

# The International Ballast Water Management Convention

*SAFEMED IV Project: Training on Implementation & Compliance of the IMO's Ballast Water Management Convention for Tunisia*



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Lisbon - remotely / 13<sup>th</sup> and 14<sup>th</sup> October 2021

# The Problem

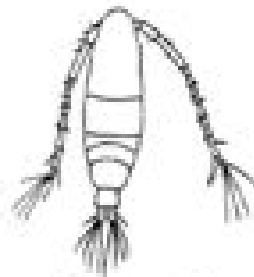
- 1) When stones used as ballast
- 2) When water used as ballast
  - Increasing numbers of Alien species
  - Larger and faster ships (up to 100,000 tonnes of ballast water)
  - Specific mass invasions



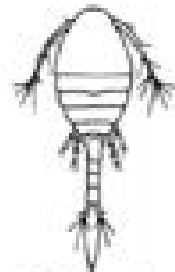




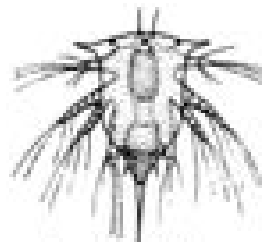




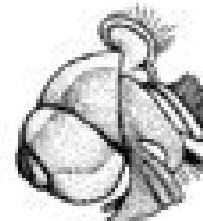
**Copepod**  
Acartia juvenile



**Copepod**  
Oithona



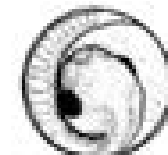
**Crab, Shrimp**  
Nauplius larvae



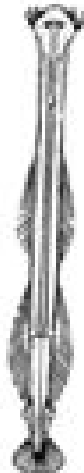
**Mollusc**  
Veliger



**Shrimp**  
Peneaid larvae



**Fish larva**



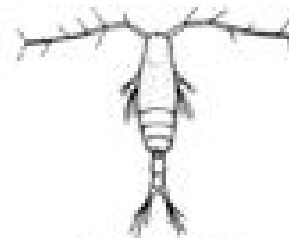
**Arrowworm**  
Sagitta



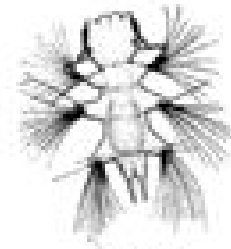
**Sea Squirt**  
Ascidian



**Crab**  
Zoea



**Copepod**  
Acartia



**Worm**  
Polychaete



**Water flea**  
Daphnia

## International Ballast Water Management Convention

Entry into force: 8<sup>th</sup> September 2017

Triggered by: 30 States = 35% of the world's tonnage

Now: 86 States = 91.19% of the world's tonnage

Tunisia yet to Ratify



