

# Recent Topics at IMO

— Outline of Discussion at IMO Committees —

External Affairs Department, Rule Development and ICT Division, 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 79th Marine Environment Protection Committee (MEPC 79) held in December 2022 and 106th Maritime Safety Committee (MSC 106) held in November 2022 was provided.

This article provides a summary of the decisions taken at 80th Marine Environment Protection Committee (MEPC 80) held from 3 to 7 July 2023 and 107th Maritime Safety Committee (MSC 107) held from 31 May to 9 June 2023 as below. Refer to the separate article “Recent Topics on GHG Emissions Reduction from International Shipping” for those topics related to Greenhouse Gases (GHG) discussed at MEPC 80 not covered by this article.

## 2. OUTCOMES OF MEPC 80

### 2.1 Greenhouse Gases (GHG)

#### 2.1.1 Review of Data Collection System for Fuel Oil Consumption of Ships

The Data Collection System for fuel oil consumption of ships (DCS), under which operational data such as fuel oil consumption has been collected and reported since 2019, has been under review since 2022 to improve the items to be reported and the granularity of reported data.

At this session, draft amendments to MARPOL Annex VI Appendix IX were approved, including the amendments and additions to the following items required to be reported in the DCS.

1. Fuel oil consumption per combustion systems (main engines, auxiliary engines/generators and oil-fired boilers);
2. Fuel oil consumption while the ship is not under way;
3. Laden distance traveled (on a voluntary basis);
4. Transport work;
5. Total amount of on-shore power supplied; and
6. Category of Innovative energy efficiency technologies.

The amendments will be adopted at MEPC 81. It is also noted that the “transport work” above was agreed to be calculated based on the actual amount of cargo, the details of which will be further discussed at MEPC 81 along with amendments to the relevant guidelines.

#### 2.1.2 Use of Power Reserve in EEDI Regulations

At the previous session, it was agreed in general to introduce the concept of the use of power reserve, which is limited under normal operations, during emergency situations (i.e. in adverse conditions) in order to conform with both the Energy Efficiency Design Index (EEDI) and minimum propulsion power regulations.

At this session, discussions were held with an aim to introduce the concept, particularly regarding the definition of power of main engines ( $P_{ME}$ ), referred maximum continuous rating (MCR) in NO<sub>x</sub> certification framework and possible implications on the NO<sub>x</sub> Technical Code. Specifically, divergent views were expressed from delegations towards whether the definition of  $P_{ME}$  should be based on 75% of limited MCR ( $MCR_{lim}$ ) as referred to in the EEDI regulations, or the lower value between 83% of  $MCR_{lim}$  or 75% of MCR. The discussions will be continued in future sessions as agreements could not be reached at this session.

#### 2.1.3 Onboard Carbon Capture Systems

There have been initiatives to develop onboard carbon capture (OCC) technologies for reducing GHG emissions by segregating and capturing CO<sub>2</sub> from exhaust gases onboard ships. At the last session, a proposal was made that the amount of CO<sub>2</sub> captured by OCC Systems should be taken into consideration when calculating the attained EEDI, Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII).

At this session, a new output under Intersessional Working Group on Reduction of GHG from Ships (ISWG-GHG) was agreed for further work to develop a regulatory framework to allow for uses of OCC technologies.

## 2.2 BWM Convention

### 2.2.1 Review of BWM Convention

When BWM Convention entered into force in 2017, it was agreed to monitor the application and to review the effectiveness of the Convention through the experience building phase (EBP), in which a relevant Correspondence Group was established to develop and prepare a Convention Review Plan (CRP).

At this session, MEPC approved the CRP that includes the issues to be finalized. Furthermore, a Correspondence Group was re-established to continue with the review of the BWM Convention by MEPC 81. Amendments to the BWM Convention are currently planned to be approved at MEPC 84 (spring 2026) and to be adopted at MEPC 85 (autumn 2026).

