPC 75 (as well as from MEPC 74) relating to energy efficiency were necessarily deferred to MEPC 76. Among the submittals and proposals to be taken up at MEPC 76 related to energy efficiency, one significant proposal relates to the concept of Shaft/Engine Power Limitation, which would allow for engines to be considered to operate at or below a certain power limitation for the purpose of EEDI calculations, but have the capability to operate at full power during an emergency event. This concept also requires the careful consideration of what minimum propulsive power may be needed for safe maneuvering in normal and emergency operating conditions. Both of these concepts are expected to be progressed at MEPC 76.

Additionally, a Correspondence Group on Possible Introduction of EEDI Phase 4 was initiated at the MEPC 74 Committee meeting and this group is anticipated to submit its final report to the MEPC 76 meeting. This group was instructed to analyze available information from industry regarding progress seen in in-service energy efficiency improvements and make a recommendation on the implications of introducing EEDI Phase 4. The conclusions of this Correspondence Group will be considered at MEPC 76, with consideration being given to how EEDI Phase 4 may contribute to mid- and long-term objectives of the IMO Strategy on GHG emissions.

WORK IN PROGRESS

In order to improve the consistency in quality of the global fuel oil supply, deliberations are underway in development of guidance for standards of licensing of fuel oil suppliers. These standards of licensure are being progressed by a Correspondence Group that will report to MEPC 76 and will likely take the form of best-practices guidance, rather than a formal MARPOL amendment.

Additionally, concerns were raised during the meeting regarding the difficulties faced by the yachting sector in complying with the Tier III NOX emissions standards by the agreed deadline of January 2021, due to the current lack of compliant engines to be installed in newly built large yachts and the impact of the COVID-19 pandemic. Despite acknowledgment of these difficulties by a number of Member States, there are not currently any clear grounds for suspending enforcement of the requirements as of 1 January 2021 until further notice. Member States are expected to submit proposals on this issue at an upcoming Committee meeting.

LONG-TERM PLANS

With the implementation of the 2020 Global Sulphur Limit and emergence of new fuel grades intended to allow ships to meet this standard, the effort within the Maritime Safety Committee (MSC) to enhance safety standards related to ship’s fuel remains on the agenda for that Committee. Discussion on fuel safety standards for ships needed to be deferred at the MSC 102 meeting in 2020, due to time limitations of the IMO’s virtual meeting format. However, this discussion is expected to resume at the MSC 103 meeting in May 2021.

The Committee is also expected to pursue other aspects of air emissions abatement, such as the reduction of emissions of black carbon from international shipping, and the establishment of performance criteria for thermal waste treatment devices used as an alternative to an incinerator for the thermal disposal of garbage. This work is expected to be progressed via the PPR Sub-Committee and reported to the MEPC.

Additionally, the MEPC 76 and PPR 9 will undertake an evaluation of rules and guidance on the discharge of water from exhaust gas cleaning systems (EGCS) into the aquatic environment, including conditions and areas of discharge, with the view to harmonizing regional requirements. This work will seek to assess existing EGCS technologies for the possible harmful effects of discharge water, and to develop guidance for assessing the impacts of such discharges and the need for further regulatory measures.

ABS RESOURCES – AIR POLLUTION AND ENERGY EFFICIENCY

- ABS Energy Efficiency Services website (link)
- Insights into EEDI and MPP Verification Practices (link)
- ABS Whitepaper – Air Lubrication Technology (link)
- ABS Regulatory News (link)
- ABS Rules and Guides (link)
**What to know...**

- **For the Owner / Operator:** Globally, ships continue to approach their date for being fitted with BW treatment systems complying with the D-2 biological standard. The [ABS Ballast Water Management Insights](#) report provides insights and knowledge gained from the installation and daily operations of ballast water management systems of various technology types.

- **For the Designer / Shipyard:** Resolution [MEPC.325(75)](#) has been adopted, requiring a commissioning test of BWMS systems at the time of installation (linked to either the Initial Survey or Additional Survey under the Convention). This will enter into force on 1 June 2022, but some flag Administrations have already begun requiring such commissioning tests in advance of the actual Convention amendment entering into force.

- **For the Supporting Industry:** Amendments to the AFS Convention have been approved, placing controls on the use of cybutryne in anti-fouling system coatings. An effort to improve the IMO’s Biofouling Guidelines and see them more widely applied is currently being pursued.

## OUTCOME OF MEPC 75

### Ballast Water Management

The Committee adopted resolution [MEPC.325(75)](#) at this session, with amendments to Regulation E-1 of the Convention that will incorporate a requirement for a commissioning test at the time of system installation. 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 revised at this session in [BWM.2/Circ.70/Rev.1](#). 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. This amendment will enter into force on 1 June 2022, although several Member States have begun early implementation of this BWMS commissioning test for ships in their registry.

