**MEPC74 - 13 to 17 May 2019**

**73th session of the MARINE ENVIRONMENT PROTECTION COMMITTEE**

**Consideration and adoption of amendments to mandatory instruments**

The Committee considered the final text of the draft amendments to MARPOL Annexes I, II and V related to Electronic Record Books, and adopted the amendments by Resolution MEPC.312(74).

The adopted amendments to MARPOL Annexes I, II and V shall be deemed to have been accepted on 1 April 2020 and shall enter into force on 1 October 2020.

***MEPCresolution on Guidelines for the use of Electronic Record Books under MARPOL***

MEPC73 had adopted Resolution MEPC.318(74) on Guidelines for the use of Electronic Record Books under MARPOL.

IACS had comments on the draft Guidelines, in particular on the use of ozone-depleting substance electronic recording systems on existing ships.

Having discussed whether or not these should be re-approved in light of the Guidelines and the MARPOL amendments, MEPC74 decided that ODS electronic recording systems installed prior to the entry-into-force date of the MARPOL amendments concerning Electronic Record Books and approved by the Administration without taking account of the Guidelines for the use of Electronic Record Books under MARPOL must be reapproved by the Administration after the entry-into-force of the above-mentioned amendment, to take into account the Guidelines.

***Amendments to MARPOL Annex II related to cargo residues and tank washings of persistent floating products***

MEPC74 considered the final text of the draft amendments to MARPOL Annex II related to cargo residues and tank washings of persistent floating products, and adopted the amendments by Resolution MEPC.313(74).

Having noted that the amendments to MARPOL Annex II were directly linked to the amendments to the IBC Code, also to be adopted at this session, MEPC74 agreed to align the date of entry-into-force date of these amendments to that of the amendments to the IBC Code. MEPC74 therefore agreed that the entry-into-force date of the amendments to MARPOL Annex II would be 1 January 2021.

***Amendments to MARPOL Annex VI related to Electronic Record Books and EEDI regulations for ice-strengthened ships***

The Committee considered the final text of the draft amendments to MARPOL Annex VI related to Electronic Record Books and EEDI regulations for ice-strengthened ships, and adopted the amendments by Resolution MEPC.314(74).

The adopted amendments to MARPOL Annex VI shall be deemed to have been accepted on 1 April 2020 and shall enter into force on 1 October 2020.

***Amendments to the NOX Technical Code 2008***

MEPC74 considered the final text of the draft amendments to the NOX Technical Code 2008 concerning Electronic Record Books and certification requirements for SCR systems, and adopted the amendments by resolution MEPC.315(74).

The adopted amendments to the NOX Technical Code shall be deemed to have been accepted on 1 April and shall enter into force on 1 October 2020.

MEPC74 noted that the NOX Technical Code 2008 may require a review of paragraphs making reference to record books when next amended, based on the inclusion of a new definition for Electronic Record Book in the Code.

***Amendments to the IBC Code***

MEPC73 and MSC100, concurrently approved the draft amendments to chapters 15, 16, 17, 18, 19 and 21 of the IBC Code with a view to adoption at this session. MEPC74 considered the final text of the draft amendments to the IBC Code, and adopted the amendments by Res MEPC.316(74).

The adopted amendments to the IBC Code shall be deemed to have been accepted on 1 July 2020 and shall enter into force on 1 January 2021

MEPC74 noted that the temperature class ranges set out in paragraph 21.4.9.1.1 of chapter 21 of the IBC Code were not consistent with the latest IEC standards and that this information would need to be reviewed and updated when chapter 21 is next amended.

MEPC74 concurred with the proposal to include a reference to the RO Code as part of the amendments to the IBC Code, for purposes of alignment with MARPOL and SOLAS, noting, in particular, the need clarify that only Parts 1 and 2 of the RO Code were mandatory

Noting the concern raised by the observer from IACS related to the inclusion of the new paragraph 15.12 concerning H2S detection in the draft amendments and the potential perception that this paragraph may infer a requirement that is additional to the requirement set out in paragraph 13.2.1 of the Code, MEPC74 agreed to add the following at the end of paragraph 15.12 of the IBC Code:

"Toxic vapour testing instruments provided for complying with the requirement in 13.2.1 of the Code, which are also designed and calibrated for testing H2S, may be used to satisfy this requirement."

It was also noted that this text could be utilized to address the same issue in paragraph 4.24 of the BCH Code.

MEPC74 further noted that a revision of circular MSC-MEPC.5/Circ.7 setting out Guidance on the timing of replacement of existing certificates by revised certificates, as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code may be required to ensure consistent implementation of the draft amendments and agreed to refer the matter to ESPH 25 for further consideration.

***Amendments to the BCH Code***

MEPC74 considered the final text of the BCH Code (MEPC74/WP.7, annex 6), and adopted the amendments by Res MEPC.317(74).

The adopted amendments to the BCH Code shall be deemed to have been accepted on 1 July 2020 and shall enter into force on 1 January 2021.

Similar to the modifications made to the IBC Code, the text of paragraph 4.24 of the Code related to H2S detection equipment was modified in order to clarify the requirement in relation to the requirement in paragraph 3.11.1, notably to avoid any suggestion that additional detection equipment for H2S would be required under the Code.

***MEPC resolution on Amendments to the 2017 Guidelines addressing additional aspects of the NOX Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with selective catalytic reduction (SCR) systems (resolution MEPC.291(71))***

MEPC74 adopted Resolution MEPC.319(74) on Amendments to the 2017 Guidelines addressing additional aspects of the NOX Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with selective catalytic reduction (SCR) systems.

