

# Ballast water management

(Revision 4)

## Our Position

The BWM Convention plays a crucial role in safeguarding the environment by preventing the spread of harmful aquatic organisms and pathogens. IACS, operating within the framework of the IMO, is committed to contributing to the development of practical measures as well as ensuring consistent implementation of the Ballast Water Management (BWM) Convention. Additionally, IACS actively participates in the Experience Building Phase, established to develop improvements to the Convention.

Furthermore, IACS acknowledges the importance of addressing technical challenges related to retrofitting and engineering, along with potential safety implications. These concerns include ship stability issues due to insufficient capacity of Ballast Water Management Systems (BWMS), new operational challenges such as ships operating in poor water quality conditions or the temporary storage of treated sewage and/or grey water in ballast tanks, and potential fire risks associated with BWMS installation. Efficient onboard surveys are also crucial. IACS emphasizes the necessity of identifying and adequately addressing these challenges, primarily through amendments to IMO instruments or, if necessary, through IACS resolutions.

## BACKGROUND

Considering that challenges may arise during the implementation of the BWM Convention that were not foreseen at the time of its adoption, MEPC 71 adopted resolution MEPC.290(71) establishing an Experience Building Phase associated with the Convention. MEPC 80 approved BWM.2/Circ.79 on Convention Review Plan for the experience-building phase associated with the BWM Convention. During MEPC 81, the Committee endorsed the list of provisions and instruments for revision and/or development under the convention review stage of the experience-building phase associated with the BWM Convention. This endorsement will guide the further work of the Correspondence Group on the Review of the BWM Convention.

Recognising that due considerations should be further given to the items at discussion in the Convention Review, IACS will continue to be involved in the discussion on the following topics (not an exhaustive list):

- Implementation of the Convention and the associated Code, Guidelines and Guidance:
  - amendments to the Convention and/or the Code in conjunction with BWMS
  - commissioning during the initial survey (survey item (BI) 1.1.3.20 in the 2023 Version of the HSSC Survey Guidelines)
  - ballast water sampling and analysis and analytical procedures for sampling and analysis
  - application of the BWM Convention to ships operating at ports with challenging water quality
  - temporary storage of treated sewage and grey water in ballast tanks
  - approval of modifications to BWMS with existing TAC in accordance with BWMS Code
- Safety and stability requirements, risk of fire and/or explosion caused by BWMS, for hazardous materials

stored and/or hazardous products generated by the system:

- Hazardous area definition and use of electrical equipment
  - Suitability of fire fighting system for stored material and generated products
  - Appropriateness of the materials or equipment contained within the space relative to the fire risk categorization of that space
  - Possible chemical reactions and suitable coating for chemical storage tanks that must be considered in addition to the presence of chemicals in assessing the hazards of ballast water treatment systems
  - Stability requirements of ships engaging BWE+BWT
  - Spread of hazardous materials/products also caused by possible breakdown of BWMS (corrosion, miss-operation and lack of management)
  - Pollution due to spillage of hazardous materials
  - Safety implications of proposed procedures for modifications to type approved BWMS
- Survey issues:
- Implementing efficiently the BWM.2/Circ.70/Rev.1 “2020 Guidance for the Commissioning Testing of Ballast Water Management Systems” in the associated survey guidance.
  - Considering any other issues regarding the commissioning on-board surveys to BWMS such as ship plan approval, installation, maintenance after installation and testing items to be focused.
  - Issues at discussion for intermediate and renewal surveys such as calibration reports, biological test reports, maintenance logs

- If deemed necessary, IACS intends to develop and implement IACS resolutions to prevent that ship’s safety is impaired due to installation/operation of BWMS..

