



**International
Harbour Masters
Association**

Ballast Water Management - PSC

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Introducing IHMA

The International Harbour Masters' Association is The professional body for those with responsibility for the safe, secure, efficient and environmentally sound conduct of Marine operations in port waters.

With 253 members in more than 50 countries, the Association brings together Harbour Masters and all those who hold a managerial position In aspects of the control of marine operations within a port.



IHMA Objectives

1. Promote the safe, secure, efficient and environmentally sound conduct of marine operations in ports waters;
2. Develop and foster collaboration and good relations among harbour masters worldwide;
3. Represent the professional views of harbour masters internationally, regionally, and nationally;
4. Promote the professional standing and interests of harbour masters generally;
5. Collect, collate and share information relevant to the H/M role.



IHMA Activities

Participate at IMO, IHO, IALA, PIANC, NaCC Partnership, and MACN (Maritime anti-corruption network)

Member communication and networking for support and professional development

Co-operative agreements with IALA, The Nautical Institute, IMPA and PIANC



IHMA – A Brief History regarding Ballast Water Convention

- The Ballast Water Management Convention (BWMC) was adopted by IMO in 2004 and entered into force on the 8th September 2017. With a few exceptions it applied to all ships in international trade beginning in 2017 and fully implemented in 2024.
- The BWMC aims to end the transfer of non-indigenous species travelling in the ballast water to new aquatic ecosystems.



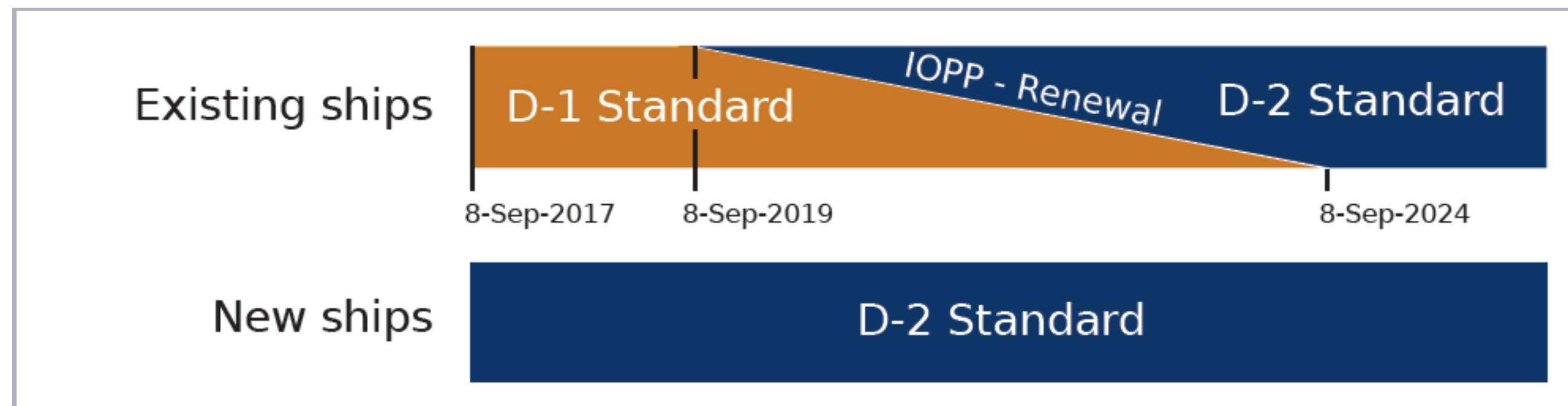
Overview Ballast Water Management

- seawater is taken into the vessel's ballast tanks in order to ensure stability and structural integrity on board.
- Ballast water carries 30-35% of the ship's carrying capacity (deadweight tonnage).
- approximately 3-5 billion tons of ballast water is transferred worldwide each year.



