



# Technical Circular

No.: 123/2020

Date: 15<sup>th</sup> October 2020

## **Subject: DGS Circular No. 32 of 2020 Reg Ballast Water Convention**

1. Indian Administration has issued DGS Circular No. 32 of 2020 providing detailed requirements of Ballast Water Convention on Indian ships undertaking International voyages. This circular supersedes DGS Engineering Circular 02 of 2016 and its addendum.
2. All Indian ships plying internationally to which the Convention applies are required to comply with the Convention and are to be issued with a Statement of Compliance after an initial survey as required by Regulation E-1 of the BWM Convention.
3. The implementation schedule for compliance with the D-2 discharge standard is as follows:
  - New ships constructed on or after 8 September 2017 shall comply with D-2 discharge standard on delivery.
  - Existing ships (constructed prior 8 September 2017) shall comply with the D-2 discharge standard as under:
    - i. By the first IOPP renewal survey: this applies when the first renewal survey of the ship takes place on or after 8 September 2019; or
    - ii. By the first IOPP renewal survey after 8 September 2017: this applies when a renewal survey has been completed on or after 8 September 2014 but prior to 8 September 2017.
    - iii. By the second IOPP renewal survey after 8 September 2017: this applies if the first renewal survey after 8 September 2017 takes place before 8 September 2019. In this case, compliance must be by the second renewal survey (provided that the previous renewal survey has not been completed in the period between 8 September 2014 and 8 September 2017).
  - An existing ship to which the IOPP renewal survey under MARPOL Annex I does not apply shall meet the D-2 discharge standard **not later than 8 September 2024**.

## **4. Implementation of Ballast water Convention on Indian ships plying internationally:**

All ships to which BWM Convention applies are required to carry following;

- . This Technical Circular and the material contained in it is provided only for the purpose of supplying current information to the reader and not as an advice to be relied upon by any person.
- . While we have taken utmost care to be as factual as possible, readers/ users are advised to verify the exact text and content of the Regulation from the original source/ issuing Authority.

- a. A Statement of Compliance after an initial survey as required by Regulation E-1 of the BWM Convention.
- b. **A Ship Specific ballast water management plan** approved by the Administration/Recognized Organizations in accordance with Guidelines for Ballast water Management and Development of Ballast Water Management Plans (G4) detailed in MEPC Resolution MEPC 127(53) as amended to include contingency measures vide Resolution MEPC 306(73). The "contingency measures" to take into account on "Guidance on contingency measures under the BWM Convention issued vide BWM .2ICirc.62.
- c. **A ballast water record book** that may be an electronic record system in accordance with Regulation B-2 of the BWM convention.
- d. **Records of familiarization** for Officers and crew with Ballast Water Management Plan and their duties in the implementation of Ballast Water Management particular to the ship on which they serve.
- e. All **Ballast water Management System (BWMS)** installed on Indian Ships are required to be approved by Recognized Organization on behalf of Maritime Administration as follows;
  - i. Ballast water management systems installed **on or after 28 October 2020** to be approved in accordance with the **BWMS Code**, as may be amended; and
  - ii. Ballast water management systems installed **before 28 October 2020** are to have been approved in accordance with the BWMS Code or approved taking into account the 2016 G8 Guidelines adopted by resolution **MEPC.279(70)** or the Guidelines (G8) adopted by resolution **MEPC.174(58)**.
  - iii. Additionally, Ballast water Management systems which make use of Active Substances or preparations containing one or more Active Substances to comply with BWM Convention are to be approved in accordance with G9 Guidelines (**MEPC 169(57)**).
  - iv. Installed means the contractual date of delivery of the BWMS to the ship or, in the absence of such a date, it refers to the actual date of delivery of the BWMS to the ship. Thus ship-owners/operators who had placed order on fitment of BWMS which were approved prior 28 October 2018 in accordance with resolution MEPC.174 (58), will be able to install such systems if it is evident from record that the contractual delivery date of the BWMS or, in the absence of such a date, the actual date of delivery of the BWMS to the ship is before 28 October 2020.

