



**MEPC 72 - 9 TO 13 APRIL 2018**  
**MAJOR OUTCOMES OF THE 72TH SESSION OF THE IMO MARITIME ENVIRONMENT  
PROTECTION COMMITTEE (MEPC)**

**SUMMARY**

The MEPC held its 72th session from 9 to 13 April 2018.

MEPC 72 successfully adopted the **Initial IMO Strategy on reduction of GHG emissions from ships** (MEPC.304(72)), which is an important step forward for the Organization in the completion of its Roadmap for developing a comprehensive IMO strategy (**item 7**).

Regarding the **International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004** (**item 3 and 4**), MEPC 72 has adopted :

- Res. MEPC.297(72) amending regulation B-3 of the BWM Convention concerning the implementation schedule of ballast water management for ships together with the associated MEPC resolution ;
- Res. MEPC.298(72) related to the determination of the survey (IOPP) referred to in regulation B-3 ;
- Res. MEPC.296(72) - Amendments to regulations A-1 and D-3 of the international convention for the control and management of ships' ballast water and sediments, 2004 ;
- Res. MEPC.299(72) - Amendments to regulations E-1 and E-5 of the international convention for the control and management of ships' ballast water and sediments, 2004 ;
- Res. MEPC.300(72) - Code for Approval of Ballast Water Management Systems (BWMS Code).

It has also approved :

- BWM.2/Circ.66 - Unified Interpretation of Appendix I (Form of the International Ballast Water Management Certificate) of the BWM Convention;
- BWM.2/Circ.33/Rev.1 - Revised Guidance on scaling of ballast water management systems ;
- BWM.2/Circ.43/Rev.1 - Revised Guidance for Administrations on the type approval process for ballast water management systems.

Regarding **Energy efficiency of ships** (**item 3 and 5**), MEPC 72 has adopted :

- Res. MEPC.301(72) - Amendments to MARPOL Annex VI concerning ECAs and the required EEDI for ro-ro cargo ships and ro-ro passenger ships,

inviting the Parties to consider the application of the aforesaid amendments as soon as possible

Regarding **Air pollution from ships** (**item 5**), MEPC 72 has approved :

- MEPC.1/Circ.875 - Guidance on best practice for fuel oil purchasers/users for assuring the quality of fuel oil used on board ships.

Regarding technical and operational measures for enhancing the **energy efficiency of international shipping (item 6)**, MEPC 72 has approved :

- MEPC.1/Circ.876 - Sample format for the Confirmation of compliance, early submission of the SEEMP part II on the ship fuel oil consumption data collection plan and its timely verification pursuant to regulation 5.4.5 of MARPOL Annex VI,

encouraging stakeholders concerned to submit SEEMP part II to the Administration or its recognized organization by 1 September 2018.

MEPC 72 also approved the joint MSC-MEPC.2/Circ.12/Rev.2 - Revised guidelines for **Formal Safety Assessment (FSA)** for use in the IMO rule-making process (**item 3**).

### **Agenda item 2 –Decision of other bodies**

MEPC 72 approved the joint MSC-MEPC.2/Circ.12/Rev.2 on Revised guidelines for Formal Safety Assessment (FSA) for use in the IMO rule-making process.

### **Agenda item 3 and 4 - Harmful aquatic organisms in ballast water**

#### **Amendments to regulation B-3 of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004**

MEPC 71 approved draft amendments to regulation B-3 of the BWM Convention, concerning the implementation schedule of ballast water management for ships, and also a draft MEPC resolution on Determination of the date referred to in regulation B-3, as amended, of the BWM Convention, with a view to adoption at MEPC 72.

MEPC 72 has adopted Res. MEPC.297(72) amending regulation B-3 of the BWM Convention concerning the implementation schedule of ballast water management for ships together with the associated MEPC resolution.

These amendments shall enter into force on 13 October 2019.

It also adopted Res. MEPC.298(72) related to the determination of the survey (IOPP) referred to in regulation B-3.

#### **Amendments to regulations A-1 and D-3 of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 - Secretariat**

MEPC 71 approved the Code for approval of ballast water management systems (BWMS Code) and an associated draft MEPC resolution, as well as consequential draft amendments to regulations A-1 and D-3 of the BWM Convention, to make the BWMS Code mandatory.

MEPC 72 has adopted the draft amendments to regulations A-1 and D-3 of the BWM Convention to make the BWMS Code mandatory, with the associated Res. MEPC 296(72) - Amendments to regulations A-1 and D-3 of the international convention for the control and management of ships' ballast water and sediments, 2004.

