

# Recent Topics at IMO

— Outline of Discussion at IMO Committees —

Rule Development and ICT Division, External Affairs Department, ClassNK

## 1. INTRODUCTION

This article introduces recent topics discussed at International Maritime Organization (IMO). At the previous issue, a summary of the topics discussed at 76th Marine Environment Protection Committee (MEPC 76) held in June of 2021 was provided.

This article provides a summary of the decisions taken at 77th Marine Environment Protection Committee (MEPC 77) held from 22 to 26 November 2021 and 104th Maritime Safety Committee (MSC 104) held from 4 to 8 October 2021 as below.

## 2. OUTCOMES OF MEPC 77

### 2.1 Greenhouse Gases (GHG) Emission Reduction Measures

Measures to reduce GHG emissions from international shipping have been deliberated at IMO and 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) have been introduced so far. Further, the Initial IMO Strategy on reduction of GHG emissions from ships, was adopted at MEPC 72 held in 2018, which includes the emission reduction targets and candidate measures to reduce GHG emissions from maritime.

#### 2.1.1 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, at MEPC 76, the amendments to MARPOL Annex VI were adopted to implement Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) as well as the related Guidelines were also adopted. Further, a Correspondence Group (CG) was established for the implementation of CII framework to develop/update Guidelines on SEEMP and DCS, correction factors for certain ship types for the CII calculations.

An interim report of the CG was submitted at this session and followings were agreed. For finalization of the above-mentioned Guidelines, CG will continue its work and final report of the CG will be submitted to MEPC 78 held in June 2022.

- (1) in cases where a ship holds multiple load line certificates, deadweight and/or gross tonnage to be used for calculation of the CII should be specified in DCS verification guidelines
- (2) the correction factors should be applied in the calculation of the attained CII, and the CII value after correction should be used for rating purposes
- (3) the attained annual operational CIIs as well as the parameters to calculate the correction factors etc. should be reported to IMO

#### 2.1.2 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 CO<sub>2</sub> 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.

At this session, proposals for mid/long-term measures to achieve the above target were submitted, such as cap-and-trade system, carbon levy etc. These proposals will be further considered at future session.

#### 2.1.3 IMRF and IMRB

At MEPC 75 held in November 2020, to promote research and development of low and decarbonized technologies, it was proposed to establish the International Maritime Research Fund (IMRF). As a result of the discussion, MEPC 77 agreed to continuously consider this proposal at the future sessions.

### 2.1.4 Review of Initial IMO Strategy on the Reduction of GHG Emissions from Ships

In order to keep the Paris Agreement temperature goals which would limit temperature to well below 2 °C, preferably to 1.5 °C, the recent reports of the Intergovernmental Panel on Climate Change (IPCC) emphasize the urgency of tackling the climate crisis and reinforce that all emissions must peak now and a zero GHG emissions level must be achieved for all sectors by at least 2050.

At this session, recognizing the need to strengthen the ambition of Initial IMO Strategy, MEPC 77 agreed to conduct a revision of the Initial IMO Strategy, with a view to finalization at MEPC 80 to be held in Spring 2023.

### 2.1.5 Wind Assisted Propulsion Systems on EEDI

At MEPC 65 held in May 2013, Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI (MEPC.1/Circ.815) was approved to incorporate the effect of innovative technologies into the calculation of EEDI values.

At this session, the amendments to MEPC.1/Circ.815 were approved to reflect the effect of the Wind Assisted Propulsion Systems (WAPS) to EEDI/EEXI calculation.

## 2.2 BWM Convention

### 2.2.1 Commissioning of Ballast Water Management Systems

At MEPC 75 held in November 2020, the amendments to the BWM Convention were adopted to specify the requirements to conduct a commissioning test of Ballast Water Management System (BWMS) including sampling and analysis. This amendment will enter into force on 1 June 2022.

At this session, a Unified Interpretation was approved to interpret that the commissioning testing of individual BWMS should be conducted if the initial or additional survey is completed on or after 1 June 2022.

### 2.2.2 Ships Operating at Ports with Challenging Water Quality

Proposals on application of the BWM Convention to ships operating at ports with challenging water quality was made due to concerns on operation of BWMS at port area where certain water qualities, such as high level of turbidity, high level of total suspended solids or low salinity, are identified to exceed the operational limitation.

At this session, it was agreed to treat the cases where ships operate at ports with challenging water quality as contingency measures specified in BWM.2/Circ.62. MEPC 77 also agreed to further consider the matter at next session to develop the guidance for ships operating at ports with challenging water quality.

### 2.2.3 Experience-Building Phase

At MEPC 71 held in October 2017, MEPC resolution was adopted, which stipulates a work plan during the experience-building phase (EBP) to gather data and analyze the concerns for implementation of the BWM Convention and to facilitate the implementation of the Convention by classifying EBP into three stages as follows.

Stage 1: data gathering to collect the concerns over the implementation of the Convention

Stage 2: data analysis

Stage 3: review of the requirements of the Convention

At this session, the extension of EBP was proposed due to the delay in the data gathering caused by the pandemic of COVID-19. As a result of the discussion, MEPC 77 agreed to consider a possibility of the extension at next session, in which the result of data analysis based on the gathered data will be reported.

## 2.3 Air Pollution

### 2.3.1 Guidelines for Exhaust Gas Cleaning System (EGCS)

Regulation 14 of MARPOL Annex VI prescribes requirements of sulphur content of any fuel oil used on board ships, for reduction of SO<sub>x</sub> emission from international shipping, and alternative compliance method can be applied with acceptance of the Administration in accordance with regulation 4 of Annex VI. Under the circumstances that the Exhaust Gas Cleaning System (EGCS) is used as alternative compliance methods, EGCS should be in line with EGCS Guidelines (MEPC.289(68)), which stipulate the technical standards and verification procedures.