**f. Commissioning Test:**

An installed ballast water management system (BWMS) is required to undergo a commissioning test in accordance with BWM.2/circ.70 during the initial or additional survey as follows;

- i. The commissioning test is to be carried out for BWMS that are installed on board applicable Indian Flagged Ships of 400GT and above after 08 September 2020. Applicable ships of less than 400GT may undergo the commissioning test voluntarily.
- ii. The commissioning test is to be carried out to the satisfaction of the attending RO surveyor after a complete installation of the BWMS, and after all ballasting equipment (e.g. pumps and piping) has been fully tested as appropriate. The commissioning testing should be carried out in accordance with the Annex of BWM.2/Circ.70 - Guidance for the commissioning testing of ballast water management systems.
- iii. Samples are to be taken in accordance with the Guidelines on ballast water sampling (G2), MEPC 173 (58) as may be amended. The ballast water samples collected for the commissioning test should be a representative sample, analyzed using at least an appropriate indicative analysis method selected from the list of indicative analysis methods listed in table 3 of BWM.2/Circ.42/Rev.1, as may be amended. The commissioning test is considered to be successful if the analysis indicates that the sample does not exceed the D-2 standard and the self-monitoring equipment of the BWMS indicates correct operation of all sensors and related equipment.
- iv. A written report including methods and detailed results of the commissioning testing is to be provided to the attending RO surveyor for verification before a Statement of Compliance is issued. The report is to be provided to the Directorate General of Shipping for information.
- v. The arrangement for conducting the test and any commercial dealings pertaining to the commissioning test must be between the shipowners/manager/shipyard/contractor and the manufacturer. The Administration does not carry out approval of any specific testing facility. The testing facility engaged to conduct the commissioning test is to be independent of the manufacturer of the BWMS and accepted by the RO which issues the Statement of Compliance for Ballast Water Management Convention.
- vi. If the commissioning test cannot be successfully carried out due to the equipment's system design limitation, a short term IBWMC may be issued for a period of not more than **three (3) months**. This is to allow time for the commissioning test to be carried out to the satisfaction of the attending RO surveyor. No authorization from Directorate General of Shipping is required for such cases provided that the attending RO surveyor ensures the following:
  - a) reasons for the commissioning test not being completed successfully are recorded in the ballast water record book;
  - b) the attending RO surveyor is provided with arrangements for the commission test (e.g. date, time, location);

- c) the ship's ballast water management plan (BWMP) has incorporated appropriate contingency measures in line with the “Amendments to the Guidelines for ballast water management and development of ballast water management plan (G4) (Resolution MEPC.306(73));
- d) the ship's Master and the designated ballast water management officer are aware of the "Guidance on contingency measures under the BWM Convention", BWM/2/Circ. 62, as may be amended, in particular on the communication between the ship and the port State; and
- e) the ship's Master and the designated ballast water management officer are aware of the reporting requirements to the competent port Authority as per regulation E- 1.7 of the BWM Convention when the vessel is calling a foreign port and shall comply with any additional requirements that the port State may impose.
- f) If the commissioning test is not completed within the three (3) months of the short term IBWMC, the Directorate General of shipping approval for an extension is to be sought.

#### **5. Electronic Ballast Water Record Book:**

If an electronic Ballast Water Record Book is used, same is to be approved by the Administration and a declaration to this effect issued by the flag Administration is to be kept on board.

#### **6. Implementation of Ballast Water Management System on Coastal Ships:**

Noting that many Indian ships keep on shifting from Coastal to International Voyage and therefore to prevent Port State Detention, all Indian ships to which the Convention applies are required to comply with the provisions of the DGS Circular No. 32 of 2020 prior undertaking any International Voyage.

Any Indian ship requiring dispensation from fitment of BW Management System meeting D-2 compliance requirements till the time India ratifies the Convention and Rules prepared and implemented, are required to apply to the Competent Authority in the Directorate with an undertaking that during the period of dispensation the ship will always remain on Indian coast.