Also included in resolution [MEPC.325(75)](#) is 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).

Additionally, draft amendments were approved for the [Guidance on Ballast Water Sampling and Analysis for Trial Use in accordance with the BWM Convention and Guidelines (G2)](#). The Committee determined it necessary to incorporate these amendments by releasing a consolidated 2020 edition of this guidance document which has been released as [BWM.2/Circ.42/Rev.2](#). Revisions to the guidance include the recognition of the use of Adenosine triphosphate (ATP) for an indirect indicative analysis based on three indicator microbes, and thereby assess the total quantity of living bacteria in the sample.

Also at this session, several ballast water management systems were progressed in their approval process. **Final Approval** was granted to the following systems:

- CleanBallast® Ocean Barrier System (filtration and in-line electrochlorination during uptake and neutralization with sodium thiosulfate at discharge)
Final Approval was not granted for FlowSafe Ballast Water Management System (uses a SeaWater Conditioning Unit and a side-stream electrochlorination unit during uptake and, as needed, sodium thiosulfate for neutralization during discharge).

Final Approval was extended for use in fresh water for the following systems:

- EcoGuardian™ ballast water management system (uses a filter and side-stream electrochlorination during uptake and sodium thiosulfate for neutralization during discharge)
- HiBallast™ ballast water management system (uses a filter and side-stream electrochlorination during uptake and sodium thiosulfate for neutralization during discharge)
- Electro-Cleen™ System (uses electrochlorination during uptake and sodium thiosulfate for neutralization during discharge)
- BALPURE® ballast water management system (uses a filter followed by electrolytic treatment and neutralization during discharge)
- NK-O3 BlueBallast II Plus ballast water management system (uses ozone injection treatment and neutralization during discharge)

The new Final Approvals noted above are reflected in BWM.2/Circ.34/Rev.9 consolidated listing.

The IMO secretariat has also updated their listing of approved ballast water management systems on their BWM Technologies website, to provide information distinguishing those systems which have received their Type Approval under the more recent BWMS standards of the 2016 Guidelines for approval of ballast water management systems (G8) or the Code for Approval of Ballast Water Management Systems (BWMS Code).

Anti-Fouling Systems

At this session, the Committee approved amendments to the AFS Convention which will limit and control the use of cybutryne as a component of anti-fouling systems. It has been observed that cybutryne may leach from anti-fouling system coatings into the marine environment and become harmful to aquatic life, due to its biocidal properties. Under the approved amendments to the AFS Convention, cybutryne can no longer be applied / re-applied in anti-fouling systems on/after 1 January 2023. Existing anti-fouling systems containing cybutryne must either be removed or have a sealant applied which prevents leaching. In either case, this work is to be carried out by the renewal of the anti-fouling system scheduled on/after 1 January 2023, but no later than 60 months following the last application of an anti-fouling system containing cybutryne. Furthermore, the form of the International AFS Certificate will be revised to incorporate cybutryne into the section of the certificate which addresses controlled anti-fouling systems. Ships with an anti-fouling system containing cybutryne must receive an updated IAFS Certificate no later than 1 January 2025. Ships that do not have an anti-fouling system containing cybutryne must receive an updated IAFS Certificate at the next AFS application to the ship.

The text of these amendments to the AFS Convention can be viewed in draft form in Circular Letter No.4351, and are expected to be formally adopted at MEPC 76.

UPCOMING AT MEPC 76 (JUNE 2021)

Ballast Water Management

At MEPC 76, it is anticipated that discussion will address additional guidance for ballast water management system to address system operation in ports with challenging water quality. This may be due to operations in a port area where certain water qualities (e.g., high turbidity, high suspended solids, low salinity, etc.) may exceed the operational tolerances of the ballast water management system. Under the current proposal, if operation of the BWMS is not possible and no port reception facilities are available at that location, then the ship may take in water bypassing the BWMS and then move to an area where the BWMS can be properly operated. At this location (either on the high seas or an area prescribed by the Port State), the ship would perform ballast water exchange using water treated by the BWMS in order to comply with regulation D-2. Details of this guidance are still subject to commentary at MEPC 76.