### 2.2.2 Ballast Water Management in Ships Operating in Challenging Water Quality and Temporary Storage of Treated Sewage and/or Grey Water

As there are ports with challenging water quality (CWQ) that make it difficult to continuously operate ballast water management systems (BWMS), a draft interim guidance has been proposed to allow taking in ballast water while bypassing BWMS in such ports and employing ballast water exchange plus treatment (BWE + BWT) at areas where the treatment system can operate normally. At this session, comments were raised regarding the timing when such bypassing should be commenced and when normal operation should be resumed. However, no general agreement could be reached and therefore the discussion will be continued at MEPC 81.

In addition, the prohibition on the discharge of treated sewage and grey water at certain ports has led to temporary storage of treated sewage and grey water in ballast tanks, and thus another draft guidance has been proposed to set out measures to be taken when treated sewage and/or grey water should be temporarily stored into ballast tanks at such ports. Discussions were held regarding several guidance proposals at this session, but due to time constraints, it was concluded that the discussion will continue at MEPC 81 following intersessional work to develop a concrete proposal.

### 2.2.3 Protocol for Verification of Ballast Water Compliance Monitoring Devices

The BWM Convention regulates the number of organisms per volume in treated ballast water. To verify compliance to the regulation, ballast water compliance monitoring devices (CMD) have been used as a rapid assessment of the concentration of viable organisms in treated water. In this regard, a framework for the verification of the performance of ballast water CMD has been discussed at the Sub-Committee on Pollution Prevention and Response (PPR).

At this session, the Protocol for Verification of Ballast Water Compliance Monitoring Devices developed by PPR was approved. The CMD approved in accordance with the protocol are expected to be utilized at scenes such as PSC sampling and onboard monitoring.

### 2.2.4 Unified Interpretation on the Format of BWM Certificate

The unified interpretation drafted at PPR was approved at this session, addressing the application of the BWM Certificate in terms of the date of construction for ships that went under a major conversion.

### 2.2.5 Guidance on BWRB

In relation to the amendments to the mandatory requirement regarding the format of Ballast Water Record Books (BWRB) being adopted at this session, the guidance on matters relating to ballast water record-keeping and reporting was approved. In addition, the guidelines for the use of electronic record books under the BWM Convention were adopted along with the approval of consequential amendments to the Regulations A-1 and B-2 of the BWM Convention, the latter of which will be adopted at MEPC 81.

## 2.3 Air Pollution

### 2.3.1 Revision of the Requirements of Bunker Delivery Note for Low-Flashpoint Fuels and Gas Fuels

At the previous session, amendments to MARPOL Annex VI were adopted to include flashpoint information of the fuel delivered to the ship into the bunker delivery note (BDN). Meanwhile, further discussions were held to clarify the application of BDN requirements to low-flashpoint fuels and gas fuels.

At this session, amendments to MARPOL Annex VI have been approved, which clarify the requirements for onboard storage and minimum information of BDN for low-flashpoint fuels and gas fuels. These amendments will be adopted at MEPC 81.

## 2.4 Others

### 2.4.1 Minimization of Transfer of Invasive Aquatic Species

Since 2020, the 2011 Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species (Res. MEPC.207(62)) have been reviewed in terms of their practicalities and effectiveness.

At this session, amendments to the Guidelines were adopted, which include the provisions on hull inspection frequency on the basis of the anti-fouling system (AFS) application, recommended cleaning on the basis of the results from hull inspections, etc. It was also agreed that guidelines on matters relating to provisions on capture rates of biomass and particles during in-water cleaning will be developed by 2025.

### 2.4.2 Amendments to Guidelines for the Development of the Inventory of Hazardous Materials

With respect to the restriction of the use of cybutryne as anti-fouling system since January 2023, amendments to the Guidelines for the Development of the Inventory of Hazardous Materials (Res. MEPC.269(68)) have been adopted, adding cybutryne to hazardous materials to be listed in the Inventory of Hazardous Materials (IHM), the development of which is required in the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (also known as the Ship Recycling Convention or the Hong Kong Convention).