**Enclosure:** DGS Engineering Circular No. 32 of 2020

---

Whilst the utmost care has been taken in the compilation of the Technical Information, neither Indian Register of Shipping, its affiliates and subsidiaries if any, nor any of its directors, officers, employees or agents assume any responsibility and shall not be liable to any person for any loss, damage or expense caused in any manner whatsoever by reliance on the information in this document.



भारत सरकार / GOVERNMENT OF INDIA  
पोत परिवहन मंत्रालय / MINISTRY OF SHIPPING

नौवहन महानिदेशालय, मुंबई  
DIRECTORATE GENERAL OF SHIPPING, MUMBAI

**DGS Circular 32 of 2020 (ENGINEERING)**

File No: 13-20011/4/2020/-ENGG-DGS	Date: 03.10.2020
Subject: Ballast Water Convention	

**Introduction:**

1. Whereas, the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM Convention), entered into force globally on 8.9.2017. This Convention applies to ships registered under contracting Parties to the BWM Convention, which use ballast water during international voyages.
2. Whereas, India is still not a party to the Convention, yet Indian ships making international voyages can be inspected by port States which are Parties to the BWM Convention and such ships will have to comply with the requirements of the Convention, as no more favorable treatment is given to these ships.
3. Noting that many Indian ships shall be making International voyages to ports of countries which have ratified the Convention, the Directorate issued Engineering Circular 02 of 2016 dated 06.12.2016 and Addendum to Engineering Circular 02 A of 2016 dated 08.08.2017 detailing the implementation date for ships on International Voyages, permitting issuance of Statement of Compliance (SOC) to Ballast Water Convention by Recognized Organization on behalf of Government of India (GOI) and requirements to be followed for issuance of such Statement.
4. Whereas, Resolution MEPC 296(72) dated 13 April 2018 was adopted at the 72<sup>nd</sup> session of Marine Environmental Protection Committee of International Maritime Organization. The Said Resolution amended Regulation A-1 and D-3 of the Ballast Water Management Convention in accordance with the Article 19(2) (c) of the BWM Convention. The said amendments entered into force on 13 October 2019 in accordance with article 19(2) (e) (ii) article and 19(2) (f) (ii) of the BWM Convention.
5. Whereas under Regulation A-1, a new Paragraph 8 has been added defining the Ballast Water Management Code as "*BWMS Code means the Code for Approval of Ballast Water Management Systems adopted by resolution MEPC.300 (72), as may be amended by the Organization, provided that such amendments are adopted and brought into force in accordance with article 19 of the present Convention relating to amendment procedures applicable to the Annex*".
6. Whereas Paragraph 1 of Regulation D-3 (*Approval requirements for ballast water management systems*) has been replaced with the following:

बीटा बिल्डिंग, 9वीं मंजिल, आई थिंक टेक्नो कैम्पस, कांजूर गाँव रोड, कांजूरमार्ग (पूर्व) मुंबई-400042

9th Floor, BETA Building, I-Think Techno Campus, Kanjur Village Road, Kanjurmarg (E), Mumbai-400042

फ़ोन/Tel No.: +91-22-2575 2040/1/2/3 फ़ैक्स/Fax.: +91-22-2575 2029/35 ई-मेल/Email: dgship-dgs@nic.in वैबसाइट/Website: www.dgshipping.gov.in

*“1: Except as specified in paragraph 2, ballast water management systems used to comply with this Convention shall be approved by the Administration as follows:*

*.1 ballast water management systems installed on or after 28 October 2020 shall be approved in accordance with the BWMS Code, as may be amended; and*

*.2 ballast water management systems installed before 28 October 2020 shall be approved taking into account the guidelines (MEPC.125 (53), MEPC.174 (58) or MEPC.279 (70)) developed by the Organization or the BWMS Code, as may be amended.”*

7. Taking all the above into cognizance, it is now decided to issue a consolidated circular detailing all the requirements of Ballast Water Convention on Indian Ships undertaking international voyages. The Engineering Circular 02 of 2016 and its Addendum is hereby superseded by this circular.