The said amendments shall enter into force on 13 October 2019.

#### **Regulations E-1 and E-5 of the BWM Convention**

MEPC 72 adopted amendments regulations E-1 and E-5 of the BWM Convention, concerning endorsements of additional surveys on the International Ballast Water Management Certificate. These adoption has been made though Res. MEPC.299(72) – Amendments to regulations E-1 and E-5 of the international convention for the control and management of ships' ballast water and sediments, 2004.

These amendments shall enter into force on 13 October 2019.

## **BWMS Code**

MEPC 72 adopted the Code for Approval of Ballast Water Management Systems (BWMS Code) by Res.MEPC.300(72).

### **Unified interpretation of Appendix I (Form of the International Ballast Water Management Certificate) of the BWM Convention**

MEPC 72 approved by BWM.2/Circ.66 the following Unified Interpretation of Appendix I (Form of the International Ballast Water Management Certificate) of the BWM Convention :

the deadline for installing a ballast water management system as set out in operative paragraph 6 of resolution MEPC.279(70) (2016 Guidelines for approval of ballast water management systems (G8)) is as follows:

"for the purpose of operative paragraphs 4 and 5 of this resolution, the word 'installed' means the contractual date of delivery of the ballast water management system to the ship. In the absence of such a date, the word 'installed' means the actual date of delivery of the ballast water management system to the ship;"

### **Organizational arrangements related to the evaluation and approval of BWMS**

MEPC 72 had for its consideration the recommendations of the GESAMP-BWWG that Procedure (G9) should be revised and made mandatory, as a consequence of the revision of Guidelines (G8), and that a broader review of Procedure (G9) should be initiated, as it dates from 2008 and would benefit from various updates and improvements.

It has agreed that Procedure (G9) should be revised as a consequence of the revision of Guidelines (G8), and that it is not necessary to make Procedure (G9) into a code under the Convention.

### **Amendments to BWM.2/Circ.33 and BWM.2/Circ.43**

MEPC 71 in connection with the consideration of the draft BWMS Code and associated draft amendments to the BWM Convention to make the Code mandatory, also considered consequential amendments to the Guidance on scaling of ballast water management systems (BWM.2/Circ.33) and the Guidance for Administrations on the type approval process for ballast water management systems in accordance with Guidelines (G8) (BWM.2/Circ.43).

MEPC 72 has approved :

- BWM.2/Circ.33/Rev.1 on revised Guidance on scaling of ballast water management systems ;
- BWM.2/Circ.43/Rev.1 on revised Guidance for Administrations on the type approval process for ballast water management systems.

### **Validation of the compliance of individual BWMS with regulation D-2 of the BWM Convention in conjunction with their commissioning**

MEPC 72 was invited by III 4 to consider whether detailed aspects of the validation of the compliance of individual BWMS with regulation D-2 of the BWM Convention in conjunction with their commissioning need to be addressed.

A30 adopted resolution A.1120(30) on Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2017. As tasked by MEPC 71, the following new provision were included in the 2017 version of the HSSC Guidelines:

"(BI) 1.1.2.19 verifying that an operational test of the ballast water management system was carried out based on the installation commissioning procedures and that documented evidence is provided which shows compliance of the treated discharge ballast water during the above-mentioned test with regulation D-2 through sampling and analysis based on applicable guidelines developed by the Organization".

But there are no clear guidelines on what should be included in the commissioning procedures specified in paragraphs 8.2.5 and 8.3.6 of the draft BWMS Code.

While initial commissioning inspection is encompassed in regulation E-1.1.1 of the BWM Convention and paragraphs 8.2.5 and 8.3.6 of the draft BWMS Code, initial onboard sampling and analysis testing, as stated in (BI) 1.1.2.19 of the 2017 version of the HSSC Guidelines, is

not required according to the BWM Convention or the mandatory draft BWMS Code. As this requirement is specified in detail only in the non-mandatory HSSC Guidelines, some delegates (IACS) asked for clarity whether sampling and analysis is seen as a mandatory requirement.

MEPC 72 agreed to the proposal for a corresponding amendment to regulation E-1.1.1 of the BWM Convention. It invited interested Member Governments and international organizations to submit proposals for the development of guidance on the validation of the compliance of individual BWMS with regulation D-2 of the BWM Convention in conjunction with their commissioning

### **Contingency measures in the ballast water management plan**

MEPC 71 had approved BWM.2/Circ.62 on Guidance on contingency measures under the BWM Convention.

