

# The role of the PSC in the control, monitoring and enforcement of the BWM Convention.

Training on implementation & Compliance of BWM Convention

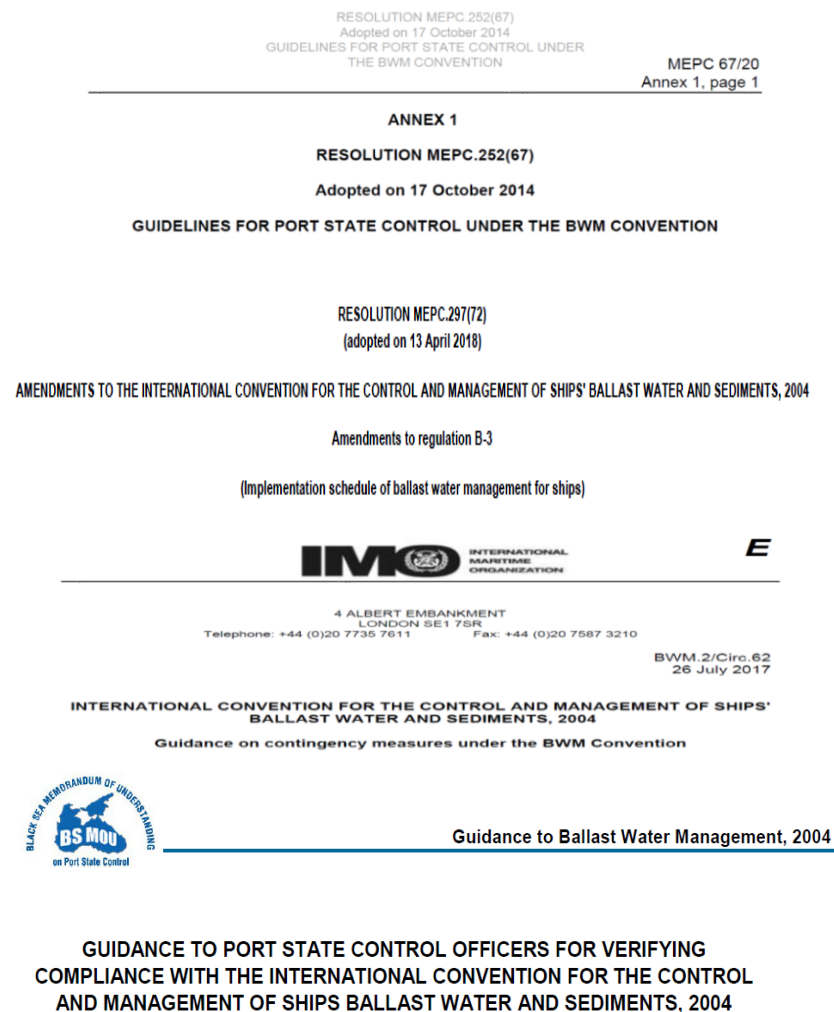
Fabrizio Pirelli / Project Officer

Unit 1.3 Capacity Building

Tekirdağ / 20 -21 February 2020

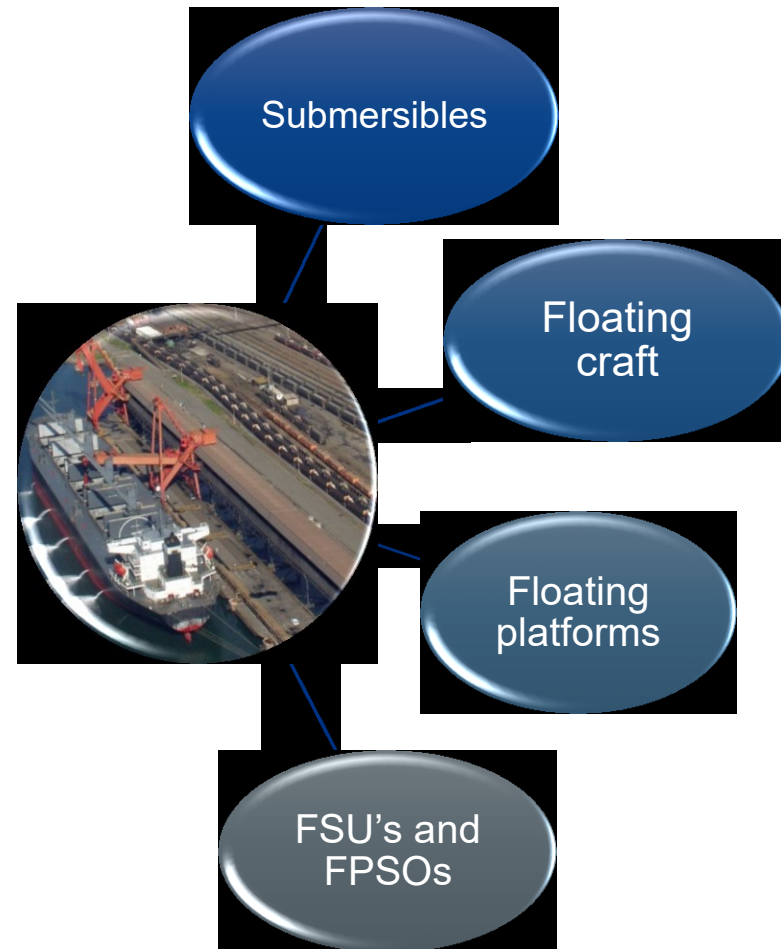


- **Key elements of the BWM Convention**
- Guidelines for PSC under the BWM Convention (Resolution MEPC.252(67))
- Application of BWMC (original text of regulation B-3 replaced by MEPC 297 (72))
- Guidance on contingency measures under the BWM Convention (BWM.2/Circ.62)
- MoU Instructions (Black Sea MoU B.7.1 Guidelines on BWMC rev. 1)



## Scope of application:

All vessels designed or constructed to carry ballast water



# Floating platform - FSU - FPSO

Floating platform  
for exploration



FSU

FPSO



## Certificate requirements:

All vessels of 400GT or above, excluding:

- Floating platforms
- FSU's and FPSOs



After the entry into force (8-9-2017) existing ships can use standard D-1 or D-2 during a transitional period (8/9/2017 – 1<sup>st</sup> OR 2<sup>nd</sup> renewal IOPP survey)