#### **A. Requirements of Ballast Water Convention**

1. The BWM Convention applies to all vessel types which are designed or constructed to carry ballast water and is entitled to fly the flag of a Party to the Convention or operate under the authority of a Party. This includes submersibles, floating craft and platforms including FSUs and FPSOs.

2. Further in accordance with Regulation E-1 of BWM Convention, ships of 400 gross tonnages and above excluding floating platforms, FSUs and FPSOs are subject to an initial survey before the ship is put into service or before the Certificate is issued for the first time.

3. The amendments to regulation B-3 of the BWM Convention vide Resolution MEPC.297 (72), entered into force on October 13, 2019 and require:

3.1. A Ship constructed on or after 08 September 2017 shall conduct Ballast Water Management that at least meets the standards described in Regulation D-2 of the Ballast Water Management Convention from the date of delivery of the ship. (B-3/5).

3.2. A Ship constructed prior to 08 September 2017 which has completed an IOPP renewal survey on or after 08 September 2014 but prior to 08 September 2017:

3.2.1. shall conduct Ballast Water Management that at least meets the standards described in Regulation D-2 of the Ballast Water Management Convention from the date of the 1<sup>st</sup> IOPP renewal survey after 08 September 2017.

3.2.2. From 08 September 2017 until the date of the 1<sup>st</sup> IOPP renewal survey, the ship must either conduct Ballast Water Exchange (BWE) and comply with Regulation D-1 or alternatively comply with Regulation D-2(B-3/10.1.2)

3.3. A Ship constructed prior to 08 September 2017 which has not completed an IOPP renewal survey on or after 08 September 2014 but prior to 08 September 2017 and which has its 1<sup>st</sup> IOPP renewal survey during the period 08 September 2017 and 07 September 2019:

3.3.1. shall conduct Ballast Water Management that at least meets the standards described in Regulation D-2 of the Ballast Water Management Convention from the date of the 2<sup>nd</sup> IOPP renewal survey after 08 September 2017.

- 3.3.2. From 08 September 2017 until the date of the 2<sup>nd</sup> IOPP renewal survey, the ship must either conduct Ballast Water Exchange (BWE) and comply with Regulation D-1 or alternatively comply with Regulation D-2. (B-3/10.2).
4. For ships constructed before 08 September 2017 which are not subjected to the MARPOL IOPP renewal survey (Oil tanker of less than 150 GT and every ship other than Oil tankers of less than 400 GT):
- 4.1. shall conduct Ballast Water Management that at least meets the standards described in Regulation D-2 of the Ballast Water Management Convention from the date decided by the Administration, but not later than 08 September 2024.
- 4.2. From 08 September 2017 until the 08 September 2024 the ship must either conduct Ballast Water Exchange (BWE) and comply with Regulation D-1 or alternatively comply with Regulation D-2. (B-3/8).
5. From the date of entry into force, that is 8 September 2017, all ships are required to carry:
- 5.1. **A Ship Specific ballast water management plan in accordance with Regulation B-1** of the BWM Convention approved by the Administration/Recognized Organizations in accordance Guidelines for Ballast Water Management and Development of Ballast Water Management Plans (G4) detailed in MEPC Resolution MEPC 127(53) as amended to include contingency measures vide Resolution MEPC 306(73). The “contingency measures” shall take into account on “Guidance on contingency measures under the BWM Convention issued vide BWM.2/Circ.62.
- 5.2. **A ballast water record book** that may be an electronic record system in accordance with Regulation B-2 of the BWM Convention.
- 5.3. **Records of familiarization for Officers and crew** with Ballast Water Management Plan and their duties in the implementation of Ballast Water Management particular to the ship on which they serve.