MEPC 72 considered that the inclusion of information on contingency measures in the Guidelines for ballast water management and development of ballast water management plans (G4) is important and should be done as soon as possible

It has invited Member Governments and international organizations to submit proposals to clarify when elements introduced by the Guidance on contingency measures under the BWM Convention should be included into ballast water management plans.

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

MEPC 72 had for its consideration documents about the challenges faced by rescue tug boats and unmanned non-self-propelled barges in complying with the BWM Convention. It has invited delegations to submit a proposal for a new output at a future session.

### **Recording working time of ballast water operational pump and connecting it to the GPS system**

Iran had proposed that the time, date and geographical position of the operation of ballast water pump be recorded both on ships equipped with ballast water management systems and those that follow ballast water exchange standards. MEPC 72 invited that delegation to submit a proposal for a new output to develop guidance on recording the operation of ballast water pumps at a future session.

## **Item 3 and 5 - Energy efficiency of ships**

### **Amendments to regulation 21 of MARPOL Annex VI (EEDI requirements for ro-ro cargo and ro-ro passenger ships)**

MEPC 72 has adopted amendments to MARPOL Annex VI concerning ECAs and the required EEDI for ro-ro cargo ships and ro-ro passenger ships by Res. MEPC.301(72).

The said amendments shall enter into force on 1 September 2019.

MEPC 72 agreed to the inclusion of new operative paragraph 4 in the resolution to encourage early implementation of the amendments to regulation 21.

“[MEPC] invites further the Parties to consider the application of the aforesaid amendments to regulation 21 of Annex VI of MARPOL concerning new parameters for determination of reference values of the EEDI to ships entitled to fly their flag as soon as possible, prior to entry into force;

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

Regulation 21 of MARPOL Annex VI, adopted by MEPC 62, requires the attained EEDI of new ships not to exceed the required EEDI. The required EEDI is determined according to the ship's size and ship type by using the reference line value, which represents an average EEDI value of ships delivered in the preceding 10 years (from 1 January 1999 to 1 January 2009). Also, it was agreed that the reduction factor, which is to be raised in a phased manner, shall apply.

MEPC 67 agreed to establish a Correspondence Group on EEDI review required under regulation 21.6 of MARPOL Annex VI in order to review the status of technological developments relevant to implementing phase 2 of the EEDI regulations.

MEPC 70 considered the report of the Correspondence Group on EEDI review and agreed to retain the current reduction rates, time periods and EEDI reference line parameters in the phase 2 requirements for ship types other than ro-ro cargo and ro-ro passenger ships. The Committee also agreed that it would be necessary to start a thorough review of EEDI phase 3 requirements and their early implementation, and of the possibility of establishing a phase 4.

It had instructed the Correspondence Group to submit a progress report to MEPC 72, an interim report to MEPC 73 and a final report to MEPC 74 in 2019.

Hence, MEPC 72 had for its consideration a first report, proposing that an exemption from EEDI regulation should be applicable to ice class ships having at least an ice class PC 5 of IACS or equivalent (see regulations 3.3.2.1 and 6.3.3.1 of the Polar Code).

The dedicated Working group installed by MEPC 72 agreed to the following suggested modifications to regulation 19.3 of MARPOL Annex VI:

"3 Regulations 20 and 21 of this Annex shall not apply to ships which have non-conventional propulsion, except that regulations 20 and 21 shall apply to cruise passenger ships having non-conventional propulsion and LNG carriers having conventional or non-conventional propulsion, delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2. Regulations 20 and 21 shall not apply to ~~cargo ships having ice-breaking capability an ice class higher than IA Super~~ category A ships as defined in the Polar Code."

MEPC 72 instructed the Correspondence Group on EEDI review beyond phase 2 to consider further how ships ice-strengthened in accordance with ice classes higher than IA Super should be defined and excluded from the EEDI regulations.

### **Reference line parameters for bulk carriers and tankers**

China provided to MEPC 72 analysis of compliance of large tonnage bulk carriers and tankers with EEDI phase 2 and phase 3 requirements, and presented proposals on amendments to reference lines for such ship types.

China is of the view that currently it is not achievable for large tonnage bulk carriers and tankers to comply with EEDI phase 2 requirements. According to China, only 27.98% of bulk carriers of 100,000 DWT and over meet EEDI phase 2 requirements, and 19.15% of tankers of 120,000 DWT and over meet EEDI phase 2 requirements. The percentage of such large tonnage ships which meet phase 3 requirements is even lower.