## 2.5 Amendments to Mandatory Instruments

### 2.5.1 Amendments to the Format of Ballast Water Record Book

Amendments to the format of Ballast Water Record Books (BWRB) in the BWM Convention Appendix II were adopted, which require recording in terms of Codes (letter) and Items (number) similar to the format of Oil Record Books, instead of specifying records in Items (number) only. The amendments will enter into force on 1 February 2025.

## 3. OUTCOMES OF MSC 107

### 3.1 Adopted Mandatory Requirements

Mandatory requirements were adopted at MSC 107 as follows:

- (1) Amendments to SOLAS Chapter II-1 on safety requirements for lifting appliances and anchor handling winches
 

Amendments to SOLAS chapter II-1 to provide safety requirements on lifting appliances and anchor handling winches were adopted. Accordingly, thorough examination and load test in compliance with the guidelines introduced in item 3.3.2(1) would be required for those equipment installed to new and existing ships.
- (2) Amendments to SOLAS chapter II-2, etc. on the prohibition of perfluorooctane sulfonic acid (PFOS)
 

Amendments to SOLAS chapter II-2, and the 1994 and 2000 HSC Codes to prohibit the use of fire-fighting foams containing PFOS, were adopted.
- (3) Amendments to SOLAS chapter V and format of SE Certificate on carriage of electronic inclinometers
 

Amendments to SOLAS chapter V to require carriage of electronic inclinometers on container ships and bulk carriers of 3,000 gross tonnage and upwards were adopted. Accordingly, format of SE Certificate was also amended to add new entry of "Container ship" in Particulars of ship. The requirement would be applied to new bulk carriers defined under SOLAS XII and ships which are intended primarily to carry containers.
- (4) Amendments to LSA Code
 

Amendments to LSA Code to add new ventilation requirements applied to totally enclosed lifeboats, in conjunction with the amendments to the recommendation on testing of life-saving appliances (resolution MSC.81(70)) which newly stipulates the relevant operation tests, were adopted.
- (5) Amendments to IMSBC Code
 

The 7th amendments to IMSBC Code (AMENDMENT 07-23) were adopted, including addition of new cargoes.

### 3.2 Approved Mandatory Requirements

The following mandatory requirements were approved at this session, and are expected to be considered for adoption at MSC 108 in May 2024.

#### (1) Amendments to IGF Code

Amendments to IGF Code were approved as a part of the task for amendments to the IGF Code and development of guidelines for alternative fuels and related technologies. It was also agreed to issue an MSC circular on the early

implementation of the draft amendments to paragraphs 4.2.2 and 8.4.1 to 8.4.3 of the Code.

(2) Amendments to International Code for the Safe Carriage of Grain in Bulk (Grain Code) (resolution MSC.23(59))

Amendments to Grain Code, to add new loading condition of specially suitable compartments partly filled in way of the hatch opening with ends untrimmed, were approved.

(3) Amendments to SOLAS regulation II-1/3-4

Amendments to SOLAS regulation II-1/3-4 to require emergency towing arrangements fitted on ships other than tankers of not less than 20,000GT were approved. The detailed requirements would be considered based on the existing guidelines (Res. MSC.35(63)) at SDC Sub-Committee.

(4) Amendments to LSA Code

The following amendments to LSA Code and the *recommendation on testing of life-saving appliances* (resolution MSC.81(70)) were approved;

1. In-water performance requirements for lifejackets;
2. Requirements for single fall and hook systems with on-load release capability which is used for lifeboat launched by a fall or falls, except a free-fall lifeboat; and
3. Requirements for lifeboats to limit the minimum and maximum lowering speed of fully loaded survival craft and rescue boats.