## **B. Ballast Water Management System**

1. As per Regulation D-3 of the BWM Convention, all Ballast Water Management Systems are required to be approved by Administrations in accordance with IMO Guidelines (*Ref. G8 / G9 of BWMS Code. See paragraph C.3 and C.4 below*) to comply with the Regulation D-2 standard of the Convention.
2. Vide Resolution MEPC.300 (72) “Code for approval of Ballast Water Management systems (BWMS Code) was adopted and consequential amendments to Regulations A-1 and D-3 which mandate that systems be approved under the Code, was adopted vide Resolution MEPC.296 (72) and entered into force with effect from 13 October 2019. Adoption of the BWMS Code has revoked the 2016 Guidelines for Approval of Ballast Water Management Systems (2016 G8 Guidelines) adopted by resolution MEPC.279

(70). The contents of the 2016 G8 Guidelines has become mandatory through the BWMS Code.

3. The amendments to Regulation D-3 – Approval requirements for ballast water management systems states that:

3.1. Ballast water management systems installed on or after 28 October 2020 shall be approved in accordance with the BWMS Code, as may be amended; and

3.2 Ballast water management systems installed before 28 October 2020 are to have been approved in accordance with the BWMS Code or approved taking into account the 2016 G8 Guidelines adopted by resolution MEPC.279(70) or the Guidelines (G8) adopted by resolution MEPC.174(58).

4. Additionally, Ballast Water Management Systems which make use of Active Substances or preparations containing one or more Active Substances to comply with BWM Convention shall be approved in accordance with G9 Guidelines (MEPC 169 (57).

5. Installed means the contractual date of delivery of the BWMS to the ship or, in the absence of such a date, it refers to the actual date of delivery of the BWMS to the ship. Thus, ship-owners/operators who had placed order on fitment of BWMS which were approved prior 28 October 2018 in accordance with resolution MEPC.174 (58), will be able to install such systems if it is evident from record that the contractual delivery date of the BWMS or, in the absence of such a date, the actual date of delivery of the BWMS to the ship is before 28 October 2020.

### **C. Implementation of Ballast Water Convention on Indian Ships plying internationally**

1. The Ballast Water Convention has entered into force on 8 September 2017 and all Indian Flag ships plying internationally may be inspected by a port state of a country which has already ratified the Convention and hence all Indian ships plying internationally to which the Convention applies are required to comply with the Convention.

2. All Indian Ships demonstrating compliance shall be issued a Statement of Compliance after an initial survey as required by Regulation E-1 of the BWM Convention.

3. All Ballast Water Management System installed on Indian Ships are required to be approved by Recognized Organization on behalf of Maritime Administration in accordance with IMO Guidelines G8/G9 of BWMS Code, as applicable. (See Paragraph C.3 and C.4 above)

4. A commissioning test is required in accordance with BWM.2/Circ.70 based on the following requirements:

4.1 The amendments to regulation E-1.1.1 and E-1.1.5 of the BWM Convention require that an installed ballast water management system (BWMS) to undergo a commissioning test during the initial, or additional, survey.



4.2 Paragraphs 8.2.5 and 8.3.6 of BWMS Code require verification of installation commissioning procedures

4.3 Paragraph 1.1.2.19 of annex 4 of the HSSC Guidelines (resolution A.1120 (30)), which includes, "*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.*"

## **5 Commissioning Test:**

5.1 The purpose of the commissioning test is to verify that the mechanical, physical, chemical and biological processes of the installed BWMS are working properly, taking into account guidelines developed by the IMO (i.e. the BWM.2/Circ.70, as may be amended). The commissioning test is not intended to validate the type approval of the BWMS.

5.2 The commissioning test shall be carried out for BWMS that are installed on board applicable Indian Flagged Ships of 400GT and above after 8 September 2020. Applicable ships of less than 400GT may undergo the commissioning test voluntarily.

5.3 The commissioning test shall be carried out to the satisfaction of the attending RO surveyor after a complete installation of the BWMS, and after all ballasting equipment (e.g. pumps and piping) has been fully tested as appropriate. The commissioning testing should be carried out in accordance with the Annex of BWM.2/Circ.70 - Guidance for the commissioning testing of ballast water management systems.