**Harmful aquatic organisms in ballast water**

In accordance with the Data gathering and analysis plan for the experience-building phase associated with the BWM Convention approved by MEPC72 (BWM.2/Circ.67), a summary of any data received to date was submitted by the Secretariat to MEPC74.

The Secretariat had developed a new tab to accommodate the experience-building phase in the Ballast Water Management module in the Global Integrated Shipping Information System (GISIS), structured in accordance with the interfaces in the approved data gathering and analysis plan (BWM.2/Circ.67), which had been launched in December 2018, allowing Member States to start providing data (Circular Letter No.3913).

MEPC74 approved BWM.2/Circ.67/Rev.1 on the revised Data gathering and analysis plan for the experience-building phase associated with the BWM Convention.

***Proposed amendments and unified interpretations of the form of the International Ballast Water Management Certificate***

MEPC74 had for its consideration draft amendments to the form of the International Ballast Water Management Certificate (IBWMC) regarding the items under "Details of ballast water management method(s) used" and "Particulars of ship", as set out in appendix I of the BWM Convention.

Since the entry into force of the BWM Convention, ships to which the BWM Convention applies have been subject to surveys and been issued with an International Ballast Water Management Certificate (IBWMC) according to regulations E-1 and E-2 of the Convention. However, it is found in practice that the form of the IBWMC regarding the items under "Details of ballast water management method(s) used" does not capture certain methods which can meet the requirements of the BWM Convention.

China and IACS explained the rationale behind the proposed need for such amendments, in order to capture other means of compliance with the BWM Convention, as provided for in regulation B-3.

In this regard, some delegations stated the view that the purpose of the section of the Certificate in question was simply to indicate at what stage the ship was in terms of its transition from compliance with regulation D-1 to compliance with regulation D-2 whereas the detailed means of compliance would be set out in the BWMP as already discussed.

A compromise proposal was put forward to carry out a much simpler amendment of the Certificate, adding one new option (check box) to the existing form of the Certificate covering other means of compliance to those currently listed without specifying in detail such options

MEPC74 approved the draft amendments to the form of the International Ballast Water Management Certificate, with a view to adoption by MEPC75.

***Unified interpretations of the form of the International Ballast Water Management Certificate***

MEPC72 had approved a unified interpretation of the form of the International Ballast Water Management Certificate, which had been circulated by means of BWM.2/Circ.66, and had instructed the Secretariat to update the unified interpretation with appropriate references to the Code for Approval of Ballast Water Management Systems (BWMS Code) and to submit this to MEPC74 at a future session, following the entry into force of the Code.

Noting that, in light of the BWMS Code's effective date of 13 October 2019, and noting that MEPC74 was the last session of MEPC74 before that date, MEPC74 approved unified interpretation of appendix I (Form of the International Ballast Water Management Certificate) of the BWM Convention and instructed the Secretariat to circulate it by means of BWM.2/Circ.66/Rev.1.

***Commissioning testing of ballast water management systems***

MEPC71 had instructed III 4 to incorporate the Interim Survey Guidelines, as set out in BWM.2/Circ.7, into the draft 2017 HSSC Guidelines and to introduce provisions in said Guidelines for validating the compliance of individual BWMS with regulation D-2, in conjunction with their commissioning (MEPC71/17, paragraph 4.41).

At MEPC72, it was noted that validation of BWMS in conjunction with their commissioning was essentially mandated by regulation E-1.1.1 of the BWMC and paragraphs 8.2.5 and 8.3.6 of the BWMS Code; however, the regulatory basis for survey item (BI) 1.1.2.19 was not complete with regard to sampling and analysis.

MEPC73 had approved BWM.2/Circ.70 on Guidance for the commissioning testing of ballast water management systems and had invited Member Governments and international organizations to submit proposals to this session for an amendment to an appropriate mandatory instrument to require commissioning testing, and for interim measures to address this matter before the entry into force of any such amendment.

All delegations who spoke supported amendments to make statutory surveys for BWMS commissioning testing mandatory.

MEPC74 approved the draft amendments to regulation E-1 of the BWM Convention, with a view to adoption by MEPC75.

Any amendment would not enter into force until October 2021 at the earliest, while the commissioning testing of BWMS was urgently needed and should already be carried out in accordance with the Guidance for the commissioning testing of ballast water management systems (BWM.2/Circ.70).

In this regard, several delegations proposed that early implementation of any such amendment should be encouraged.

MEPC74 endorsed the view that commissioning testing should begin as soon as possible in accordance with BWM.2/Circ.70 and agreed to reflect this in the requisite resolution for the adoption of the relevant amendments to mandatory instruments.

It also endorsed the view that commissioning testing should not be applicable to ships that installed a BWMS and were certified for compliance with regulation D-2.

MEPC74 confirmed that the analysis undertaken in the context of commissioning testing would be indicative and agreed to reflect this in the requisite resolution for the adoption of the relevant amendments to mandatory instruments.

***Standard for verification of ballast water compliance monitoring systems***

Numerous methods for indicative and detailed analysis of ballast water for trial use in accordance with the Ballast Water Management Convention (BWM Convention) and Guidelines (G2) are mentioned in BWM.2/Circ.42/Rev.1, and more methods are under development. However, there are no international standard methods for certification of these indicative methods.

Denmark provided suggestions towards a standard for verification of ballast water compliance monitoring systems that aim at providing indicative analysis to verify the efficacy of BWMS prior to issuance of the International Ballast Water Management Certificate. In the ensuing discussion, all delegations that spoke supported the document. Some delegations noted the potentially relevant work being carried out in parallel within ISO and it was reiterated that commissioning testing should start prior to the finalization of such a standard.