(5) Amendments to SOLAS chapter II-2 and FSS Code

The following amendments to SOLAS chapter II-2 and FSS Code on fire safety of ro-ro passenger ships, etc. were approved;

1. Fire safety requirements on new/existing ro-ro passenger ships mainly shown as below;
  - Fixed fire detection and fire alarm systems including linear heat detectors;
  - Video monitoring in ro-ro spaces;
  - Arrangement of openings in ro-ro and special category spaces;
  - Arrangement of weather decks; and
  - Water monitors for protection of weather deck
2. Amendments to SOLAS regulation II-2/7.5.5 to require fixed fire detection and fire alarm systems within control stations and cargo control rooms in addition to accommodation spaces of cargo ships.

### 3.3 Approval of Unified Interpretations (UIs), Guidelines and Guidance etc.

The following unified interpretations (UIs), guidelines, guidance and etc. were approved during MSC 107. IACS UI referred to as below is available on IACS website (<http://www.iacs.org.uk/>).

#### 3.3.1 UIs

(1) Unified interpretation of IGF Code

1. Unified interpretation of 5.8 to clarify applicability of requirements on arrangements and bilge well of fuel preparation rooms not located on open deck.
2. Unified interpretation of 9.2.2 to restrict the use of single common flange in the piping system for fuel transfer to the consumers.

(2) Unified interpretation of IGC Code

1. Unified interpretation to clarify that cargo transfer equipment installed on LNG bunkering ships should comply with 11.3.1.4, 11.3.1.5, 11.4.1, 11.4.3 and 18.10.3.2 for fire detection and fire protection in the cargo area.
2. Unified interpretation on the conduct of verifications and examinations required during the first full loading and unloading of the cargo under 4.20.3.5, 4.20.3.6, 4.20.3.7, 5.13.2.5 and 13.3.5.

(3) Amendments to unified interpretation of 2008 IS Code (MSC.1/Circ.1537/Rev.1)

Amendments to unified interpretation of 2008 IS Code (MSC.1/Circ.1537/Rev.1) to make specific down-flooding points (ventilators fitted with weathertight closing appliances, serving at machinery spaces that are required to remain open, are regarded as unprotected openings), which were formerly applied only to weather criterion, applied to the entirety of the 2008 IS Code.

(4) Amendments to unified interpretation of SOLAS chapter II-1 (MSC.1/Circ.1362/Rev.1)

Amendments to unified interpretation of SOLAS chapter II-1 (MSC.1/Circ.1362/Rev.1) to include the following new

interpretations.

1. Unified interpretation of regulation II-1/3-8 on mooring arrangement and equipment to clarify the documentation which was necessary to support an Administration or an RO in verifying compliance with regulation II-1/3-8; and
2. Unified interpretation of regulation II-1/13.2.3 to provide clarification for pressure testing of penetrations in watertight divisions after a fire test for passenger ships.

(5) Unified interpretation of LSA Code and 1994/2000 HSC Code

Unified interpretation of LSA Code and 1994/2000 HSC Code to accept multiple light source LED torch as an alternative to “one spare bulb” equipped for liferaft, lifeboat and rescue boat, provided that the failure of any one of LED does not prevent the fully functioning of other LEDs.

(6) Amendments to unified interpretation of SOLAS chapter II-2 (MSC.1/Circ.1276)

Amendments to unified interpretation (MSC.1/Circ.1276) in line with the application to the generalized “ducts”, not only to galley ducts in SOLAS regulation II-2/9.7.2.5. The amended interpretation applies to fire protection construction, installation, arrangements and equipment to be installed on board ships of which the building contract is placed on or after the date of approval.

### 3.3.2 Guidelines and Guidance etc.

(1) Guidelines on lifting appliances and anchor handling winches

In conjunction with the amendments to SOLAS as shown in above 3.1(1), the relevant two (2) guidelines on lifting appliances and anchor handling winches were approved.

(2) Interim guidelines for the safety of ships using LPG fuels

*Interim guidelines for the safety of ships using LPG fuels*, as a part of the task for amendments to the IGF Code and development of guidelines for alternative fuels and related technologies.

