

## **Preliminary Report of MEPC 78**

The 78th session of the IMO Marine Environment Protection Committee (MEPC 78) was held from 6 to 10 June 2022. A summary of the outcome is given hereunder for your information.

Please note that this summary has been made based on informal information obtained from participants from ClassNK and Working Papers developed during MEPC 78 with priority given to disseminating the information as early as practicable.

### **1. Greenhouse Gases (GHG) emission reduction measures**

Reduction of greenhouse gas (GHG) emissions to address global warming is a universal challenge, and the measures to reduce GHG emissions from international shipping have been deliberated at IMO.

IMO has introduced the Energy Efficiency Design Index (EEDI), the Ship Energy Efficiency Management Plan (SEEMP) and the Data Collection System for fuel oil consumption of ships (DCS) so far. Further, the Initial IMO Strategy on the reduction of GHG emissions from ships, which includes the emission reduction target and the candidate measures to reduce GHG emissions, was adopted at MEPC 72.

#### **1.1 Short-term measures for reduction of GHG**

The initial IMO Strategy on the reduction of GHG emissions from ships specifies the short-term target by 2030 for improved transportation efficiency of at least 40% compared to 2008. To achieve the short-term target, the amendments to MARPOL Annex VI were adopted at MEPC 76 to implement Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) as well as the related Guidelines were also adopted., and these

will be commenced in 2023.

#### **1.1.1 Carbon Intensity Indicator (CII)**

Operational Carbon Intensity Indicator is rating mechanism for ships, by calculating attained CII based on the operational fuel consumption data.

MEPC 76 established Correspondence Group (CG) to revise/update relevant guidelines on DCS and SEEMP, and develop guidelines on correction factors for certain ship types for implementation of CII framework.

At this session, the relevant Guidelines prepared by the said CG and Intersessional Working Group meeting held prior to MEPC 78 were considered and adopted as below.

- 2022 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)
- Guidelines for the verification and company audits by the Administration of Part III of SEEMP
- 2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity
- 2022 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database
- 2022 Interim Guidelines on Correction Factors and Voyage Adjustments for CII Calculations

(G5)

- Amendments to relevant Guidelines; CII Guidelines (G1), CII Reference Lines Guidelines (G2) and CII Rating Guidelines (G4)

Further information on CII and SEEMP Part III are posted on the following NK website.

NK website>Products & Services>Statutory Services> SEEMP, IMO DCS and CII

URL:<https://www.classnk.or.jp/hp/en/activities/statutory/seemp/index.html>

### **1.1.2 Energy Efficiency Existing Ship Index (EEXI)**

EEXI is regulations for existing ships to require the same level of energy efficiency as EEDI for new ships.

At this session, to clarify the applicable limited power of ships fitted with a shaft generator and a method to obtain ship speed  $V_{ref}$  from the in-service performance measurement, amendments to Guidelines on the Method of Calculation of the Attained Energy Efficiency Existing Ship Index (EEXI) and Guidelines on Survey and Certification of the Attained EEXI were adopted.

### **1.2 Lifecycle GHG and carbon intensity Guidelines for maritime fuels**

For low/zero-carbon fuels, which are expected to become more widely used in the future to decarbonize ships, it is recognized that CO2 emissions during the manufacturing and distribution processes of these fuels should be taken into account. It is also recognized the significant impact on global warming caused by greenhouse gases other than CO2, such as methane (CH4).

Based on this background, MEPC considers developing lifecycle GHG and carbon intensity Guidelines for marine fuel (LCA Guidelines), which assess GHG emissions from marine fuel comprehensively through its manufacture, distribution, and use onboard ships.

At this session, MEPC agreed to establish Correspondence Group for development of the said Guidelines, with a view to finalization at MEPC 80.

### **1.3 Mid/Long-term measures for reduction of GHG**

The initial IMO Strategy on the reduction of GHG emissions from ships specifies the middle-term target by 2050 to pursue the efforts towards the CO2 reduction of 70% per transport work and to reduce the total annual GHG emissions by at least 50% as well as the long-term target within this century to aims to phase out GHG emissions as soon as possible.