***Application of the BWM Convention to specific ship types***

The delegations of the Russian Federation and Turkey provided an introduction to the difficulties encountered in the application of the BWM Convention to specific ship types.

MEPC74 acknowledged that some ships may face difficulties in complying with the Convention. Several delegations expressed the view that the Convention does provide for alternative options, particularly under regulation B-3.7, which could be further explored by Administrations dealing with such cases.

Examples mentioned included port-based solutions such as shore- or barge-based treatment; port reception facilities; the use of cargo to control the ship's trim; the use of potable or fresh water; etc.

All delegations that spoke on this matter reached consensus that guidance on options for compliance with the Convention, which would be aimed at all ships and not specific ship types, could be useful for Administrations and the industry.

In this regard, the Group considered that this could be achieved either through a revision of existing guidance, such as the aforementioned BWM.2/Circ.44, to expand its applicability and enhance its content, or through a new circular,

The Plenary invited concrete proposals to PPR 7 for guidance on options other than a BWMS for compliance with the BWM Convention, in addition to those included in BWM.2/Circ.44.

**Air pollution and energy efficiency**

PPR 6 had agreed to the draft amendments to MARPOL Annex VI to support consistent implementation of the 0.50% sulphur limit, which included amendments to:

* Regulation 1 on the application of the regulation;
* Regulation 2 providing definitions of "sulphur content of fuel oil", "low-flashpoint fuel", "MARPOL delivered sample", "in-use sample", and "on board sample";
* Regulation 14 on in-use and on board fuel oil sampling and testing verification procedures for a MARPOL Annex VI fuel oil sample;
* Appendix VI concerning the Fuel verification procedure for MARPOL Annex VI fuel oil samples.

MEPC74 approved draft amendments to regulations 1, 2, 14 and 18, appendix I and appendix VI of MARPOL Annex VI, with a view to adoption at MEPC75.

Recognizing some of the concerns related to the deletion of stage 2 of the verification procedure of appendix VI by PPR 6, the Group agreed to an alternative text replacing paragraphs 2.6 and 4.6 of appendix VI, providing the competent authority the flexibility to evaluate the final result obtained from the laboratory, to determine whether the fuel oil has met the applicable sulphur limit.

***Draft 2019 guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI***

MEPC74 adopted Resolution MEPC.320 (74) on 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI.

PPR 5 had agreed to develop a single set of guidelines on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI".

PPR 6 agreed to the draft 2019 Guidelines on consistent implementation of the 0.50% Sulphur limit under MARPOL Annex VI, for submission to MEPC74, with a view to adoption.

The Intersessional Meeting on Consistent implementation of regulation 14.1.3 of MARPOL Annex VI agreed to develop a draft MEPC circular on guidance on ship implementation planning for 2020.

The ship implementation plan would not have a mandatory nature and would not need to be endorsed by the Administration.

PPR 6 agreed the Fuel Oil Non-Availability Report (FONAR) as set out in the appendix 1 to the draft guidelines on consistent implementation of the 0.50% sulphur limit.

It noted note that regulation 18.2.4 of MARPOL Annex VI does not provide for the FONAR to be reported to the port that has not provided the compliant fuel oil contrary to regulation 18.1 of MARPOL Annex VI, and that the port reception facility module in GISIS may provide a model to address this issue.

MEPC74 also noted information provided by the observer from OCIMF on developments concerning joint industry guidance on potential safety and operational issues related to the supply and use of fuel oil with a maximum sulphur content of 0.50% m/m. OCIMF confirmed that the joint industry guidance had incorporated information from the draft ISO PAS 23263 as far as possible, that the joint industry guidance was expected to be released in August 2019.

ISO made a point on on the preparation of the Publicly Available Specification (PAS) 23263 providing guidance as to the application of the existing ISO 8217 marine fuel standard to 0.50% compliant fuel oils which is expected to be published later this year.

***Draft 2019 guidelines for port State control under MARPOL Annex VI***

MEPC74 adopted Resolution MEPC.321(74) on 2019 Guidelines for port State control under MARPOL Annex VI - Chapter 3.

MEPC74 agreed to include a new paragraph 2.1.6 addressing how to follow-up a possible discrepancy between the sulphur content on the bunker delivery note and independent test results of commercial samples taken by the ship during bunkering.

It also agreed to include a new appendix in the draft Guidelines, providing guidance to port State control officers in the case that non-availability of compliant fuel is claimed, and having used the Fuel Oil Non-Availability Report (FONAR) annexed to the draft 2019 Guidelines for Consistent Implementation of the 0.50% sulphur limit under MARPOL Annex VI as basis.

The Group, following consideration, agreed to include the NOX related amendments.

***Draft guidance for port State control on contingency measures for addressing non-compliant fuel oil***

MEPC74 approved MEPC.1/Circ.882 on Guidance for port State control on contingency measures for addressing non-compliant fuel oil.

MEPC74 agreed that the draft Guidance should address all possible instances of non-compliant fuel oil, and should not be limited in time or apply solely to situations of fuel oil non-availability following the entry into force of the global sulphur limit.

***Early application of the approved amendments to the verification procedures for a MARPOL Annex VI fuel oil sample***

MEPC74 approved MEPC.1/Circ.881 on Notification on early application of the verification procedures for a MARPOL Annex VI fuel oil sample (regulation 18.8.2 or regulation 14.8).

It aims at ensuring a consistent approach to verifying the sulphur limit of the fuel oil until the entry into force of the approved amendments to the appendix of MARPOL Annex VI.