(3) Interim guidelines on onshore power supply (OPS)

*Interim guidelines on safe operation of onshore power supply (OPS) service in port for ships engaged on international voyages.*

(4) Amendments to performance standards for water level detectors on ships subject to SOLAS regulations II-1/25, II-1/25-1 and XII/12 (resolution MSC.188(79)/Rev.1)

Amendments to performance standards for water level detectors on ships subject to SOLAS regulations II-1/25, II-1/25-1 and XII/12 (resolution MSC.188(79)/Rev.1) to clarify that the measurement of height from the bottom of a bilge well is applied to bilge level sensors in regulation II-1/25-1.3.

(5) Amendments to Hazardous area classification (application of SOLAS regulation II-1/45.11) (MSC.1/Circ.1557)

Amendments to Hazardous area classification (application of SOLAS regulation II-1/45.11) (MSC.1/Circ.1557) in order to address inconsistencies between the standard IEC 60092-502. (related to IACS UI SC274)

### 3.4 Postponement of Application of a Part of Performance Standard of GMDSS Equipment in Relation to Resolutions MSC.511(105), MSC.512(105) and MSC.513(105)

As modernization of the Global Maritime Distress and Safety System (GMDSS), the relevant performance standards, guidelines and guidance have been approved at MSC 105 with entry into force on 1 January 2024.

However, noting the relevant new IEC standards are not yet developed, concerns were expressed that shipborne VHF, MF and MF/HF radio installations and Inmarsat-C ship earth stations meeting the new performance standards approved at MSC 105 may not be supplied by the effective date.

To address this situation, MSC 107 agreed to permit continued installation of radio installations that comply with the existing standards (i.e. resolutions A.803(19), as amended, A.804(19), as amended, A.806(19), as amended and A.807(19), as amended) until 1 January 2028.

Accordingly, MSC circular on *Delays affecting the availability of new GMDSS equipment compliant with the revised performance standards*, set out in resolutions MSC.511(105), MSC.512(105) and MSC.513(105) and the revision of MSC.1/Circ.1460/Rev.3 on *Guidance on the validity of radiocommunications equipment installed and used on ships* were approved at this session.

### 3.5 Consideration of Requirements for Maritime Autonomous Surface Ships (MASS)

In the recent development of MASS, it has been discussed at MSC on an international instrument of MASS (MASS Code).

At this session, based on the report by the Correspondence Group (CG) and the meeting outcome arranged by the related working group such as the second Joint MSC-LEG-FAL Working Group (JWG2), non-mandatory MASS Code has been discussed and agreed on further consideration. In addition, the road map for developing the MASS Code was discussed, which resulted in the re-establishment of the CG, and establishment of Intersessional MASS Working Group (ISWG) in the coming October. Consequently, it was also agreed to postpone the third Joint Working Group (JWG 3), originally scheduled as September of 2023, to spring of 2024. Given the updated road map, changing the planned adoption of the mandatory code from MSC 110 (in 2025) to MSC 111 (in 2026) was agreed, while keeping the date of entry into force of the mandatory MASS Code as 1 January 2028.

### 3.6 Measures to Enhance the Safety of Ships Relating to the Use of Fuel Oil

Triggered by the global 0.50% sulphur limit, which has entered into force on 1 January 2020, further measures to enhance the safety of ships relating to the use of fuel oil have been discussed. MSC 106 adopted amendments to SOLAS Chapter II-2 to require that a bunker delivery note for the fuel delivered to the ship shall contain the flashpoint information.

At this session, the amendments to SOLAS Chapter II-2 to specify similar general provisions on fuel oil safety as set out in 18.3.1.1.3 of MARPOL Annex VI were approved. Also, joint MSC-MEPC *guidelines for taking fuel oil samples during bunkering* based on the existing guidelines (resolution MEPC.182(59)) was approved in order to establish a single sampling regime under both the SOLAS and MARPOL Conventions. The draft revised guidelines will be approved by subsequent MEPC and published as an MSC-MEPC Circular.