To proceed consideration of Mid/Long-term measures to achieve these targets, MEPC 76, held in 2021, developed work plan as follows:

Phase	Work item	Timeline
I	Collation and initial consideration of proposals for measures	2021-2022
II	Assessment and selection of measures to further develop	2022-2023
III	Development of measures for statutory requirements	2023-

At intersessional working group meeting held prior to MEPC 78, the following measures were proposed by each country. MEPC 78 agreed to proceed with phase II for further consideration of these proposals.

- GHG Fuel Standard (GFS)  
Each ship calculates GFS value, which is expressed in the mass of GHG emissions per unit of energy used on-board a ship (g CO<sub>2</sub>e/MJ). The reduction factor for the GFS value would be enhanced year by year.
- IMO Maritime Research Fund (IMRF)  
US\$2 per tonne of marine fuel are funded to IMRF, which is used for development of low/zero carbon technologies.
- International Maritime Sustainability Funding and Reward (IMSF&R)  
Using CII mechanism, ships above upper benchmark level pay funding contributions and ships below lower benchmark level receive rewards.
- feebate  
Ships using fossil fuels pay for the levy and ships

using zero-emission fuels receive rebate.

- **GHG levy**  
Ships pay GHG levy for US\$100 per tonne of marine fuel. The revenue will be funded to climate change mitigation and adaptation projects under UNFCCC, and subsidized to R&D projects for new technologies under IMO.
- **Emission Cap-and-Trade System (ECTS)**  
Based on the annual cap on GHG emissions, each ship is required to acquire and surrender allowances for GHG emissions by auctioning.

#### **1.4 Review of Initial IMO Strategy on the reduction of GHG emissions from ships**

The initial IMO Strategy on the reduction of GHG emissions from ships adopted in 2018 stipulates that its contents be reviewed every five years. At MEPC 77, recognizing the need to strengthen the ambition of Initial IMO Strategy, it was agreed to conduct a review of the Initial IMO Strategy, with a view to finalization at MEPC 80 to be held in Spring 2023.

At this session, it was agreed to hold intersessional working group meeting prior to MEPC 79 to facilitate discussion for the review of the initial IMO Strategy.

### **2. BWM Convention**

#### **2.1 Unified Interpretation on BWM Cert.**

With regard to the form of the International Ballast Water Management Certificate (IBWMC), it was pointed out that it's unclear on how to fill in the certificate for vessels temporarily engaged in a single international voyage or vessels intended for a specific voyage. At this session, a unified interpretation was approved to clarify the method of description in the certificate for such vessels.

#### **2.2 Temporary storage of treated sewage and grey water**

The prohibition on the discharge of treated sewage and graywater in certain ports has led to questions as to whether it is acceptable to temporarily store such water in ballast tanks. However, it is not clear whether the storage of treated sewage and grey water in the ballast tanks are subject to the BWM

Convention and/or MARPOL Annex IV. At this session, it was agreed to continuously consider this issue at future sessions.

### **3. Air pollution**

#### **3.1 Unified Interpretation on use of biofuel**

Regulation 18.3 of MARPOL Annex VI prescribes that fuel oil for combustion purposes derived by methods other than petroleum refining shall not cause an engine to exceed the applicable emission of nitrogen oxides (NOx) limit as per regulation 13.

At this session, the application of this requirement for a biofuel and a biofuel blend, which is expected to be introduced as zero/low-carbon fuels, were considered and a unified interpretation was approved. According to the unified interpretation, a certified marine diesel engine, which can operate on a biofuel or a biofuel blend without changes to its NOx critical components or settings/operating values outside those as given by that engine's approved Technical File, is permitted to use such a fuel oil without the additional assessment. Also a fuel oil which is a blend of not more than 30% by volume of biofuel is deemed as blends of hydrocarbons derived from petroleum refining specified in regulation 18.3.1, and additional confirmation of NOx emission is not needed. In other case than above, the onboard simplified measurement method in accordance with 6.3 of the NOx Technical Code 2008 may be used for a verification that the specified engine does not exceed the applicable NOx emissions limit when burning the said fuels.