To ensure a consistent approach to verifying the sulphur limit of the fuel oil delivered to, in-use or carried for use on board a ship until the entry into force of the approved amendments, Member Governments are invited to apply the approved amendments to appendix VI of MARPOL Annex VI related to the verification procedure for a MARPOL Annex VI fuel oil sample (regulation 18.8.2 or regulation 14.8), as contained in the annex to this Circular, in advance of their entry into force.

***Draft MEPC circular on the 2019 guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships***

MEPC74 approved MEPC.1/Circ.864/Rev.1 on the 2019 guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships.

***Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the EGCS fails to meet the provision of the Guidelines***

MEPC74 approved MEPC.1/Circ.884 on Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the EGCS fails to meet the provision of the Guidelines.

If a malfunction occurs in the instrumentation for the monitoring of Emission Ratio or discharge water (pH, PAH, Turbidity), the ship should keep records of interim indication for demonstrating compliance.

Any EGCS malfunction that lasts more than one hour or repetitive malfunctions should be reported to the flag and port Stateʹs Administration along with an explanation of the steps the ship operator is taking to address the failure.

At their discretion, the flag and port State's Administration could take such information and other relevant circumstances into account to determine the appropriate action to take in the case of an EGCS malfunction, including not taking action.

***Draft MSC-MEPC circular on delivery of compliant fuel oils by suppliers***

MEPC74 approved, subject to concurrent approval by MSC101, the draft MSC-MEPC circular on delivery of compliant fuel oil by suppliers.

***Guidance for Best practice for Member State/coastal State***

MEPC73 had approved MEPC.1/Circ.875/Add.1 on Guidance on best practice for fuel oil suppliers for assuring the quality of fuel oil delivered to ships.

MEPC74 approved MEPC.1/Circ.883 on Guidance for Best practice for Member State/coastal State.

These best practices are intended to assist Member States in carrying out their responsibilities under MARPOL Annex VI, to ensure effective implementation and enforcement of statutory requirements of that Annex.

MEPC74 generally recognized the usefulness of a voluntary licensing scheme for bunker suppliers to help ensure the quality and compliance of fuel oil.

The Group agreed to include a new paragraph recommending Member States, or other relevant authorities, desiring to do so may decide to establish or promote a licensing scheme for bunker suppliers.

Recognizing existing and planned bunker licensing schemes in different Member States, MEPC74 has decided to keep the proposed example of a bunker supply licence contained in the annex to document MEPC74/5/4 for consideration at a future session.

***Enhancement of the implementation of regulation 18 of MARPOL Annex VI***

MEPC73 had invited further concrete proposals on how to enhance the implementation of regulation 18 of MARPOL Annex VI, in particular on fuel oil quality and reporting of non-availability of compliant fuel oils, including the enhancement of the GISIS MARPOL Annex VI module to support data collection and analysis.

MEPC74 approved MEPC.1/Circ. on Reporting of data related to fuel oil availability and quality in GISIS to promote greater understanding of the consistent implementation of the 0.50% m/m Sulphur limit under MARPOL Annex VI.

It should be noted that in the view to help shipping companies prepare for implementation of the global sulphur limit for ships' fuel oil, ICS with the support of the Asian Shipowners' Association (ASA) and the European Community Shipowners' Associations (ECSA) has produced, free of charge, some comprehensive guidance on implementation planning, to help ensure compliance across the shipping industry with this regulatory game changer.

The guidance to shipping companies and crews on preparing for compliance with the 2020 global sulphur cap can be accessed at the following link:

http://www.ics-shipping.org/free-resources/2020-sulphur-compliance

***EEDI reviews required under regulation 21.6 of MARPOL Annex VI***

MEPC73 had invited concrete proposals on the development of draft amendments to MARPOL Annex VI on strengthening EEDI phase 3 to MEPC74 for further consideration, with a view to approval.

MEPC73 had instructed the Correspondence Group on EEDI Review Beyond Phase 2 to further develop the above-mentioned draft amendments to MARPOL Annex VI.

MEPC74, having recalled the decision of MEPC73, considered amendments to gas carriers, containerships, general cargo ships, refrigerated cargo ships, combination carriers, LNG carriers and cruise passenger ships having non-conventional propulsion, based on the report of the Correspondence Group.

MEPC74 approved the draft amendments to table 1 of regulation 21 of MARPOL Annex VI, with a view to adoption at MEPC75.

Interested delegations could submit documents proposing alternative EEDI values to the next session to be considered, before adoption of the draft amendments to the EEDI values for container vessels, including draft amendment text.

MEPC73 had decided to retain the current EEDI phase 3 requirements for tankers and bulk carriers. Nevertheless, MEPC74 had for its consideration a proposal of amendments to regulation 21.3 of MARPOL Annex VI with regard to the EEDI reference line parameters for the very large bulk carrier ship type.

According to the sponsors of those amendments, more efficient bulk carriers should not be penalized; solution is to have a constant after a certain tonnage threshold rather than extrapolation of reference line which is the approach used to amend provisions for ro-ro cargo and ro-ro passenger ships

MEPC74 approved draft amendments to regulation 21 of MARPOL Annex VI, concerning reduction factors for the EEDI and the parameters for the determination of the reference line for bulk carriers, with a view to adoption at MEPC75.

***Draft amendments to regulation 20 of Marpol Annex VI and amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.308(73))***

MEPC73 had considered amendments to MARPOL Annex VI to require mandatory reporting of verified EEDI values for new ships subject to the EEDI phase 0, phase 1 and future EEDI phases.