At this session, based on the reports from PPR Sub-Committee, amendments to the EGCS Guidelines, which include new definitions for technical terms and revision of technical standards, etc., were adopted. The guidelines will be applied to EGCS installed on ships the keels of which are laid or which are at a similar stage of construction on or after 1 June 2022; or exhaust gas cleaning systems installed on ships the keels of which are laid or which are at a similar stage of construction before 1 June

2022 which have a contractual delivery date of EGCS to the ship on or after 1 June 2022 or, in the absence of a contractual delivery date, the actual delivery of the exhaust gas cleaning system to the ship on or after 1 June 2022; or amendments, as those specified in paragraphs 4.2.2.4 or 5.6.3 of the 2021 EGCS Guidelines, to existing exhaust gas cleaning systems undertaken on or after 1 June 2022.

### 2.3.2 Failure of EGCS

At MEPC 74, the Guidance on recommended actions to take in the case of the failure of a single monitoring instrument and the EGCS fails etc. was adopted. The Guidance specifies the procedures that a short-term temporary emission exceedance due to the system response should not be considered as a breach, and the system malfunction that cannot be rectified within one hour is regarded as a breakdown. Also, any EGCS malfunction that lasts more than one hour or repetitive malfunctions is required to be reported to flag States and port State's Administration to determine the appropriate action. At their discretion, the Flag State could take such information and other relevant circumstances into account to determine the appropriate action to take in the case of an EGCS malfunction.

At this session, amendments to the Guidance were approved to require additional communication with the relevant port State to decide on appropriate action in accordance with the Convention, to continue on its intended voyage in a non-compliant condition.

### 2.4 Others (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, it was agreed to conduct IMO study on marine plastic litter from ships to estimate the contribution to marine plastic litter by all ships.

At this session, MEPC resolution on Strategy to Address Marine Plastic Litter from Ships was adopted, which includes vision of aims to strengthen the international framework and compliance with the relevant IMO instruments, endeavouring to achieve zero plastic waste discharges to sea from ships by 2025.

## 3. OUTCOMES OF MSC 104

### 3.1 Adopted Mandatory Requirement

Mandatory requirement was adopted at MSC 104 as follows:

#### (1) Amendments to 1988 LL Protocol and IGC Code

Amendments to 1988 LL Protocol regulation 27(13)(a) with the relevant parts of IGC Code were adopted, in order to clarify the condition of watertight doors on cargo ships to be considered for stability criteria at any stage of flooding.

### 3.2 Ad Hoc Midterm Amendment Cycle for SOLAS and the Associated Codes

Amendments to SOLAS normally enter into force every four years. SOLAS also stipulates that the minimum period between adoption and entry into force of amendments is 18 months. Therefore, amendments adopted less than 18 months before the end of a four-year cycle of entry into force should enter into force at the end of the next four-year cycle.

The COVID-19 pandemic has delayed finalization of draft amendments for approval and adoption, the entry into force of which had originally been planned within the current four-year cycle, i.e. by 1 January 2024.

Considering above circumstances, the Committee endorsed ad hoc midterm amendment cycle with an entry into force date of 1 January 2026 for the draft amendments to SOLAS adopted before 1 July 2024.

### 3.3 Modernization of the Global Maritime Distress and Safety System (GMDSS)

Due to the fact that requirements and standards related to the GMDSS have not been updated for long time, modernization of the GMDSS has been discussed at IMO.

At this session, the draft amendments to SOLAS II-1, III, IV and V, and the appendix (Certificates), the 1988 SOLAS Protocol, the 1994 and 2000 HSC Codes, the 1983 and 2008 SPS Codes and the 1979, 1989 and 2009 MODU Codes, were finalized and approved. The relevant performance standards, guidelines and guidance were also approved. Provided with adoption of these draft amendments at MSC 105, the amendments would be entered into force on 1 January 2024. The main points of the amendments are shown as follows:

#### (1) Definition of "Sea area A3" are modified to "a recognized mobile satellite service supported by the ship earth station carried

on board” from “an Inmarsat geostationary satellite”.

- (2) The provisions in SOLAS regulation III/6 related to two-way VHF radiotelephone apparatus and search and rescue locating devices (SART) have been relocated under SOLAS IV.
- (3) The performance standards for the reception of maritime safety information and search and rescue related information by MF (NAVTEX) and HF, shipborne VHF radio installations, shipborne MF and MF/HF radio installations, Inmarsat-C ship earth stations, simplified voyage data recorders (S-VDRs)/VDRs, etc. were amended.

#### 3.4 New Output on Remote Survey

The recent years' COVID-19 pandemic situation has hindered or restricted physical attendance of surveyors to ship onboard surveys. To address the situation, ship surveys have been partially implemented by remote means utilizing ICT technique in lieu of physical attendance of surveyors.

At this session, it was agreed to consider developing guidance on assessments and applications of remote survey with a target completion year of 2024. Discussion will be started at next III Sub-Committee in July 2022.

#### 3.5 New Output on Safety of Newly Built Ships Using Ammonia as Fuel

To achieve GHG reduction target, utilization of alternative fuel is essential and demand for design and/or construction of ammonia-fueled ships are emerging. Under these circumstances, it was proposed to develop non-mandatory guidelines for ships using ammonia as fuel at MSC 104.

Due to time constraint, the proposal was not discussed at this session. It would be discussed at MSC 105 in April 2022 and then the consideration of safety measures for ships using ammonia as fuel would be initiated at CCC Sub-Committee in September 2022.