#### **3.2 Designation of SOx emission control area**

Regulation 14 of MARPOL Annex VI sets out control measures to reduce emissions of Sulphur Oxides (SOx) and Particulate Matter (PM) from ships and limits the sulphur content in fuel oil used in Emission Control Areas (ECAs) to 0.10% and limits the sulphur content to 0.50% for outside of ECAs. So far, the Baltic Sea, the North Sea, the North American Area and the United States Caribbean Sea Area have been designated as SOx-ECA.

At this session, a proposal to designate the

Mediterranean Sea as SOx-ECA was submitted. Following the discussion, draft amendments to MARPOL Annex VI to add the Mediterranean Sea as SOx-ECA were approved. Since no conclusion was reached on the application date for the said draft amendments at this session, it is expected that MEPC 79 will further discuss the application date and adopt the amendments to MARPOL Annex VI. The earliest possible application of 0.1% sulphur limit in marine fuel oil used on board ships operating in the Mediterranean Sea would be in Spring of 2025.

### **3.3 Bunker delivery note (BDN)**

MSC 105 had discussions on the development of further measures to enhance the safety of ships relating to the use of fuel oil and approved the draft amendments to SOLAS in relation to flashpoint of fuel oil to be indicated on bunker delivery note.

In response, MEPC 78 approved the draft amendments to appendix V of MARPOL Annex VI to include information on flashpoint of fuel oil in the bunker delivery note.

### **3.4 Discharge of wash water from exhaust gas cleaning system (EGCS)**

With regard to the sulphur contents in marine fuel oil, regulation 4 of MARPOL Annex VI permits the use of equivalent means as long as the reduction method for SOx is evaluated as to be equivalent to the required sulphur contents specified in the regulation 14 of MARPOL Annex VI. An exhaust gas cleaning system (EGCS) is one of such equivalent means. EGCS shall comply with 2015 Guidelines for EGCS (MEPC. 259 (68)), and wash-water discharged from EGCS should meet wash-water discharge criteria in the Guidelines. On the other hand, some ports prohibit the use of EGCS due to the concern on the impact of the wash-water to marine environment. MEPC 74 agreed to investigate the environmental impact of the wash-water discharged from EGCS with a view to establishing uniform requirements, and PPR Sub-Committee has investigated it.

At this session, having considered the report from PPR Sub-Committee, Guidelines for risk and impact

assessments of the discharge water from EGCS were approved.

## **4. Others**

### **4.1 Anti-fouling Systems (AFS)**

The AFS Convention entered into force in 2008 to prohibit the use of harmful organotin (TBT) in anti-fouling paints used on ships. At MEPC 76, amendments to the AFS Convention to prohibit the use of anti-fouling paints containing cybutryne were adopted.

At this session, to reflect the prohibition of cybutryne, amendments to Guidelines for brief sampling of anti-fouling systems on ships, Guidelines for inspection of anti-fouling systems on ships and Guidelines for survey and certification of anti-fouling systems on ships were adopted.

### **4.2 Marine plastic litter**

With a view to tackling the problem of plastics in the oceans, MARPOL Annex V prohibits discharge of plastics from vessels. However, it was often pointed out that this prohibition regulation was not effective and that some additional actions were needed at IMO level to reduce plastic pollution in the marine environment. To solve this problem, MEPC resolution on Strategy to Address Marine Plastic Litter from Ships was adopted at MEPC 77, which includes vision of aims to strengthen the international framework and compliance with the relevant IMO instruments, endeavoring to achieve zero plastic waste discharges to sea from ships by 2025.

At this session, amendments to MARPOL Annex V were approved to expand the scope of Garbage Record Book, which is required to be provided for vessels of 400 tons or more, to vessels of 100 tons or more. These amendments will be adopted at next session.

## **5. Amendments to mandatory instruments**

MEPC 78 adopted amendments to mandatory instruments as follows:

## **5.1 Watertight doors on cargo ships**

Amendments to MARPOL Annex I and IBC Code to align with the requirements on the condition of watertight doors specified in SOLAS were adopted.

Entry into force: 1 Jan 2024 (MARPOL Annex I)

Entry into force: 1 July 2024 (IBC Code)

## **5.2 GESAMP Hazard Evaluation Procedure**

Amendments to appendix I of MARPOL Annex II related to the abbreviated legend of the revised GESAMP Hazard Evaluation Procedure were adopted.

Entry into force: 1 November 2023

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For any questions about the above, please contact:

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