	Last IOPP renewal survey						Ultimate installation date BW treatment system						
	8/9	8/9	8/9	8/9	8/9	8/9	8/9	8/9	8/9	8/9	8/9	8/9	8/9
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Ship 1	IOPP renewal						1st IOPP renewal*					2nd IOPP renewal	
Ship 2		IOPP renewal**						1st IOPP renewal*					2nd IOPP renewal
Ship 3			IOPP renewal**						1st IOPP renewal				
Ship 4				IOPP renewal**						1st IOPP renewal			
Ship 5					IOPP renewal**						1st IOPP renewal		
									D-2 Compliance				

survey.

New ships (after 8-9-2017) to comply with D2 standard



## **BWM Convention contains the following exceptions\*:**

**Emergency situations for safety reasons**

**Accidental discharge or ingress due to damage of the ship or its equipment**

**Avoiding or minimizing pollution**

**Discharge in the same place of ingress**

**Discharge to a PRF**

**No water exchange if safety (ship, crew, passengers) is threaten by extraordinary conditions (adverse weather, equipment failure ...)**

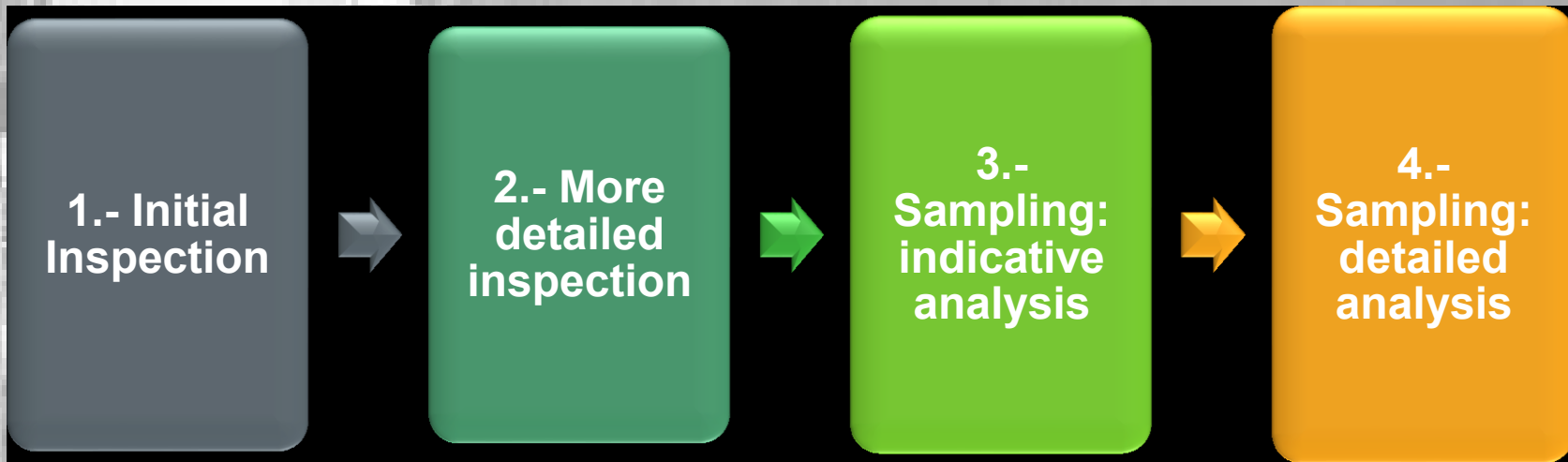
**IMO Guidelines for PSC  
under the BWM  
Convention (Resolution  
MEPC.252(67))**