## SUMMARY OF WORK CARRIED OUT BY IACS ON THIS ISSUE TO DATE

### 1. IACS URs/UIs/PRs or Recs

- IACS UR M74 “Installation of Ballast Water Management Systems” (Rev.2 June 2021) has been published and entered into force on 01 July 2022. Rev.2 of this UR cover the following aspects of BWMS:
  - Categorization of BWMS technologies and identification of the potential hazards for each BWMS category
  - Extension to all BWMS categories (arrangement of a single BWMS on tankers)
  - Clarification of the applicability and scope of the risk analysis and Classification certification
  - Tackling the issues raised by the challenge of retrofit installation onboard existing ships
- IACS UR Z17 “Procedural Requirements for Service Suppliers” (Rev. 18 Feb. 2023) has been updated to include the qualification requirements of the service supplier for BWMS commissioning test.
- IACS UR F45 addressing the safety requirements of BWMS has been published in June 2021 and entered into force on 1st July 2022. This new UR has sections covering fire categorization, BW room location, fire fighting and prevention, ventilation and personal equipment.
- IACS Recommendation 180 “Recommendation for conducting commissioning testing of Ballast Water Management” has been published to facilitate uniform implementation of commissioning test for Ballast Water Management Systems (BWMS) in accordance with IMO BWM.2/Circ.70/rev.1.

## IACS POSITION

IACS holds the following positions:

- Monitoring the Convention’s implementation to identify practical or implementation challenges is critical.
  - Continuous review of the BWM Convention and its associated IMO instruments is essential to identify and address any emerging challenges or evolving needs
  - IACS will remain engaged in discussions regarding survey and certification at IMO
- ### 2. IACS participation in external fora such as JWGs, Tripartite, ESSF, etc.
- IACS participation in the IMO Correspondence Groups on the review of the Guidelines (G8) and on the Experience-Building Phase associated with the BWM Convention
  - IACS participation in the IMO Drafting Group on production of a manual entitled “Ballast Water Management – How to do it”

- IACS participation at Tripartite 2018 “Onboard Surveys of BWMS”
- IACS participation at Tripartite 2019 “Operational and Functional Experience with BWMS”
- IACS participation in the informal Correspondence Group on verification protocol for BWMS compliance monitoring
- IACS participation in IMO Correspondence Group on Development of a Protocol for Verification of Ballast Water Compliance Monitoring Devices
- IACS participation in the EBP data collecting process and provided a consolidated data report in accordance with BWM.2/Circ.67/Rev.1 to WMU.
- IACS participation in IMO Correspondence Group on Review of the BWM Convention (CRP)
- MEPC 77/4/11 - Proposed unified interpretation of regulation B-3.10 of the BWM Convention
- PPR 9/16/2 - Proposed unified interpretation of appendix I to the BWM Convention
- MPEC 78/4 - Clarification of the temporary storage of treated sewage and grey water in the ballast tanks under the BWM Convention
- MEPC 79/4/6 - Proposed unified interpretation of paragraph 4.10 of the BWMS Code
- MEPC 79/4/7 - Clarification of a commissioning test of a BWMS undergone major modification or upgrade onboard an existing ship
- MEPC 80/4/12 - Clarification of the temporary storage of treated sewage and grey water in the ballast tanks under the BWM Convention

### 3. Recent IACS submissions to IMO

- MEPC 71/4/18 - Completion of the International Ballast Water Management Certificate
- MEPC 72/3/9 - Proposed amendments to draft regulation D-3 of the BWM Convention and the draft Code for approval of ballast water management systems (BWMS Code)
- MEPC 72/4/4 - Contingency plan in the ballast water management plan
- MEPC 72/4/11 - New provision in the HSSC Survey Guidelines on validating the compliance of individual BWMS with regulation D-2 of the BWM Convention in conjunction with their commissioning during the initial survey (survey item (BI) 1.1.2.19)
- MEPC 74/4/14 – Proposed amendments to the forms of the International Ballast Water Management Certificate (IBWMC) of the BWM Convention
- PPR 8/11/2 - Comments on the draft protocol for the verification of ballast water compliance monitoring devices (CMDs)
- MEPC 77/4/6 - Proposed unified interpretation of regulations E-1.1.1 and E-1.1.5 of the BWM Convention

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