Having reiterated that MEPC 70 had agreed to retain the current reduction rates, time periods and EEDI reference line parameters in the phase 2 requirements for ship types other than ro-ro cargo and ro-ro passenger ships, MEPC 72 has decided that the proposed approach to amend phase 2 EEDI requirements for large bulk carriers and tankers would not be taken forward, and referred documents from China to the Correspondence Group on EEDI review beyond phase 2 for its consideration in terms of the EEDI requirements "beyond phase 2".

### **Minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions**

MEPC 71 agreed to extend the Interim Guidelines to EEDI phase 2 and to continue the discussion on this matter at MEPC 72, inviting interested Member States and international organizations to make every effort to further develop the draft revised Interim Guidelines and submit proposals to the Committee.

China presented the following proposals:

- revising the definition of self-propulsion factors in the Interim Guidelines ;
- inviting the Committee to adopt the new numerical method proposed by China as one of the alternative new numerical methods for calculating quadratic transfer function of wave added resistance in regular waves.

MEPC 72 agreed to continue the discussion on this matter at the next session and its invitation to interested Member Governments and international organizations to make every effort to further develop the draft revision of the 2013 Interim Guidelines, for submission to MEPC 73.

## **Item 5 - Air pollution from ships**

### **Prohibition to carry non-compliant fuel under regulation 14.1 of MARPOL Annex VI**

MEPC 70 agreed that the effective date of the 0.50% m/m sulphur content limit of fuel oil should be 1 January 2020 as set out in regulation 14.1.3 of MARPOL Annex VI.

MEPC 71 approved a new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI" for inclusion in the PPR Sub-Committee's biennial agenda for 2018-2019 with a target completion year of 2019.

PPR 5 agreed to the draft amendments to MARPOL Annex VI for a prohibition on the carriage of non-compliant fuel oil for combustion purpose with a sulphur content exceeding 0.50%, for submission to MEPC 72 for approval as an urgent matter, with a view to adoption at MEPC 73.

"The sulphur content of any fuel oil used on board ships or any fuel oil carried for use on board the ship shall not exceed 0.50% m/m."

MEPC 72 approved the draft amendments to regulation 14 of MARPOL Annex VI and the form of the Supplement to the IAPP Certificate concerning prohibition on the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship, with a view to adoption at MEPC 73.

The proposed text for paragraph 2.3.3 of the Supplement to the International Air Pollution Prevention Certificate (IAPP Certificate) should be modified as follows:

"For a ship without an equivalent arrangement approved in accordance with regulation 4.1 as listed in 2.6, the sulphur content of any fuel oil carried for use on board the ship shall not exceed 0.50% m/m as documented by bunker delivery notes."

### **Guidance on best practice for fuel oil purchasers/users for assuring the quality of fuel oil used onboard ships**

MEPC 71 invited interested Member Governments and international organizations to submit proposals to MEPC 72, with a view to finalization of the best practice at that session

The Committee approved MEPC.1/Circ.875 on Guidance on best practice for fuel oil purchasers/users for assuring the quality of fuel oil used on board ships.

### **Best practice for fuel oil providers for assuring the quality of fuel oil used on board ships**

IBIA has submitted a draft guidance for the Committee's consideration based on official IBIA guidelines prepared for the fuel oil supply industry. The draft best practice guidance for suppliers has drawn on information in international and local standards dealing specifically with marine fuel oil quality, procedures to maintain quality control in the supply chain, and procedures for delivery to ship and associated sampling and documentation.

IBIA believes that their draft guidance on best practice for suppliers complements the draft guidance on best practice for fuel oil purchasers/users.

MEPC 72 has invited Member States and international organizations to submit comments on this proposal to MEPC 73.

### **Proposal to unify the test methods of sulphur content of fuel oil**

At MEPC 71, the Committee approved a new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI". The third item under the scope of the new output focuses on the verification issues and control mechanisms, and actions that are necessary to ensure compliance and consistent implementation of regulation 14.1.3 of MARPOL Annex VI.

In light of paragraphs 2.4 and 3.3 of appendix VI of MARPOL Annex VI, the sulphur content of the MARPOL sample shall be tested in accordance with the test method ISO 8754:2003, as specified in appendix V of MARPOL Annex VI.

MEPC 72 had for its consideration the proposal that a test method of sulphur content of fuel oil shall be mandatory to avoid disputes and the methods used shall be ISO 8754:2003 or ISO 14596:2007.