MEPC74 had for its consideration a proposal of amendments to regulation 20 of MARPOL Annex VI that would require mandatory reporting of verified attained EEDI values and related information for ships already subject to phase 0 and phase 1 and verified EEDI values and related information for any future new ship covered by regulation 21 of MARPOL Annex I.

MEPC74 approved the draft amendments to regulation 20 of MARPOL Annex VI, in the view of adoption by MEPC75.

The proposed amendments changing the 30 and 90 days to seven months in the new regulation 20.3.1 and 20.3.2 of MARPOL Annex VI, would allow Administrations, or organizations duly recognized, to submit a consolidated set of EEDI data to the Organization, twice a year.

MEPC74 adopted Resolution MEPC.322(74) on Amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.308(73)).

***Possible introduction of EEDI phase 4***

MEPC74 agreed to establish the Correspondence Group on Possible Introduction of EEDI Phase 4.

***Shaft Power Limitation and minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions***

MEPC73 had agreed to consider EEDI phase 3 requirements on the basis of applying the 2013 Interim guidelines for determining minimum propulsion proposing a technical solution for potential conflicts between EEDI requirements and minimum required propulsion power, and maintaining the manoeuvrability of ships in adverse conditions.

Many delegations supported the further development and application of the Shaft Power Limitation ("ShaPoLi"), noting that it was one possible option that could potentially assist in resolving the improvement in energy efficiency with concerns over minimum power especially for large bulk carriers and oil tankers, and could be used for reserve power in extreme weather.

Some delegations noted that there were significant technical barriers still to be addressed including which engine power should be used for NOX certification of the marine diesel engine and whether the optimum propeller design should be for use in adverse weather or under normal operating conditions.

MEPC74 invited Member Governments and international organizations to submit further information and concrete proposals on shaft power limitation at a next session.

MEPC74 approved MEPC.1/Circ.795/Rev.4 on Unified interpretations to MARPOL Annex VI, which included unified interpretations to:

* Regulation 13.2.2 of MARPOL Annex VI in relation to the time of the replacement or addition of an engine;
* Regulation 13.5.3 of MARPOL Annex VI in relation to the applicability of recording requirements to replacements engines (Tier II) subject to resolution MEPC.230(65));
* Regulation 14.1 of MARPOL Annex VI in relation to applying requirement of sulphur content of fuel oil to emergency equipment; and
* Regulation 16.9 of MARPOL Annex VI in relation to shipboard incinerators.

***Impact on the Arctic of emissions of Black Carbon from international shipping***

PPR 6 had completed its work under the output "Consideration of the impact on the Arctic of emissions of Black Carbon from international shipping" in accordance with the terms of reference given by MEPC62.

MEPC74 considered the request by PPR 6 to provide instruction on further work on the reduction of the impact on the Arctic of Black Carbon emissions from international shipping, taking into account the relevant outcomes to date, including the simplified compilation of identified candidate control measures and the supporting guidance identifying areas where further work may be required in the future.

The overwhelming majority supported, in principle, draft terms of reference on reducing the impact on the Arctic of Black Carbon emissions from international shipping for further consideration by PPR 7, and with a view to advising MEPC74 accordingly.

 **Reduction of GHG emissions from ships**

MEPC73, in approving the Programme of follow-up actions of the Initial Strategy up to 2023, had noted that in view of the heavy workload arising from the follow-up actions, it was important that enhanced support be provided in terms of working arrangements to progress the follow-up actions, and had invited Member States to submit concrete proposals so that an informed decision or recommendation could be reached at this session.

A correspondence group has limits as face-to-face negotiation could not be replaced; support establishment of a standing technical group as the best solution, this had the advantages of a sub-committee without the budgetary implications as translation was not required, and it is more flexible than an intersessional meeting of a working group and it provided for the establishment of a sub-group and would be focused on implementation of the Initial Strategy;

MEPC74 agreed to invite the Council to note this isue, and that the matter could be considered at a future session. More detailed consideration was needed for the future working arrangements.

MEPC74 approved the holding of a sixth intersessional meeting of the Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 6) to be held from 11 to 15 November 2019.

This ISWG is requested to:

* further consider concrete proposals to improve the operational energy efficiency of existing ships, with a view to developing draft amendments to chapter 4 of MARPOL Annex VI and associated guidelines;
* further consider concrete proposals to reduce methane slip and emissions of Volatile Organic Compounds (VOCs);
* consider a draft MEPC resolution urging Member States to develop and update a voluntary National Action Plan (NAP) with a view to contributing to reducing GHG emissions from international shipping, and develop associated guidelines;
* further consider concrete proposals to encourage the uptake of alternative low-carbon and zero-carbon fuels, including the development of lifecycle GHG/carbon intensity guidelines for all relevant types of fuels and incentive schemes ;
* further consider concrete proposals to improve the operational energy efficiency of existing ships, with a view to developing draft amendments to chapter 4 of MARPOL Annex VI and associated guidelines.

***Fourth IMO GHG Study***

The Programme of follow-up actions of the Initial Strategy up to 2023 identified that the Fourth IMO GHG Study should be initiated at this session, for consideration of a progress report at MEPC75 (spring 2020) and of the final report at MEPC76 (autumn 2020).

MEPC74 requested the Secretariat to initiate the Fourth IMO GHG Study; a circular letter with an invitation for tendering for the Fourth IMO GHG Study would be issued by the Secretariat as soon as possible after the session.

***MEPC resolution on encouragement of cooperation between the port and shipping sectors to reduce GHG emissions from ships***

MEPC74 adopted Resolution MEPC.323(74) on Invitation to Member States to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships.