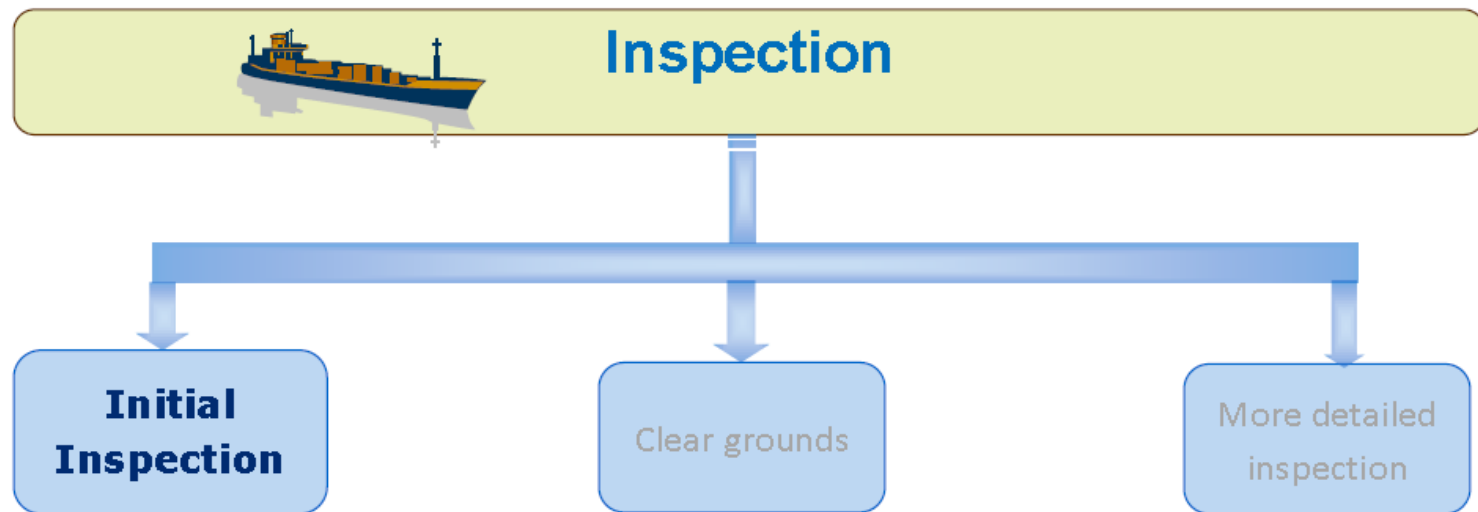
**BSMoU B.7.1 Rev.1  
Guidance for PSCOs for  
verifying compliance with  
BWMC**