Anti-Fouling Systems

The draft amendments to the AFS Convention which are noted in the previous section are expected to be formally adopted at MEPC 76. No new submittals to MEPC 76 related to the AFS Convention are expected, due to an overall reduction of new work items being taken on by the Committee while remote meeting practices remain in effect.
WORK IN PROGRESS

In previous Committee meetings, concerns were raised that some ship types may face an undue burden in trying to comply with the D-2 standards of the BWM Convention, due to their configurations or their operational parameters, and that options other than installation of a BWMS should be developed for such ships. One specific ship type, offshore support vessels, was provided with such guidance within BWM.2 Circular 44 (approved at MEPC 65), but no other ship types have been similarly considered. Several submittals were made to MEPC 75 supporting the development of enhanced guidance on complying with the BWM Convention, including for specific ship types, but these submittals were deferred due to time constraints of the MEPC 75 remote meeting, and are expected to be discussed at MEPC 76.

With growing experience under the BWM Convention and study of its impacts, and also the amendments to the AFS Convention noted above, the PPR Sub-Committee has been tasked with reviewing the 2011 Biofouling Guidelines given by MEPC.207(62) in order to assess their effectiveness in minimizing the transfer of invasive aquatic species, and to increase the uptake and effectiveness of the Guidelines. Early work has already identified that:

1) Some aspects of the Guidelines may not be practical to implement;
2) Clearer criteria for assessing levels of biofouling and efficacy of biofouling removal are needed; and
3) Ships may benefit from having biofouling management plans which are less general and reflect the various stakeholders/responsible persons with respect to biofouling management.

This matter will be further progressed at the PPR 8 Subcommittee meeting.

LONG-TERM PLANS

In the broader effort of reducing the transfer of invasive aquatic species, a more detailed study of the 2011 Biofouling Guidelines is being undertaken, to better understand the obstacles preventing a broader adoption of the Guidelines. It has been noted that there may be fewer facilities that previously assumed which can adequately provide biofouling removal in drydock, and it has also been noted that industry may benefit from an acceptable in-water biofouling removal standard. It is expected that the Committee will continue to pursue this work on biofouling removal standards.

Regarding ballast water management, data continues to be collected by the IMO from Member States regarding the effectiveness and difficulties in compliance for the BWM Convention. As further data becomes available under the Experience-Building Phase (EBP) of the BWM Convention, new work items will be consolidated in accordance with the EBP timeline shown below.

Table 1: Summary of the EBP timeline

<table>
<thead>
<tr>
<th>MEPC session</th>
<th>Timing</th>
<th>Milestone</th>
<th>EBP/MEPC action</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>Autumn 2018</td>
<td>Convention has been in force one year</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Spring 2019</td>
<td>First year of data available.</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>Spring 2020</td>
<td>Convention has been in force two years</td>
<td>Second year of data available, stocktaking of EBP timeline.</td>
</tr>
<tr>
<td>76</td>
<td>Autumn 2020</td>
<td>Convention has been in force three years</td>
<td>Partial third year of data available, enough to agree to data analysis report terms of reference.</td>
</tr>
<tr>
<td>77</td>
<td>Spring 2021</td>
<td>Full third year of data available,</td>
<td>Draft analysis report received.</td>
</tr>
<tr>
<td>78</td>
<td>Spring 2022</td>
<td>Convention has been in force four years</td>
<td>Final analysis report received,</td>
</tr>
<tr>
<td>79</td>
<td>Autumn 2022</td>
<td>Convention has been in force five years</td>
<td>Convention issues agreed.</td>
</tr>
</tbody>
</table>

This matter will be further progressed at the PPR 8 Subcommittee meeting.

ABS RESOURCES – BALLAST WATER MANAGEMENT

- ABS Ballast Water Management Insights (link)
- ABS Ballast Water Management Technology Evaluation Service (link)
- ABS Regulatory News (link)
- ABS Rules and Guides (link)
OUTCOME OF MEPC 75

Prohibition on the Use and Carriage for Use on Heavy Fuel Oil on Ships in Arctic Waters

After development within the PPR Sub-Committee, the Committee approved draft amendments to MARPOL Annex I to incorporate a prohibition on the use and carriage for use of heavy fuel oil (HFO) by ships in Arctic waters. These amendments will add a new Regulation 43A to MARPOL Annex I, and will prohibit HFO in arctic waters beginning on 1 July 2024. For ships to which regulation 12A of MARPOL Annex I or regulation 1.2.1 of chapter 1 of Part II-A of the Polar Code apply, this prohibition will become effective on 1 July 2029.

As part of this new regulation, it is specified that prior operations which may have included use of HFO will not necessitate a flush of the fuel oil tanks or piping in order to begin operating with non-HFO fuel in Arctic waters. Furthermore, the regulation allows Administrations with coastlines which border Arctic waters, to temporarily waive this prohibition for ships in their registry and operating within their own territorial waters. However, no such waivers may be issued after 1 July 2029. These draft amendments to MARPOL Annex I can be viewed in annex 1 of Circular Letter No. 4350, and will be formally adopted at MEPC 76.