The draft resolution invites Member States to promote the consideration and adoption by ports within their jurisdiction measures to facilitate the reduction of GHG emissions from ships, including:

(a) Onshore Power Supply (preferably from renewable sources);

(b) safe and efficient bunkering of sustainable low- and zero-carbon fuels;

(c) incentives promoting sustainable low- and zero-carbon shipping;

(d) support for the optimization of port calls.

***Finalization of the procedure for assessing the impacts on States of a measure***

The Initial Strategy identified that the impacts on States of a measure should be assessed and taken into account as appropriate before adoption of the measure and that the Programme of follow-up actions of the Initial Strategy up to 2023 foresaw the finalization of a procedure for assessing the impacts on States at MEPC74.

Particular attention should be paid to the needs of developing countries, especially Small Island Developing States (SIDS) and Least Developed Countries (LDCs). Disproportionately negative impacts should be assessed and addressed, as appropriate.

***The latter approved the MEPC.1/Circ on Procedure for assessing impacts***

There are up to four steps in the procedure:

* Step 1: initial impact assessment, to be submitted as part of the initial proposal to MEPC74 for candidate measures;
* Step 2: submission of commenting document(s), if any;
* Step 3: comprehensive response, if requested by commenting document(s); and
* Step 4: comprehensive impact assessment, if required by MEPC74.

The duration of the impact assessment procedure may range from one to four meetings depending on the level of assessment required and consideration of a measure by the MEPC before approval.

***Consideration of concrete proposals on candidate short-term measures***

The Plenary considered that all measures would be considered further, that short-term measures should be implemented before 2023 to achieve the 2030 goal, that the measures should be practicable, implementable and verifiable and if mandatory would be within MARPOL Annex VI.

Measures should also be balanced and global in nature resulting in a level playing field. MEPC74 also noted that proposed measures should be goal-based and include energy efficiency measures for existing ships, speed optimization and reduction, alternative fuels and national action plans.

MEPC74 noted that several approaches were interlinked, e.g. the strengthening of the SEEMP, the development of goal-based regulations for existing ships and the identification of appropriate operational energy efficiency indicators.

It also noted that further streamlining and consolidation was needed to organize the future work on candidate measures in parallel with consideration of their impact on States.

Multiple interlinkages were identified between :

* approach 1 (Improve the energy efficiency of existing ships building on the EEDI framework), approach 3 (Improve the energy efficiency of existing ships building on the SEEMP framework), approach 4 (Identify appropriate operational energy efficiency indicators) and approach 5 (Develop a speed optimization and speed reduction mechanism);
* approach 6 (Develop regulatory measures to reduce methane slip) and approach 7 (Develop regulatory measures to reduce emissions of Volatile Organic Compounds (VOCs))
* approach 10 (Initiate and support research and development activities), approach 11 (Encourage incentive schemes for first movers), approach 12 (Develop lifecycle GHG/carbon intensity guidelines for all types of fuels) and approach 13 (Implementation programme for the effective uptake of alternative low-carbon and zero-carbon fuels).

MEPC74 noted a statement by the observer from IACS highlighting the need for the proponent, and MEPC74, to address the implementation aspects of a candidate measure. IACS highlighted that without early consideration of how to implement candidate measures, there was a risk that full effect may not be given to the GHG abatement potential of the measure.

By "implementation" IACS referred to the actions that would need to be taken by shipowners and ship's crews, the verification of implementation to be undertaken by Administrations or recognized organizations acting on their behalf; and enforcement by flag and port States.

It must be underlined that high attention is granted to measures for existing vessels. Ships are used for several decades, and thus ships existing today are likely to remain in the market in 2030. Therefore, up to 2030, the effect of fleet replacement with new ships on the entire fleet is quite limited.

Furthermore, since the majority of existing ships today are not covered by the EEDI requirement (pre-EEDI ships), there will be a large number of ships to which no mandatory energy efficiency requirement is applied by 2030.

***Consideration of concrete proposals on candidate mid-/long-term measures***

ISWG-GHG 5 had considered the concrete proposals on candidate measures and provided the collation of information regarding candidate mid-/long-term measures, focusing on the effective uptake of alternative low-carbon and zero-carbon fuels.

Several delegations stressed the need to initiate the work on candidate mid- and long-term measures before 2023, with a focus on the uptake of alternative low-carbon and zero-carbon fuels, and that the Group should keep an open mindset with regards to the appropriate policy options.

 **Follow-up work emanating from the action plan to address marine plastic litter from ships**

MEPC73 had adopted the Action Plan to address marine plastic litter from ships (resolution MEPC.310(73)) (Action Plan) and agreed that the measures in the Action Plan would be reviewed at MEPC74 based on follow-up proposals. Following such a review, MEPC would instruct the PPR or other sub-committees, as appropriate, to undertake work only on actions for which a well-defined scope of work had been developed.

MEPC73 had established the Correspondence Group on Marine Plastic Litter from Ships and instructed it to:

* identify issues to be considered under an IMO study on marine plastic litter from ships;
* determine the most appropriate mechanism to undertake the study
* develop a regulatory framework matrix which identifies all international regulatory instruments and best practices associated with the issue of marine plastics from ships.

The action within the Action Plan into were categorized as follow:

* actions that can be progressed now by relevant sub-committees, which could be referred to as short-term actions;
* actions that may be reliant on the outcomes of the IMO Study on Marine Plastic Litter, or other relevant research, in order to progress, which could be referred to as mid-term actions; and
* actions which require concrete proposals to MEPC74 in order to progress, and therefore considered long-term actions.

In considering action items 10 and 11 of the Action Plan, relating to mandatory reporting of containers lost at sea and ways of communicating their location, MEPC discussed how they could be progressed.

