

IMO Frequently Asked Questions

Implementing the Ballast Water Management Convention

The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, entered into force globally on 8 September 2017.

The International Maritime Organization (IMO) responds below to frequently asked questions about the BWM Convention and its provisions, and what the entry into force means for international shipping.

What is the Ballast Water Management Convention?

The Ballast Water Management Convention or BWM Convention (full name International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004) is a treaty adopted by the International Maritime Organization (IMO) in order to help prevent the spread of potentially harmful aquatic organisms and pathogens in ships' ballast water.

From 8 September 2017, ships must manage their ballast water so that aquatic organisms and pathogens are removed or rendered harmless before the ballast water is released into a new location. This will help prevent the spread of invasive species as well as potentially harmful pathogens.

IMO is the United Nations specialized agency with responsibility for developing global standards for ship safety and security and for the protection of the marine environment and the atmosphere from any harmful impacts of shipping.

When did the BWM Convention enter into force?

The BWM Convention entered into force globally on 8 September 2017.

Which ships does the convention apply to?

The convention applies to ships registered under contracting Parties to the BWM Convention, which take up and use ballast water during international voyages.

What about ships registered under a flag which hasn't ratified the BWM Convention?

Such ships may not be issued with the relevant certificates. However, port States which are Parties will expect the ships to comply with the requirements of the Convention, so as to ensure no more favourable treatment is given to such ships.

What do ships need to do, now the treaty is in force?

From the date of entry into force, ships in international traffic are required to manage their ballast water and sediments to a certain standard, according to a ship-specific ballast water management plan. Ships have to carry:

- **A ballast water management plan** - specific to each ship, the ballast water management plan includes a detailed description of the actions to be taken to implement the ballast water management requirements and supplemental ballast water management practices;
- **A ballast water record book** - to record when ballast water is taken on board; circulated or treated for ballast water management purposes; and discharged into the sea. It should also record when ballast water is discharged to a reception facility and accidental or other exceptional discharges of ballast water; and
- **An International Ballast Water Management Certificate** (ships of 400 gt and above) – this is issued by or on behalf of the Administration (flag State) and certifies that the ship carries out ballast water management in accordance with the BWM Convention and specifies which standard the ship is complying with, as well as the date of expiry of the Certificate.

What are the ballast water management standards?

There are two ballast water management standards (D-1 and D-2).

The D-1 standard requires ships to exchange their ballast water in open seas, away from coastal areas. Ideally, this means at least 200 nautical miles from land and in water at least 200 metres deep. By doing this, fewer organisms will survive and so ships will be less likely to introduce potentially harmful species when they release the ballast water.

The D-2 standard specifies the maximum amount of viable organisms allowed to be discharged, including specified indicator microbes harmful to human health.

From the date of entry into force of the BWM Convention, all ships must conform to at least the D-1 standard; and all new ships, to the D-2 standard.

Eventually, all ships will have to conform to the D-2 standard. For most ships, this involves installing special equipment to treat the ballast water.

IMO Member Governments, meeting in the Marine Environment Protection Committee (MEPC), have agreed an implementation timetable for existing ships, linked to the ship's International Oil Pollution Prevention Certificate (IOPPC) renewal survey.

What does the new schedule for implementation say?

In essence, the schedule for implementation which has been agreed by the MEPC means that compliance with the D-2 standard will be phased in over time for individual ships, up to 8 September 2024. Over time, more and more ships will be compliant with the D-2 standard. (See the [infographic](#))

From 8 September 2017:

- **New ships** must meet the D-2 standard.
- **All ships** must have:
 - A ballast water management plan;
 - A ballast water record book; and
 - An International Ballast Water Management Certificate.
- **Existing ships** must meet at least the D-1 (ballast water exchange) standard; they may also choose to install a ballast water management system or otherwise meet the D-2 (discharge) standard but this is not mandatory until the corresponding compliance date.
- **IOPPC Renewal survey after 8 September 2019**

A ship undergoing a renewal survey linked to the ship's International Oil Pollution Prevention Certificate after 8 September 2019 will need to meet the D-2 standard by the date of this renewal survey.
- **IOPPC Renewal survey between 8 September 2017 and 8 September 2019**
 - If the previous IOPPC renewal survey was between 8 September 2014 and 8 September 2017, then the ship must comply with D-2 standard by this renewal survey.
 - If the previous IOPPC renewal survey was before 8 September 2014, then the ship can wait until the next renewal survey (which will be after 8 September 2019).

What if the ship doesn't have an IOPPC renewal survey?

The ship should meet the D-2 standard at a date determined by its flag State, but not later than 8 September 2024.

What is the real difference between the D-1 and D-2 standards?

The difference is that D-1 relates to ballast water exchange, while D-2 specifies the maximum amount of viable organisms allowed to be discharged, including specified indicator microbes harmful to human health.

D-1 standard

The D-1 standard requires ships to conduct an exchange of ballast water such that at least 95% of water by volume is exchanged far away from the coast.