5.4 Samples should be taken in accordance with the Guidelines on ballast water sampling (G2), MEPC 173 (58) as may be amended. The ballast water samples collected for the commissioning test should be a representative sample, analyzed using at least an appropriate indicative analysis method selected from the list of indicative analysis methods listed in table 3 of BWM.2/Circ.42/Rev.1, as may be amended. The commissioning test is considered to be successful if the analysis indicates that the sample does not exceed the D-2 standard and the self-monitoring equipment of the BWMS indicates correct operation of all sensors and related equipment.

5.5 A written report including methods and detailed results of the commissioning testing should be provided to the attending RO surveyor for verification before a Statement of Compliance is issued. The report should be provided to the Directorate General of Shipping for information.

5.6 The arrangement for conducting the test and any commercial dealings pertaining to the commissioning test shall be between the ship-owners/manager/shipyard/contractor and the manufacturer. The Directorate General

of Shipping does not carry out approval of any specific testing facility. The testing facility engaged to conduct the commissioning test shall be independent of the manufacturer of the BWMS and accepted by the RO which issues the Statement of Compliance for Ballast Water Management Convention.

5.7 If the commissioning test cannot be successfully carried out due to the equipment's system design limitation, a short term IBWMC may be issued for a period of not more than three (3) months. This is to allow time for the commissioning test to be carried out to the satisfaction of the attending RO surveyor. No authorization from Directorate General of Shipping is required for such cases provided that the attending RO surveyor ensures the following:

5.7.1 reasons for the commissioning test not being completed successfully are recorded in the ballast water record book;

5.7.2 the attending RO surveyor is provided with arrangements for the commission test (e.g. date, time, location);

5.7.3 the ship's ballast water management plan (BWMP) has incorporated appropriate contingency measures in line with the "Amendments to the Guidelines for ballast water management and development of ballast water management plans (G4)" (Resolution MEPC.306(73));

5.7.4 the ship's Master and the designated ballast water management officer are aware of the "Guidance on contingency measures under the BWM Convention", BWM.2/Circ.62, as may be amended, in particular on the communication between the ship and the port State; and

5.7.5 the ship's Master and the designated ballast water management officer are aware of the reporting requirements to the competent port Authority as per regulation E-1.7 of the BWM Convention when the vessel is calling a foreign port and shall comply with any additional requirements that the port State may impose.

5.7.6 If the commissioning test is not completed within the three (3) months of the short term IBWMC, the Directorate General of Shipping approval for an extension is to be sought.

#### **6. Electronic Ballast Water Record Book:**

If an electronic Ballast Water Record Book is used, same is to be approved by the Administration and a declaration to this effect issued by the flag Administration is to be kept on board.

#### **D. Implementation of Ballast Water Management System on Coastal Ships**

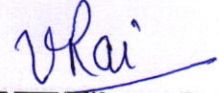
1. India has not yet ratified BWM Convention; however, as per Article 18 of the Ballast Water Management Convention, any instrument of ratification, acceptance, approval or

accession deposited after the date on which this Convention enters into force shall take effect three months after the date of deposit. Thus, once ratified India will have only 3-months to implement the same.

2. All Indian engaged on International Voyage to which the Convention applies are required to comply with the provisions of this circular.
3. Any Indian ship requiring dispensation from fitment of BW Management System meeting D-2 compliance requirements till the time India ratifies the Convention and Rules prepared and implemented, shall apply to the Competent Authority in the Directorate with an undertaking that during the period of dispensation the ship will always remain on Indian coast.

**E. Port State Inspection and Flag State Inspection:**

Port State and flag state Inspection to verify compliance with the requirements of this Circular to be carried out after India ratifies the BWM Convention.



(विक्रान्त राय/Vikrant Rai)

अभियंता एवं पोत सर्वेक्षक-सह-

उप महा निर्देशक तकनीकी

Engineer & Ship Surveyor -cum-  
Deputy Director General (Tech.)