MEPC requested the CCC and NCSR Sub-Committees to note the importance of the issue of lost containers at sea for addressing marine plastic litter from ships.

Many delegates supported the development of an IMO strategy to address marine plastic litter from ships, with a view to guiding, monitoring and overseeing the implementation of the Action Plan.

The strategy should be pragmatic and achievable, and that it could be a consolidated document with background, objectives, a schematic timeline and a categorization table of short-, mid- and long-term actions.

***Development of draft terms of reference for the IMO Study on marine plastic litter from ships***

MEPC74 approved the terms of reference for the IMO Study on marine plastic litter from ships.

GESAMP recently established a Working Group on sea-based sources of marine litter (GESAMP WG 43), co-sponsored by FAO and IMO, whose overall objective was to build a broader understanding of sea-based sources of marine litter, in particular from the shipping and fishing sectors.

MEPC recognized that the work of GESAMP WG 43 would inform some elements of the future IMO Study on Marine Plastic Litter from Ships.

 ***Pollution prevention and response***

MEPC74 concurred with:

* the evaluation of products by ESPH 24 and their respective inclusion in lists 1, 2, 3 and 5 of MEPC.2/Circ.24 (issued on 1 December 2018)
* the evaluation of cleaning additives by ESPH 24 and noted their inclusion in annex 10 to MEPC.2/Circ.24
* the evaluation of products and cleaning additives by the ESPH Working Group at PPR 6 and their inclusion in annexes 1, 3 and 10, respectively, of the next revision of the MEPC.2/Circular (i.e. MEPC.2.Circ.25), to be issued in December 2019.

***Application of the MEPC.2/Circular in relation to paraffin-like products***

MEPC74 approved MEPC.1/Circ.885 on Guidance on the implementation of provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code related to paraffin-like products.

***Carriage of blends of biofuels and MARPOL Annex I cargoes***

PPR 6 had agreed to make consequential amendments to the 2011 Guidelines for the carriage of blends of petroleum oil and biofuels, as amended (MEPC.1/Circ.761/Rev.1) as a result of the inclusion of a new annex 12 (Energy-rich fuels subject to Annex I of MARPOL) in the MEPC.2/Circular, and had included a reference to SOLAS regulation VI/5.2 regarding the prohibition of the blending of bulk liquid cargoes and production processes during sea voyages.

Consequently, MEPC74 approved, subject to concurrent approval by MSC101, the draft MSC-MEPC.2 circular on 2019 Guidelines for the carriage of blends of biofuels and MARPOL Annex I cargoes.

***Provisional assessment of liquid substances transported in bulk***

MEPC74 approved the revised Guidelines for the provisional assessment of liquid substances transported in bulk, to be issued as MEPC.1/Circ.512/Rev.1.

They include amendments to reflect the revisions to chapters 17, 18, 19 and 21 of the IBC Code, and a new section 9.

***Categorization and classification of products***

Following the finalization of the draft revised chapters 17, 18, 19 and 21 of the IBC Code which were approved by MEPC73, PPR 6 had prepared amendments to the Decisions with regard to the categorization and classification of products (BLG.1/Circ.33) to capture all relevant decisions to date in relation to the assignment of carriage requirements under the IBC Code.

MEPC74 endorsed, subject to concurrent approval by MSC101, the updated Decisions with regard to the categorization and classification of products, to be issued as PPR.1/Circ.7.

***Draft amendments to the AFS Convention***

PPR 6 had agreed to the following draft amendments to the AFS Convention, with a view to approval by MEPC74 and subsequent adoption:

* draft amendments to Annex 1 (Controls on anti-fouling systems) to the AFS Convention to include controls on cybutryne,
* draft amendments to Appendix 1 to Annex 4 to the AFS Convention (model form of the International Anti-fouling System Certificate (IAFSC)).

MEPC74 had for its consideration modifications to the draft amendments to the AFS Convention, specifically, the deletion of the draft provisions requiring the removal or sealing of existing antifouling systems containing cybutryne. Retrospective requirements to mandate blasting or sealer coatings to all ships that have applied the anti-fouling system in the past need further careful consideration.

Many delegations estimated that the deletion of provisions requiring the removal or sealing of existing AFS containing cybutryne was in conflict with article 4(2) of the AFS Convention.

 MEPC74 agreed to refer the draft amendments to Annex 1 of the AFS Convention to PPR 7 for further consideration, including addressing the potential conflict between the proposed amendments to Annex 1 and article 4(2) of the AFS Convention, and for the outcome to be reported to MEPC75 as an urgent matter.

***Development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters***

MEPC74 approved the methodology to analyse impacts of a ban on the use and carriage of heavy fuel oil as fuel by ships in Arctic waters, with a view to subsequent adoption as an MEPC resolution at a future session.

**Others matters**

Many delegations estimated that the tendency of States to introduce local or regional restrictions or prohibition measures was a worrying development, especially if no scientific background information or justification was provided.

States which are considering introduction of local rules should conduct prior impact assessments by themselves and IMO should advise or support such activities by developing guidelines.

Therefore, there is a need for additional scientific studies to provide more clarity and assist in understanding the impacts to the marine environment of washwater discharged by EGCS.

MEPC74 approved, in principle, a new output on "Evaluation and harmonization of rules and guidance on the discharge of liquid effluents from EGCS into waters, including conditions and areas" in the 2020-2021 biennial agenda of the PPR and the provisional agenda for PPR 7, with a target completion year of 2021.