D-2 standard

The D-2 standard specifies that ships can only discharge ballast water that meets the following criteria:

- less than 10 viable organisms per cubic metre which are greater than or equal to 50 micrometres in minimum dimension;
- less than 10 viable organisms per millilitre which are between 10 micrometres and 50 micrometres in minimum dimension;
- less than 1 colony-forming unit (cfu) per 100 millilitres of Toxicogenic *Vibrio cholerae*;
- less than 250 cfu per 100 millilitres of *Escherichia coli*; and
- less than 100 cfu per 100 milliliters of Intestinal Enterococci.

How will ships' compliance be checked?

Ships may be subject to port State control in any port or offshore terminal of a Party to the BWM Convention. This inspection may include verifying that there is onboard a valid Certificate and an approved ballast water management plan; inspection of the ballast water record book; and/or sampling of the ship's ballast water, carried out in accordance with the *Guidelines for ballast water sampling (G2)*.

However, the time required to analyse the samples shall not be used as a basis for unduly delaying the operation, movement or departure of the ship.

How are ballast water management systems approved?

Regulation D-3 of the Convention covers approval requirements for ballast water management systems.

Ballast water management systems must be approved by the Administration taking into account IMO Guidelines. Revised *Guidelines for approval of ballast water management systems* (G8) were adopted in 2016 and have now been reworked as a draft mandatory *Code for approval of ballast water management systems (BWMS Code)*, expected to be adopted by MEPC 72 in April 2018. The BWMS Code includes robust test and performance specifications as well as detailed requirements for type approval reporting and control and monitoring equipment.

Ballast water management systems which make use of Active Substances or preparations containing one or more Active Substances must in addition be approved by IMO, in accordance with the *Procedure for approval of ballast water management systems that make use of Active Substances* (G9).

Has the BWM Convention implementation been delayed by IMO?

When the BWM treaty was adopted in 2004 it was envisaged that there would be a phase-in of the D-2 standard (ballast water performance standard). IMO Member States adopted the treaty with a number of dates included, such as referring to ships constructed before 2009, 2012 and 2016. However, these dates were reached before the treaty achieved sufficient ratifications to meet entry into force criteria.

So IMO Member Governments, recognizing this, agreed that when the treaty did enter into force, there would be a phase-in - as envisaged by the original treaty, but with dates that would not be obsolete.

So this has been a pragmatic way to address the fact that the original dates contained in the treaty would inevitably be overtaken, once it became clear that the ratifications needed to meet entry into force criteria would take several years and go beyond those dates.

It is important to recognize that entry into force of the treaty means that certain requirements, including ballast water management for all ships and the D-2 standard for new ships, are now in force.

Why did it take so long for the treaty to enter into force?

Entry into force of the treaty was dependent on enough ratifications by States. It is fair to say that suitable ballast water management systems were not immediately available and guidelines to support the BWM convention needed to be developed. But these issues have now been addressed.

To support ratification by States as well as research and innovation, IMO executed the Global Environment Facility (GEF) - United Nations Development Programme (UNDP) - IMO GloBallast Partnerships Programme (2000-2017). This successful project focussed in particular on assisting developing countries to reduce the transfer of harmful aquatic organisms and pathogens in ships' ballast water and implement the BWM Convention.

The BWM Convention stipulated that it would enter into force 12 months after ratification by a minimum of 30 States, representing 35% of world merchant shipping tonnage. Those criteria were reached on 8 September 2016, hence the entry into force on 8 September 2017.

Will there be amendments to the BWM treaty?

IMO has agreed that the MEPC 72 session in April 2018 will consider the adoption of amendments to the BWM treaty (regulation B-3) to make mandatory the new phase-in schedule for ships to meet the D-2 standard.

Also, MEPC 72 will be invited to adopt draft amendments to the BWM Convention (regulations A-1 and D-3) to make mandatory the *Code for approval of ballast water management systems (BWMS Code)*. The BWMS Code will also be put forward for adoption. Further draft amendments relate to section E (Survey and certification).

The amendments can only be adopted after entry into force. So the proposed amendments are being circulated to Governments and will be put forward for adoption by MEPC 72 which meets 9-13 April 2018. They can then enter into force 18 months following adoption. MEPC 71 (July 2017) also adopted a resolution calling for the schedule in the amendments to be implemented immediately.

Will there be any further amendments later on?

The MEPC has recognized that challenges may be expected with the entry into force of an entirely new treaty. There may be a need for future improvements to the BWM Convention in the light of experience gained. MEPC 71 adopted an important MEPC resolution, on "the experience-building phase associated with the BWM Convention".

This envisages a three-stage approach – data gathering; data analysis; and Convention review. Based on the experience and feedback gained, as well as the analysis of the data gathered, draft amendments to the Convention could be put forward for consideration at MEPC 79 (in 2022).

As with other international treaties, Parties may also propose individual amendments at any time.

How many countries have signed up to the BWM treaty?

As at September 2017, the treaty has been ratified by more than 60 countries, representing more than 70% of world merchant shipping tonnage