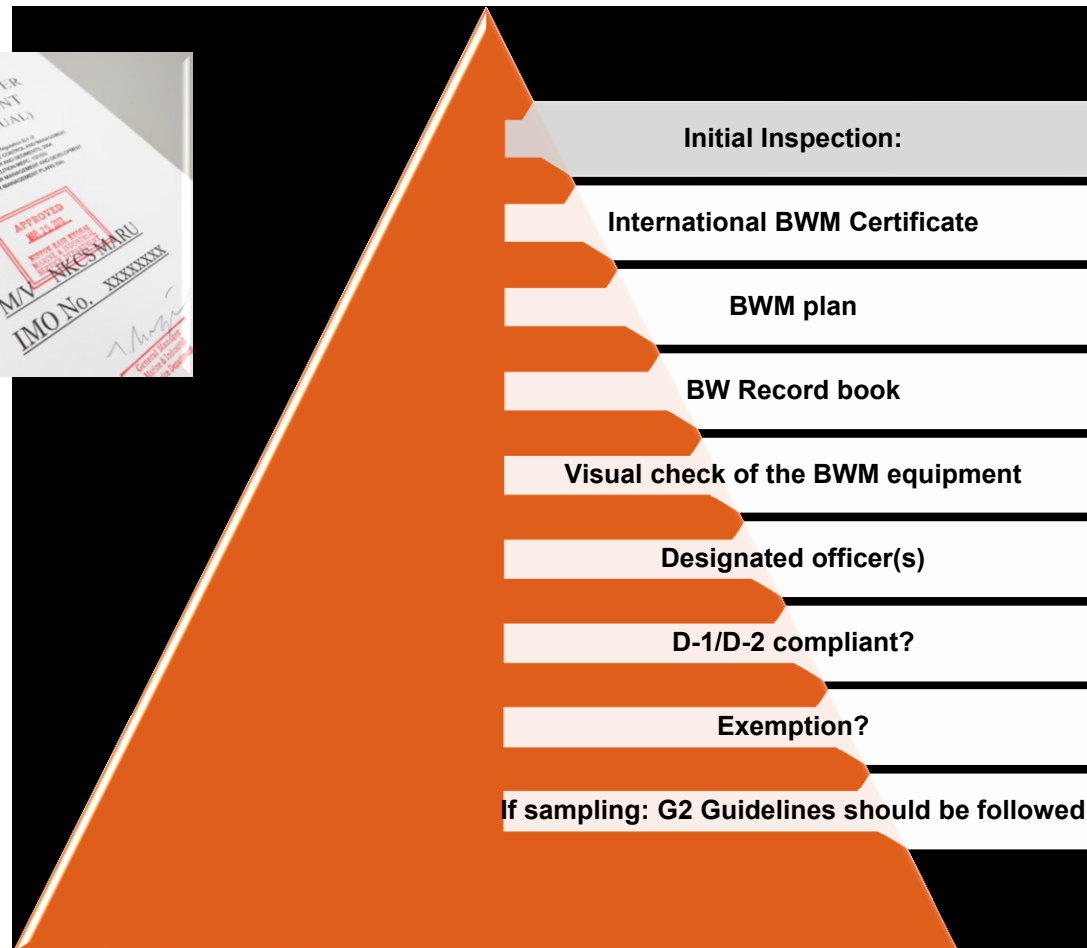
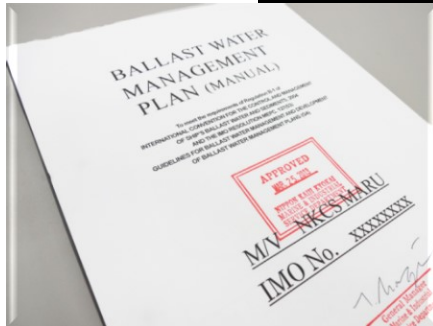
## Four stages inspection