# Structure of the IMO BWMI Convention

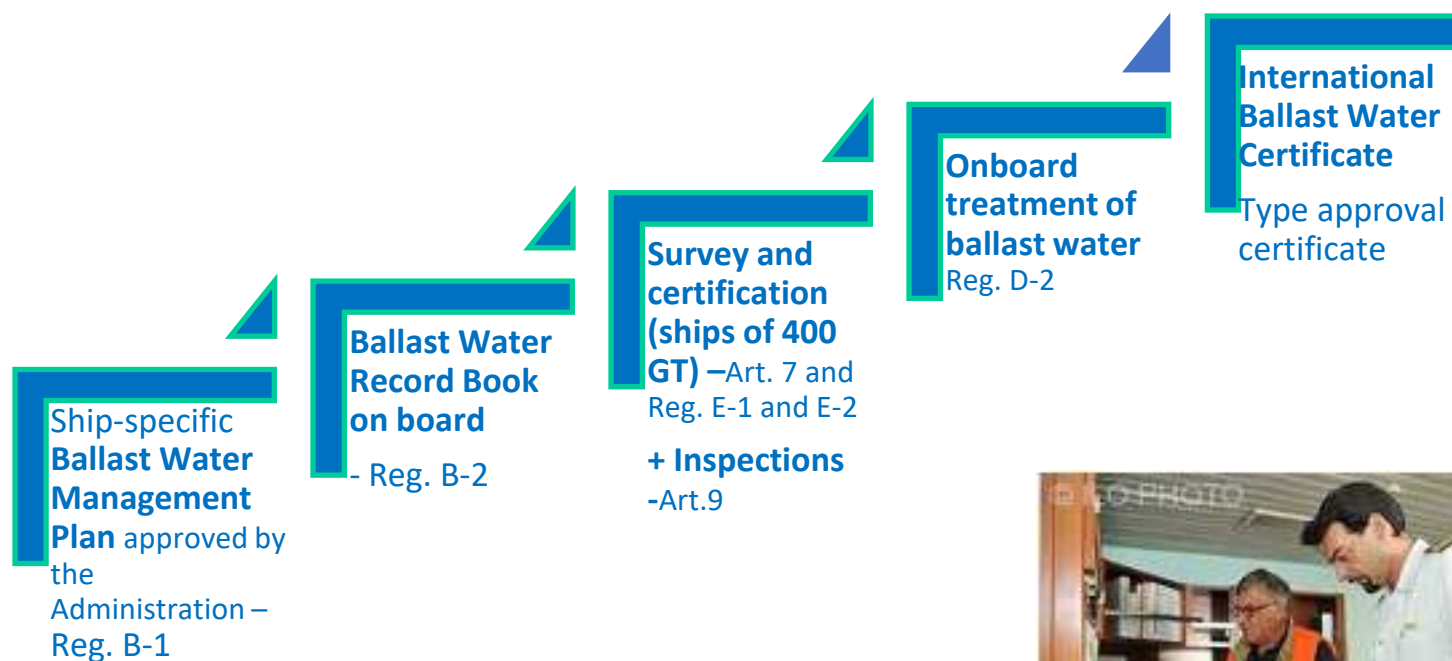
**Preamble**

**22 Articles**

**Annex (regulations)**

**Guidelines**

# Overview BWM Convention





G1: Guidelines for Sediment Reception Facilities.

G2: Guidelines for Ballast Water Sampling.

G3: Guidelines for Ballast Water Management  
Equivalent Compliance.

G4: Guidelines for ballast water management and  
development of ballast water management plans.

9

G5: Guidelines for Ballast Water Reception Facilities.

G6: Guidelines for Ballast Water Exchange.

G7: Guidelines for Risk Assessment under Regulation  
A-4.

**G8: Guidelines for approval of ballast water management systems.**

**G9: Procedure for Approval of Ballast Water Management Systems that make use of Active Substances.**

G10: Guidelines for approval and oversight of prototype ballast water treatment technology programmes.

10

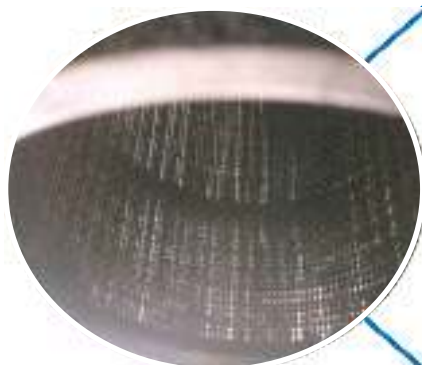
G11: Guidelines for ballast water exchange design and construction standards.

G12: Guidelines for sediment control on ships.

G13: Guidelines for additional measures including emergency situations.

G14: Guidelines on designation of areas for ballast water exchange

## How to achieve the performance standard?



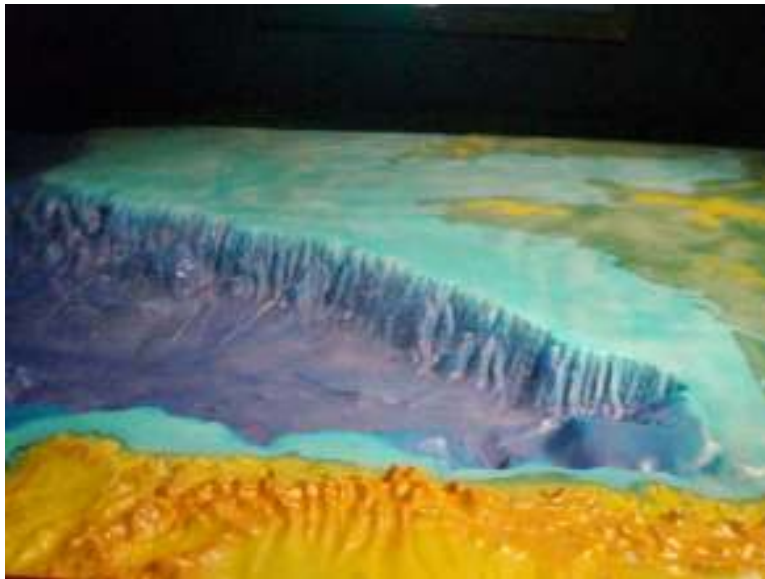
Treatment systems **not using active substances** must be tested and approved **by national administration** in accordance with **Guidelines G8**  
(Reg. D-3)