ISO 8754:2003 is a mandatory testing standard for verifying the sulphur content of the MARPOL sample. However, the test range of ISO 8754 only varies from 0.03% to 5.00% (m/m). ISO

8754:2003 cannot cover the full range of sulphur content that may be necessary for the testing of fuel oils.

ISO 14596:2007, a widely used method to determine the sulphur content of fuel oil, applies to products having sulphur contents in the range of 0.001% (m/m) to 2.50% (m/m). In light of the Article 13-3 of European Sulphur-Directive (Directive EU 2016/802), ISO 8754:2003 and ISO 14596:2007 are both the methods adopted for determining the sulphur content.

While no harmonized test method and verification procedure for sulphur content have been developed for in-use fuel oil samples, IBIA has proposed adding the definition of sulphur content in regulation 2 of MARPOL Annex VI to ensure the analysis of sulphur content is done in a uniform way and the test method shall be the latest edition of ISO 8754 as mandatory.

The Plenary agreed to forward this document to the Intersessional Meeting for consideration.

## **Item 6 - Further technical and operational measures for enhancing the energy efficiency of international shipping**

It must be recalled that MEPC 70 had adopted :

- Res. MEPC.278(70) on new regulation 22A of MARPOL Annex VI related to the data collection system for fuel oil consumption of ships, which had entered into force on 1 March 2018.
- Res. MEPC.282(70) 2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP).

MEPC 71 had adopted :

- Res. MEPC.292(71) 2017 Guidelines for Administration verification of ship fuel oil consumption data ;
- Res. MEPC.293(71)) and the 2017 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database ;

and approved :

- MEPC.1/Circ.871 on Submission of data to the IMO data collection system of fuel oil consumption of ships from a State not party to MARPOL Annex VI.

### **IMO Ship Fuel Oil Consumption Database**

The Database has been launched as a new module within the GISIS platform.

Circular Letter No.3827, issued in March 2018, provides guidance for users in Administrations and recognized organizations.

### **Confirmation of compliance pursuant to regulation 5.4.5 of MARPOL Annex VI**

MEPC 71 recognized the need for uniform application of the amendments to chapter 4 of MARPOL Annex VI and invited interested Member Governments and international organizations to submit concrete proposals on a sample form of the confirmation of compliance pursuant to regulation 5.4.5 of MARPOL Annex VI to MEPC 72.

According to regulation 5.4.5 of MARPOL Annex VI, which was introduced as part of the amendments adopted by resolution MEPC.278(70):

"The Administration shall ensure that for each ship to which regulation 22A applies, the SEEMP complies with regulation 22.2 of this Annex. ... Confirmation of compliance shall be provided to and retained on board the ship".

MEPC 72 has approved MEPC.1/Circ.876 on Sample format for the Confirmation of compliance, early submission of the SEEMP part II on the ship fuel oil consumption data collection plan and its timely verification pursuant to regulation 5.4.5 of MARPOL Annex VI.

### **Early submission of SEEMP Part II for assessment - Republic of Korea**

In accordance with amended regulation 5.4.5 of MARPOL Annex VI, ships to which DCS is applied shall develop part II of the SEEMP by 31 December 2018. The Administration shall ensure that each ship's SEEMP complies with the regulation prior to collecting any data. Subsequently, Confirmation of Compliance (COC) shall be provided to and retained on board the ship.



If requests for verification are submitted when the deadline is imminent, Administrations or recognized organizations should have a considerable administrative burden of carrying out verification on a tight schedule. Whereas the Plenary noted the information provided by the observer from IACS that its member societies had received less than 100 sets of the SEEMP part II, out of 31,000 ships that would be expected to receive by 31 December 2018, for approval.

MEPC 72 agreed to incorporate the issue of early submission of the SEEMP part II and its timely verification in the draft MEPC circular on the Sample format for the Confirmation of compliance pursuant to regulation 5.4.5 of MARPOL Annex VI

5. Member Governments are invited to:

.1 encourage stakeholders concerned to submit SEEMP part II to the Administration or its recognized organization by 1 September 2018.

### **Difficulty of defining relevant, appropriate, and meaningful proxies for "transport work" for dynamically positioned (DP) ships used in offshore energy industry**

It is the view of IMCA and IOGP that no "transport work" proxy for offshore DP ships is likely to be meaningful. This is due to the complex technical and safety requirements of the offshore oil and gas and renewable energy industries, which are obviously different from the mainstream shipping markets.