Overview Ballast Water Management

- The D-1 exchange standard requires ships to exchange their ballast water in open seas, away from coastal waters (IMO, 2017).
- The D-2 performance standard which specifies the maximum amount of viable organisms allowed to be released. Published by IMO: Mechanical, physical or chemical methods.
- The B-5 sediment standard requires ships to manage their sediments.



Source: The Little Blue Book by Danish Shipping

New ships must meet the D-2 standard while existing ships must primarily meet the D-1 standard (IMO, 2017). An agreed implementation timetable for the D-2 standard has been based on the date of the ship's International Oil Pollution Prevention Certificate (IOPPC) renewal survey, which must be carried out at least every 5 years.



Port state Control Certification and documentation

Enforced by Port State Control Officer:

- Port
- Transportation Minister's representative

Port State control officers (PSCO) have the mandate to inspect vessels and ensure they are in compliance with the BWM regulations. In general, PSCOs come from the maritime sector and they are not specialists on invasive species.

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| International Ballast Water Management Certificate (IBWMC) | After BWMC enters into force this is the key certificate provided your flag state has ratified the Convention |
| Statement of Compliance | If your flag state has not ratified the Convention you are issued this document |

Source:The Little Blue Book by Danish Shipping

When calling the US

- Ballast Water Management Plan and Ballast Water Record Book;
- US type approval certificate for BWMS or
- Alternative Management System (AMS) or
- an Extension letter .

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|--|---|
| An approved Ballast Water Management Plan (BWMP) | This document is ship specific and must now include BWMC relevant issues including compliance with D-1, D-2 or exception/exemption regime |
| A Ballast Water Record Book (BWRB) | This document must now include BWMC relevant issues and is the place to record accidental or exceptional discharges and the circumstances justifying them |
| Type approval Certificate for Treatment System | For the majority of vessels, this must be present once your vessel is subject to D-2 or a treatment system is installed prior to this. Does not apply if you are using an "Other method" or operate under an exception or exemption |

Source:The Little Blue Book by Danish Shipping



Port State Control Process

Step 1: Initial Inspection

- Inspect documentation.
- Check the appointment of the BWMM officer.
- Check the crew familiarity with BWMM.
- Visual inspection of vessel and equipment/systems for BWMM.

Step 2: detailed Inspection

- Check if BWMP procedures are followed.
- Check if BWMM has been conducted according to BWMP.
- Check record of BWMS.
- Check bypass and emergency system/procedures.



Port State Control Process

Step 3: Initial Indicative Analysis

- Limited sample taking.
- May involve the use of portable analytical equipment.

Step 4: detailed Analysis

- Full verification of compliance (requiring specialists on board).
- Samples sent to laboratories for thorough analysis.



Frequent deficiencies identified by PSCs

- Incorrect, not properly filled-out or missing entries of all ballast water movements (inboard, treatment, circulation, discharge), or the BWWM record book itself is missing.
- Incorrect ballast water exchange; either the ballast water was not exchanged at all or the amount of water exchanged was insufficient.
- The BWWM plan was not approved, incorrect or missing.
- Lack of familiarization and training of the crew.



Technical/operational challenges related to BWM

- Sampling.
- Sailing time (it takes around 2 days to complete BW exchange).
- Treatment time (flow rate versus system capabilities).
- Muddy water ports.
- No port's ballast/treatment facilities.
- Lack of familiarization and training of the crew.



Ports involvement in BWM

- Influence national, local regulation, protocols, etc.
- Support regional/national implementation of regulation in collaboration with stakeholders.
- Provide support, guidance and direction (for instance Port of Vancouver had already BWM practices & procedures in place in 1997).
- Provide BW Facilities (if available) or other services.
- Interface between PSC and Vessel.



IHMA involvement in BWM

- Influence international regulation, protocols, etc.
- Provide expertise and experience on BWM working groups at international, national and local level.
- Raise awareness on issues and challenges regarding BWM.
- Provide support, guidance and direction to Harbour Masters around the world.





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Thank you

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