Treatment systems **using active substances** must be tested and approved **by IMO** in accordance with **Procedures in G9**  
(Reg. D-3)

## Regulation D-1 Ballast Water Exchange Standard

- efficiency of 95 per cent volumetric exchange
  - Pumping-through method, three times the volume of each ballast water tank. Less if demonstrated.
- 200nm from the coast – 200m deep or
- 50nm in waters 200m deep





## Regulation D-2 Ballast Water Performance Standard

< 10 viable organisms per  $\text{m}^3$  > or = 50 micrometres, and  
< 10 viable organisms per ml < 50 micrometres and > or  
= to 10 micrometres in (minimum dimension);

## Indicator microbes (not be limited to)

**Toxicogenic *Vibrio cholerae* (O1 and O139):** <1 colony forming  
unit (cfu) per 100 ml or < 1 cfu per 1 gram (wet weight)  
zooplankton samples

***Escherichia coli*:** < 250 cfu per 100 milliliters

**Intestinal *Enterococci*:** < 100 cfu per 100 milliliters.

Exceptions – No Ballast Ships, Domestic Shipping, Warship or  
Government Ship, Permanent Ballast Water and Ballast Water  
discharged at the same place it is taken up

## **Harmonized voluntary Arrangements for Ballast Water management in the Mediterranean Region**

- Developed through the Globallast Project
  - Organised through REMPEC and the Barcelona Convention
  - Submitted to IMO – BWM.2/Circ 35
  - require ships sailing in the Mediterranean to exchange their ballast water in accordance with the requirements set out in the D-1 Standard of the BWM Convention, until they have to apply D-2.
  - implemented on 1 January 2012
- 
- **Compliant** Ballast Water Management Plan
  - Sediments should be collected and discharged at PRF

### Trade/Operation:

(i) Ships entering or leaving the waters of the Mediterranean Sea area from or to the Atlantic Ocean (Straits of Gibraltar), or from or to the Indian Ocean through the Red Sea (Suez Canal)

(ii) Ships in situations not allowing for ballast water exchange as described in (i) above, e.g. to avoid delays or deviations from a ship's intended voyage or for safety reasons

(iii) Ships engaged in traffic between:

- ports located within the Mediterranean Sea area; or
- a port located in the Black Sea area and a port located in the Red Sea area; or
- a port located in the Black Sea area and a port located in the Mediterranean Sea area; or
- a port located in the Red Sea area and a port located in the Mediterranean Sea area

(iv) Ships in situations not allowing for ballast water exchange as described in (iii) above, e.g. to avoid delays or deviations from a ship's intended voyage or for safety reasons