Russian Federation estimated that it was not appropriate to isolate DP ships when considering proxies for "transport work" and suggested that a comprehensive and uniform approach be applied when identifying the types of ships not engaged in "transport work". Due to the specific character of activities, the rescue and salvage ships are located, most of the time, in one and the same area, without performing voyages to other areas. Those ships are not engaged in cargo transportation. Therefore the definition of proxies for "transport work" for such ships, similarly to DP ships, is not considered realistic. The same deliberations could be attributed to hydrographic ships that operate, in most cases, in one and the same area during one season or during their contractual term.

Consequently, MEPC 72 has invited interested Member Governments and international organizations to submit relevant concrete proposals to a future session of the Committee, with a view to developing a comprehensive and uniform approach for identifying ships not engaged in "transport work".

### **Agenda item 7 - Reduction of GHG emissions from ships**

MEPC 72 has adopted the Initial IMO Strategy on reduction of GHG emissions from ships (MEPC.304(72)).

The Initial Strategy is aimed at enhancing IMO's contribution to global efforts by addressing GHG emissions from international shipping, and identifying actions to be implemented by the international shipping sector, as appropriate

It is the first milestone set out in the Roadmap for developing a comprehensive IMO Strategy on reduction of GHG emissions from ships (the Roadmap) approved at MEPC 70. The Roadmap for developing a comprehensive IMO strategy on reduction of GHG emissions from ships specifies that the initial IMO GHG strategy should be adopted at MEPC 72, including, inter alia, a list of candidate short-, mid- and long term measures.

In 2015, the United Nations Framework Convention on Climate Change (UNFCCC) adopted the Paris Agreement with the long-term goal of keeping the temperature increase well-below 2°C and pursuing efforts to 1.5°C by achieving the GHG balance in the second half of this century.

At the second meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 2), several delegations proposed GHG emissions reduction targets. As the most ambitious target, Kiribati et al. proposed zero GHG emission by 2035. Belgium et al. proposed 90% efficiency improvement and 70% volume reduction, pursuing efforts to 100% reduction, by 2050. ICS et al. proposed maintaining emission volumes below the 2008 level and 50% efficiency improvement by 2050. Japan proposed 40% efficiency improvement by 2030 and 50% volume reduction by 2060.

In the international aviation sector, which is not addressed by the Paris Agreement, the International Civil Aviation Organization (ICAO) adopted the global target of improving the efficiency by 2% every year and maintaining the emission volume below the 2020 level. International shipping is the sole sector having no GHG emissions reduction target today.



The initial IMO Strategy includes levels of ambition with specific GHG emissions reduction targets for international shipping.

Levels of ambition directing the Initial Strategy are as follows:

- carbon intensity of the ship to decline through implementation of further phases of the energy efficiency design index (EEDI) for new ships ;
- carbon intensity of international shipping to decline, through reducing CO2 emissions per transport work, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008 ;
- GHG emissions from international shipping to peak and decline as soon as possible and reduction of the total annual GHG emissions by at least 50% (taking into account an increase of sea transportation) by 2050 compared to 2008

The principles guiding the Initial Strategy include the need to be cognizant of the principles enshrined in instruments already developed, such as the principle of non-discrimination and the principle of no more favourable treatment, enshrined in MARPOL and other IMO conventions; but also the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances, enshrined in UNFCCC and the Paris Agreement.

A list of candidate short-, mid- and long-term further measures with possible timelines and their impacts on states to reach the objectives aforementioned has been addressed but is subject to further work from the IMO at its coming meetings.

Possible short-term measures could be finalized and agreed by the MEPC between 2018 and 2023.

The measures evoked are, a.o :

- further improvement of the existing energy efficiency framework with a focus on EEDI and SEEMP, taking into account the outcome of the review of EEDI regulations ;
- develop technical and operational energy efficiency measures for both new and existing ships, including consideration of indicators that can be utilized to indicate and enhance the energy efficiency performance of shipping, e.g. Annual Efficiency Ratio (AER), Energy Efficiency per Service Hour (EESH), Individual Ship Performance Indicator (ISPI) and Fuel Oil Reduction Strategy (FORS) ;
- establishment of an Existing Fleet Improvement Programme ;
- use of speed optimization and speed reduction ;
- initiate research and development activities addressing marine propulsion, alternative low-carbon and zero-carbon fuels, and innovative technologies to further enhance the energy efficiency of ships and establish an International Maritime Research Board to coordinate and oversee these R&D efforts.