It should be recalled that MEPC73 had instructed PPR 6, in conjunction with further advice from GESAMP, to consider the view that the environmental benefits of reducing pollution to air were not diminished in the event that EGCS discharge washwater presented additional risks.

PPR 6 had requested the Secretariat to explore the possibility of GESAMP to carry out a review of the scientific literature and oversee a modelling study on the environmental impact of the discharge of washwater from EGCS and to update PPR 7.

Upon the request of MEPC, GESAMP could establish a task team to assess the available evidence relating to the environmental impact of discharges of exhaust gas cleaning system effluent.

In order for a task team to be established, appropriate experts would have to be identified and sufficient external funding would have to be secured.

**Correspondence groups established by MEPC74**

***Correspondence Group on data collection*** and analysis under regulation 18 of MARPOL Annex VI,

Terms of reference:

* investigate the reporting of additional items on GISIS;
* further usability improvements, if feasible and as appropriate.

***Correspondence Group on Possible Introduction of EEDI Phase 4***.

Terms of reference:

* consider, collate and analyze information and data pertinent to possible introduction of EEDI phase 4,
* using the above data and information, consider the status of technological developments for improvement of energy efficiency of the EEDI regulations in chapter 4 of MARPOL Annex VI and the possible introduction of EEDI phase 4,
* consider how the introduction of possible EEDI phase 4 can contribute to the Initial IMO Strategy on reduction of GHG emission from ships (resolution MEPC.304(72)), taking into account the Programme of follow-up actions of the Initial IMO Strategy on reduction of GHG emissions from ships up to 2023 approved at MEPC73;
* further consider introduction of possible EEDI phase 4, taking into account views expressed at MEPC74.

***Correspondence group on Development of a Strategy to Address Marine Plastic Litter from Ships***

Terms of reference:

* finalize a draft Strategy to address marine plastic litter from ships, and using the Action Plan to address marine plastic litter from ships as a basis.

**Ship types and Phases**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ship Type | Size | Phase 11 Jan 2015–31 Dec 2019 | Phase 21 Jan 2020–31 Dec 2024 | Phase 31 Jan 2022and onwards | Phase 31 Jan 2025and onwards |
| Bulk carrier | 20,000 DWTand above | 10 | 20 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| 10,000 and above but less than 20,000DWT | 0-10\* | 0-20\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| Gas carrier | 15,000 DWTand above | 10 | 20 | 30 | https://www1.veristar.com/icons/ecblank.gif |
| 10,000 and above but less than 15,000DWT | 10 | 20 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| 2,000 and above but less than 10,000DWT | 0-10\* | 0-20\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| Tanker | 20,000 DWTand above | 10 | 20 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| https://www1.veristar.com/icons/ecblank.gif | 4,000 and above but lessthan 20,000 DWT | 0-10\* | 0-20\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| Containership | 200,000 DWTand above | 10 | 20 | 50 | https://www1.veristar.com/icons/ecblank.gif |
| 120,000 and above but less than 200,000DWT | 10 | 20 | 45 | https://www1.veristar.com/icons/ecblank.gif |
| 80,000 and above but lessthan 120,000 DWT | 10 | 20 | 40 | https://www1.veristar.com/icons/ecblank.gif |
| 40,000 and above but less than 80,000DWT | 10 | 20 | 35 | https://www1.veristar.com/icons/ecblank.gif |
| 15,000 and above but less than 40,000DWT | 10 | 20 | 30 | https://www1.veristar.com/icons/ecblank.gif |
| 10,000 and above but lessthan 15,000 DWT | 0-10\* | 0-20\* | 15-30\* | https://www1.veristar.com/icons/ecblank.gif |
| General Cargo ships | 15,000 DWTand above | 10 | 15 | 30 | https://www1.veristar.com/icons/ecblank.gif |
| 3,000 and above but less than 15,000DWT | 0-10\* | 0-15\* | 0-30\* | https://www1.veristar.com/icons/ecblank.gif |
| Refrigerated cargo carrier | 5,000 DWT andabove | 10 | 15 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| 3,000 and above but less than 5,000DWT | 0-10\* | 0-15\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| Combination carrier | 20,000 DWTand above | 10 | 20 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| 4,000 and above but less than 20,000DWT | 0-10\* | 0-20\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| LNGcarrier\*\*\* | 10,000 DWTand above | 10\*\* | 20 | 30 | https://www1.veristar.com/icons/ecblank.gif |
| Ro-ro cargoship (vehicle carrier)\*\*\* | 10,000 DWTand above | 5\*\* | 15 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| Ro-ro cargo ship\*\*\* | 2,000 DWT andabove | 5\*\* | 20 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| 1,000 and above but lessthan 2,000 DWT | 0-5\*,\*\* | 0-20\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| Ro-ro passenger ship\*\*\* | 1,000 DWT andabove | 5\*\* | 20 | https://www1.veristar.com/icons/ecblank.gif | 30 |
| 250 and above but less than1,000 DWT | 0-5\*,\*\* | 0-20\* | https://www1.veristar.com/icons/ecblank.gif | 0-30\* |
| Cruise passenger ship\*\*\* having non-conventional propulsion | 85,000 GTand above | 5\*\* | 20 | 30 | https://www1.veristar.com/icons/ecblank.gif |
| 25,000 and above but less than 85,000 GT | 0-5\*,\*\* | 0-20\* | 0-30\* | https://www1.veristar.com/icons/ecblank.gif |

\* Reduction factor to be linearly interpolated between the two values dependent upon ship size. The lower value of the reduction factor is to be applied to the smaller ship size.

\*\* Phase 1 commences for those ships on 1 September 2015.

\*\*\* Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.