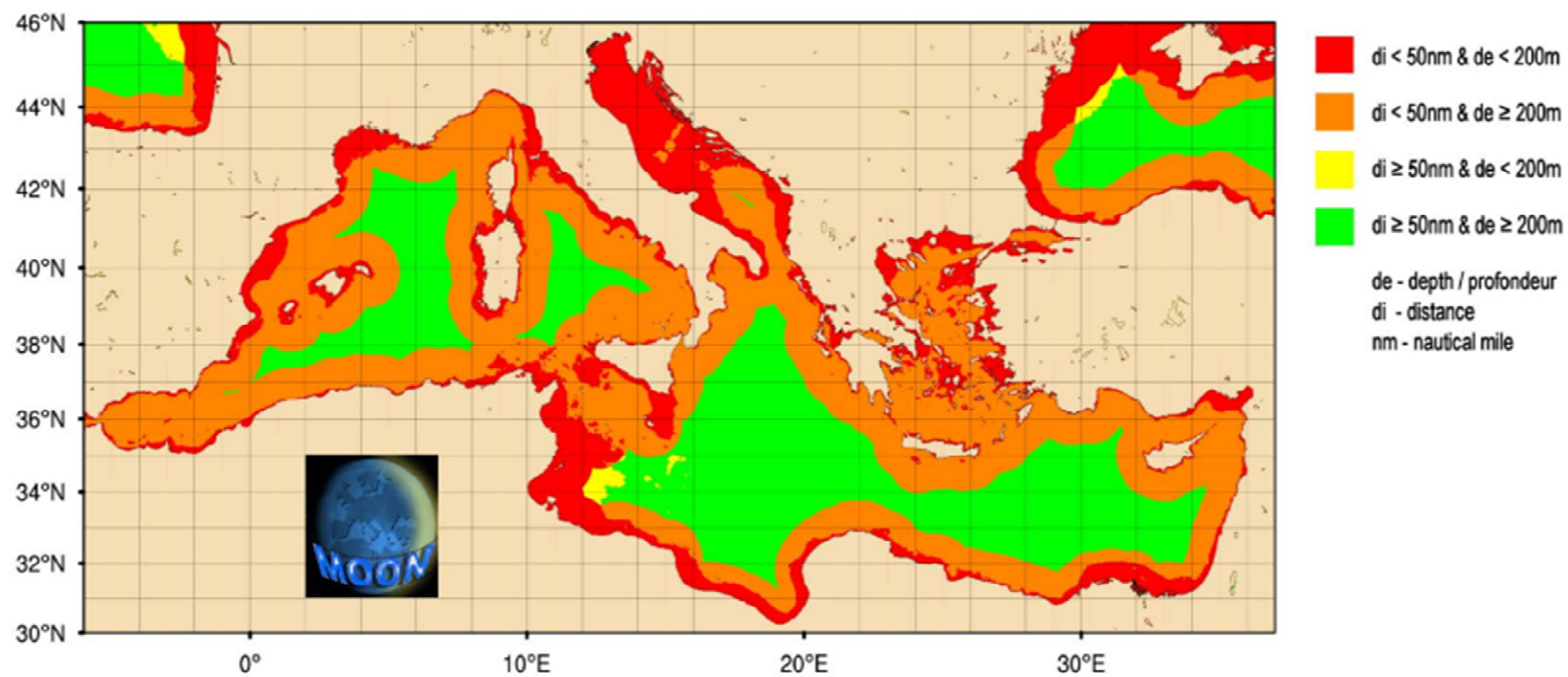
### Where to undertake ballast water exchange:

Before entering or after leaving the Mediterranean Sea area; at least 200 nautical miles from the nearest land and in waters at least 200 meters in depth

Before entering or after leaving the Mediterranean Sea area; as far from the nearest land as possible, and in all cases in waters at least 50 nautical miles from the nearest land and in waters of at least 200 meters depth

As far from the nearest land as possible, and in all cases in waters at least 50 nautical miles from the nearest land and in waters of at least 200 meters depth

Areas designated by the port State for that purpose





## CASES



R IOPP renewal survey    
 RD Decoupled IOPP renewal survey    
 ● Ballast Water Treatment D-2 requirement applies

EiF - Entry into Force, 8 September 2017

The periods in the timeline start on 8 September and end on 7 September

## Type Approval

Guidelines for approval of ballast water management systems (G8) Resolution MEPC.125(53) revised by:

Resolution MEPC.174 (58)

Resolution MEPC.279 (70)

Code for Approval of Ballast Water Management systems (BWMS Code)

# Experience Building Phase



The EBP is intended to permit port States, flag States and stakeholders (e.g. owners and operators of ships, manufacturers of BWMS, and recognized organizations) to:

1. gather and submit data concerning the implementation of the Convention;
2. participate in the analysis of this data in the Ballast Water Review Group (BWRG) of the Committee; and
3. undertake a review of the text of the Convention to identify any areas where the evidence demonstrates a need for improvement of the Convention, and then develop a package of priority amendments.

**Includes, and is broader than, the more specific "trial period" associated with methods for sampling and analysing ballast water during port State control (PSC)**

19

Non -penalisation

## No Direct corresponding legislation – no competence

However :

- Regulation (EU) No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species (IAS)
  - Article 13 requires MS to analyse the pathways of unintentional introduction of IAS of Union concern in their territory and in their marine waters, and identify priority pathways for which an action plan is required.
  - ballast water is not specified here, but it is a pathway of unintentional introduction of IAS.
  - Control based on IMO regulations would be the control
- Marine Strategy Framework Directive – Good environmental status (2008/56/EC)
- EC Biocides Regulation (528/2013)





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