Possible mid-term measures could be finalized and agreed by the MEPC between 2023 and 2030, long term ones beyond 2030.

The Roadmap identifies that a revised Strategy is to be adopted in 2023.

It can be noted that some countries (Chile, Argentina for instance), originally reluctant, have joined the consensus achieved by the MEPC 72.

Main flag states have agreed to this initial strategy (Marshall Islands, Bahamas, Liberia, whereas only few countries have expressed reservations, global (Saudi Arabia, United-States) or partial (Brazil).

## **Item 11 – Development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in arctic waters**

### **Proposal to ban heavy fuel oil use and carriage as fuel by ships in Arctic waters**

MEPC 71 agreed to include a new output on "Development of measures to reduce risks of use and carriage of heavy fuel oil (HFO) as fuel by ships in Arctic waters" and "invited concrete proposals on what type of measures should be developed, including the scope of the work on the new output, to MEPC 72.

The Committee had for its consideration a proposal to introduce a mandatory ban of HFO use and carriage for use as fuel by ships in Arctic waters. The ban would be mandatory for all ships

to which the International Convention for Prevention of Pollution from Ships (MARPOL) applies, while operating in Arctic waters. HFO carried solely as cargo would not be subject to the ban.

Certain ships could be eligible for a brief delay in implementation of the ban. Delayed implementation of the HFO ban would be available for ships that have fuel tank protections in place. Ships that comply with the structural requirements of MARPOL Annex I, regulation 12A or the Polar Code Part II-A, chapter 1, regulation 1.2.1 would be able to continue to use HFO as fuel for a short period of time after 2021, as these ships have existing fuel tank protections that reduce the risk of fuel oil spills.

Some delegations expressed the view that there was no justification for the proposed ban, emphasizing that all possible risk mitigation measures associated with the use and carriage of HFO as fuel in Arctic waters should be considered before the proposed ban was established. The Russian Federation in particular believes that it is very important to take into account the practical feasibility of the proposed measures, especially the economic impact of the implementation of such measures. Canada and the Marshall Islands are of the view that when developing measures to achieve environmental objectives, potential impacts of the measures on Arctic communities and economies should be taken into account.

Additionally, the term "heavy fuel oil" is estimated not to provide a clear indication of which fuel oil is considered a heavy fuel oil (e.g. ISO 8217:2017).

Following discussion, MEPC 72 agreed to the following scope of work for PPR:

- develop a definition of HFO taking into account regulation 43 of MARPOL Annex I;
- prepare a set of Guidelines on mitigation measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters;
- on the basis of an assessment of the impacts, develop a ban on HFO for use and carriage as fuel by ships in Arctic waters, on an appropriate timescale.

## **Item 12 - Technical cooperation activities for the protection of the marine environment**

MEPC 72 noted with appreciation the innovative work undertaken by the Global Industry Alliance to Support Low Carbon Shipping (GIA), in particular, its potential role in supporting the goals of the initial IMO strategy on the reduction of GHG emissions from ships and suggested that initiatives such as the GIA should be sustained into the future.

It must be recalled that Bureau Veritas is one of the 17 member of the GIA.

Many delegations (Finland, Malta, Georgia, etc.) emphasized the importance for the coming years and particularly in the context of the implementation of the IMO strategy for GHG, of this public-private approach.

## **Agenda item 15 - Work programme of the committee and subsidiary bodies**

### **Sustainable Development Goal 14 and marine plastic litter**

A 30 had recognized the ongoing problem of marine plastic pollution, as addressed in MARPOL Annex V, which requires further consideration as part of a global solution within the framework of ocean governance, in pursuance of the thirtieth session of the IMO Assembly and proposes a new output to address the issue of marine plastic litter from shipping in the context of 2030 Sustainable Development Goal 14 (SDG 14).

MEPC 72 agreed to include a new output "Development of an action plan to address marine plastic litter from ships" in the 2018-2019 biennial agenda of the MEPC.

### **Review of the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (resolution MEPC.207(62))**

MEPC 72 agreed to include a new output on Review of the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (resolution MEPC.207(62)) in the post-biennial agenda of the Committee.