Exemption of UNSP Barges from MARPOL Survey and Certification Requirements

The Committee approved draft amendments to MARPOL Annexes I, IV, and VI to permit an exemption from the survey and certification requirements of these Annexes for unmanned not-self-propelled (UNSP) barges. UNSP barges are defined as barges which:

1) are not propelled by mechanical means;
2) have neither persons nor living animals onboard;
3) are not used for holding sewage during transport; and
4) have no arrangements that could produce sewage.

This exemption requires the issuance of a specific exemption certificate, and a new template for this is included as part of the draft amendments to each of the above noted Annexes.
These draft amendments to MARPOL Annex I can be viewed in annexes 2 and 3 of Circular Letter No. 4350, and will be formally adopted at MEPC 76.

Provisional Categorization of Liquid Substances in Accordance with MARPOL Annex II and the IBC Code

The Committee endorsed work completed by the Sub-Committee in producing the next revision of the MEPC.2 circular on Provisional Categorization of Liquid Substances in Accordance with MARPOL Annex II and the IBC Code, which has been released as MEPC.2/Circ.26. This circular is produced periodically as required by MARPOL Annex II/Regulation 6.3, and gives a provisional assessment of carriage requirements for cargoes which have not yet been added or updated in the IBC Code.

UPCOMING AT MEPC 76 (JUNE 2021)

Marine Plastic Litter from Ships

Due to the time constraints associated with the delayed IMO meeting schedule and use of a virtual meeting format, the Committee was not able to discuss the agenda item on Marine Plastic Litter. It was agreed to defer considerations on Marine Plastic Litter from Ships until the MEPC 76 meeting.

Harmonizing Requirements on Watertight Doors

Progress is being made on an effort to harmonize the mandatory requirements relating to watertight doors on cargo ships which appear in several IMO mandatory instruments, including the SOLAS, MARPOL and Load Lines Conventions, as well as the IBC and IGC Codes. The SDC Sub-Committee has prepared amendments to each of these IMO instruments, and those under the purview of the MEPC will be considered for approval at MEPC 76.

WORK IN PROGRESS

General items which the MEPC intends to pursue in the 2020-2021 period include the following:

1. Revision of MARPOL Annex IV and associated guidelines to introduce provisions for record-keeping and measures to confirm the lifetime performance of sewage treatment plants;

2. Standards for shipboard gasification of waste systems and associated amendments to regulation 16 of MARPOL Annex VI;

3. Follow-up work emanating from the Action Plan to address marine plastic litter from ships;


Work on these items is currently underway in the PPR Sub-Committee.

Marine Plastic Litter from Ships

Several short-term actions related to Marine Plastic Litter will be referred to relevant Sub-Committees to develop appropriate implementation. This work should begin in 2020, with the goal remaining to complete and implement actions by 2025. These short-term actions include:

- Guidance to Member States on their responsibilities in enforcement of MARPOL Annex V on fishing vessels, and collection of information on accidental loss of fishing gear (from PPR 7);

- Consideration of reducing the threshold tonnage for requiring the maintenance of the Garbage Record Book on ships from 400gt to 100G GT and above (from PPR 7);

- Improvement of seafarer training, through STCW Code, to increase marine environmental awareness for personnel on fishing vessels (from HTW 7);

- Consider ways to communicate the location of lost shipping containers and establish a compulsory system for declaration of lost containers (from MSC 102).

Work on these items is currently being progressed through a Correspondence Group reporting to the PPR Sub-Committee.

LONG-TERM PLANS

Due to the COVID-19 pandemic, in-person meetings of IMO Committees and Sub-Committees have been suspended since Spring 2020. While meetings have been able to continue in virtual format, limitations of this format along with time zone differences have reduced the amount of time available for deliberation of technical matters within each Committee or Sub-Committee. In order to allow for continued progression of ongoing work on important subjects, the IMO Secretariat has placed restrictions on the submittal of new work items for
consideration. Member States and Observers have been asked to refrain from making submissions unless it relates to items which are already established in the agenda of each meeting. This has reduced the number of new proposals in the development pipeline for the Committee, but this may change as the IMO gains experience in management of virtual meetings, or when in-person meetings are eventually permitted once again.

ABS RESOURCES – OTHER IMO INSTRUMENTS

- ABS Engineering Software (link)
- ABS Remote Survey (link)
- ABS Regulatory News (link)
- ABS Rules and Guides (link)