Let's remind that MEPC 62 adopted the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (MEPC.207(62)). Later on, in 2013, MEPC 65 approved the Guidance for evaluating the 2011 Guidelines for the control and

management of ships' biofouling to minimize the transfer of invasive aquatic species (MEPC.1/Circ.811),

## **Item 16 – Any other business**

### **Regional Reception Facilities Plan (RRFP) – Outline and Planning Guide for the Arctic**

IMO recognized in the 2000 Guidelines for ensuring the adequacy of port waste reception facilities (resolution MEPC.83(44)) that the requirement for States to ensure the provision of adequate waste reception facilities may be improved by regional agreements or arrangements. Further, in the 2011 Guidelines for reception facilities under MARPOL Annex VI (resolution MEPC.199(62)) the concept of regional arrangements is noted as a possible alternative for ensuring that ports and terminals within a region can meet the reception facility requirements of regulation 17 of MARPOL Annex VI.

In 2012, IMO adopted amendments to MARPOL for regional arrangements (RA) for port reception facilities (PRF) under MARPOL Annexes I, II, IV, and V (resolution MEPC.216(63), dated 2 March 2012), and MARPOL Annex VI (resolution MEPC.217(63), dated 2 March 2012). A paragraph was added in the appropriate regulation for each Annex that allows Small Island Developing States (SIDS) to satisfy reception facility requirements through RA when, because of their unique circumstances, such arrangements are the only practical means to satisfy the requirement to ensure the provision of adequate PRF. IMO also adopted Guidelines for the development of a regional reception facilities plan (resolution MEPC.221(63), dated 2 March 2012).

The proposal described in the document submitted by Canada, Denmark, Finland, USA et al was developed by the Arctic Council's Protection of the Arctic Marine Environment (PAME) Working Group, and is submitted by the eight Arctic States Party to MARPOL.

It invites MEPC to consider a regional approach to the management of MARPOL wastes from ships in the Arctic and the applicability of regional arrangements (RA) for port reception facilities (PRF) in the Arctic.

MEPC 72 asked the co-sponsors of the document to submit a proposal for a new output to MEPC 73

### **Reducing underwater noise utilizing ship design and operational measures**

The noise contribution from shipping is likely to continue rising, including in sensitive habitats, as global ship traffic increases. This issue has been on the agenda at various multilateral meetings, including the International Maritime Organization (IMO), the Convention on Biological Diversity, the OSPAR Commission<sup>2</sup>, the Arctic Council, the International Whaling Commission, the Baltic Marine Environment Protection Committee (HELCOM), and the United Nations.

The marine industry in Canada is taking a leading role in the piloting of ship noise mitigation measures. Two particularly important studies were undertaken in 2017 that assessed the impact of key operational measures on underwater noise from different ships.

To help fill gaps in knowledge and solutions, Canada will be seeking an output for this Committee at a later meeting that returns underwater noise to its agenda and which considers economically feasible actions

MEPC 72 encouraged Member States to continue to share their experiences in dealing with the reduction of underwater noise from shipping and indicate their interest in collaborating with Canada on their proposal for a new output on this issue to a future session of the Committee.

### **Vessel grey water concerns**

Grey water is produced in greater quantities than sewage on commercial vessels. Wastewater from shop sinks and deck drains in non-engine rooms, whirlpools, garbage and laundry room floor drains, and refrigerator and air conditioner condensate, inter alia, is also routed through the grey water system.

In Europe, the EU Inland Waterway Directive (2012/49/EU) has grey water discharge requirements equivalent to sewage standards and an enforcement regime. HELCOM has also recently discussed vessel grey water matters, and Svalbard has vessel grey water discharge restrictions for certain protected areas. The 2013 U.S. EPA Vessel General Permit (VGP)<sup>24</sup> grey

water requirements are related to vessel type and location. The State of Alaska's treatment of vessel grey water extends nearly two decades and is governed by federal and state legislation.<sup>28</sup> Large cruise ships in Alaskan waters must treat grey water (and sewage) to standards only achievable through an AWT. The four California National Marine Sanctuaries and the Olympic Coast Sanctuary in Washington also impose vessel grey water discharge restrictions.

The Chair invited Member States and international groups to collate information pertaining to impacts associated with this increasingly large and globally unregulated waste stream and to submit documents to MEPC 73.

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MEPC 72 had established the following intersessional/correspondence groups :

- Correspondence Group on Fuel Oil Quality, which is due to report to MEPC 73;
- Correspondence Group on EEDI Review beyond Phase 2, which is due to present its interim report to MEPC 73;
- fourth meeting of the Intersessional Working Group on Reduction of GHG emissions from ships (ISWG-GHG 4) from 3 to 7 September 2018.

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