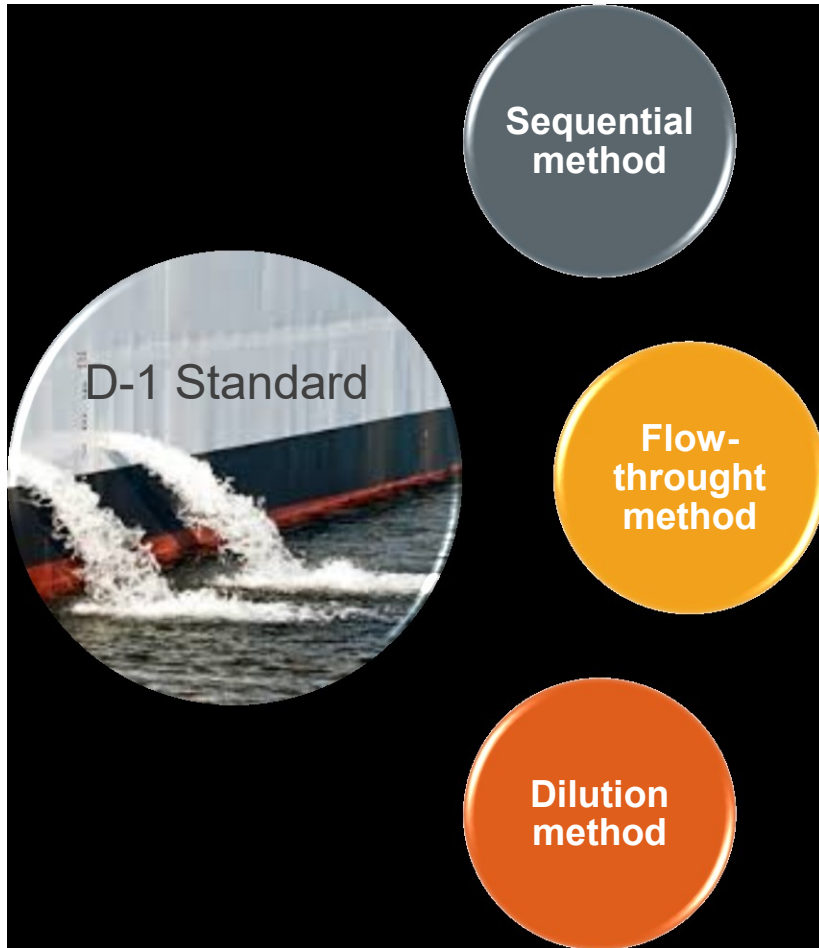
# Stage 1: Initial Inspection



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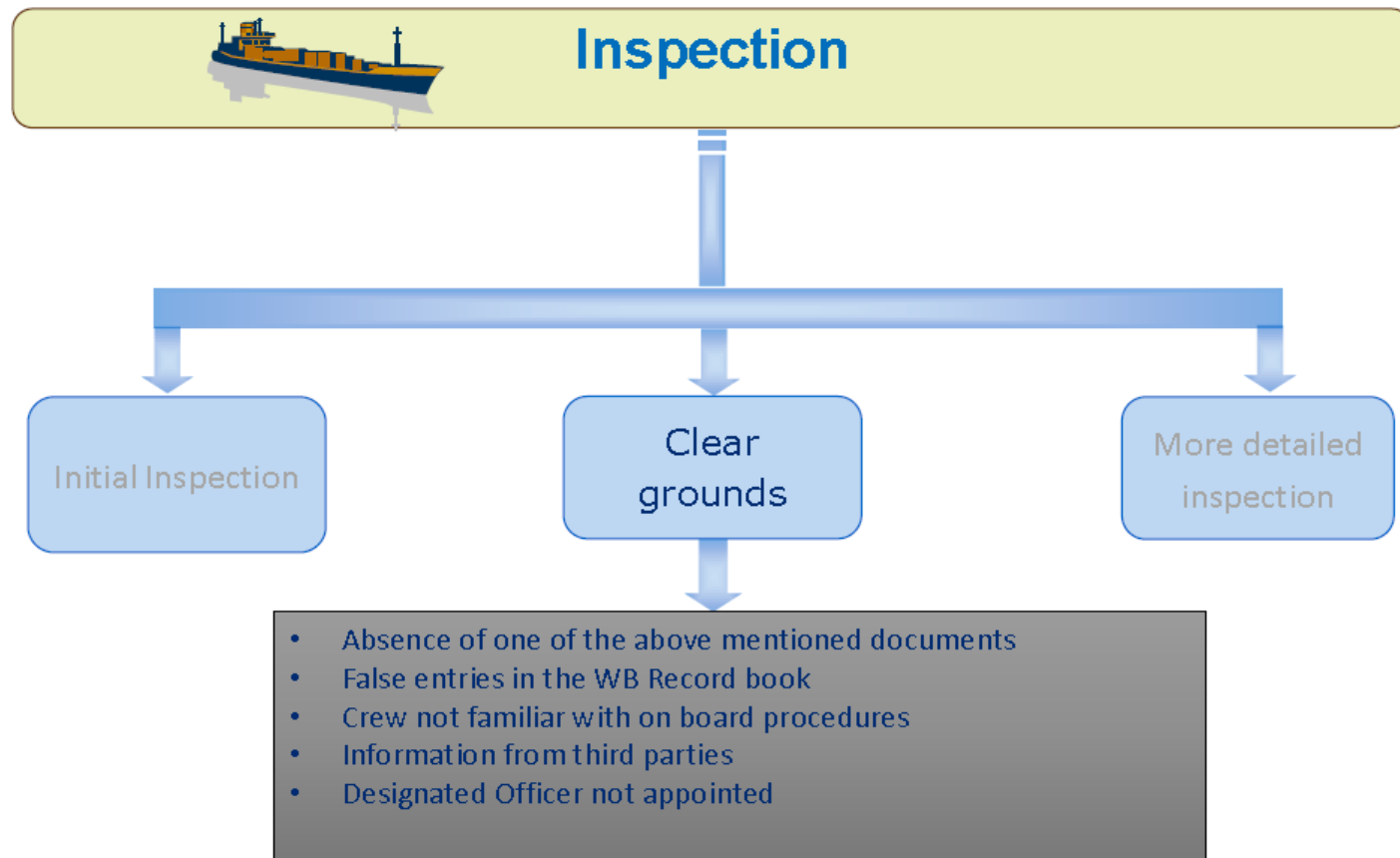


# Stage 1: Initial Inspection



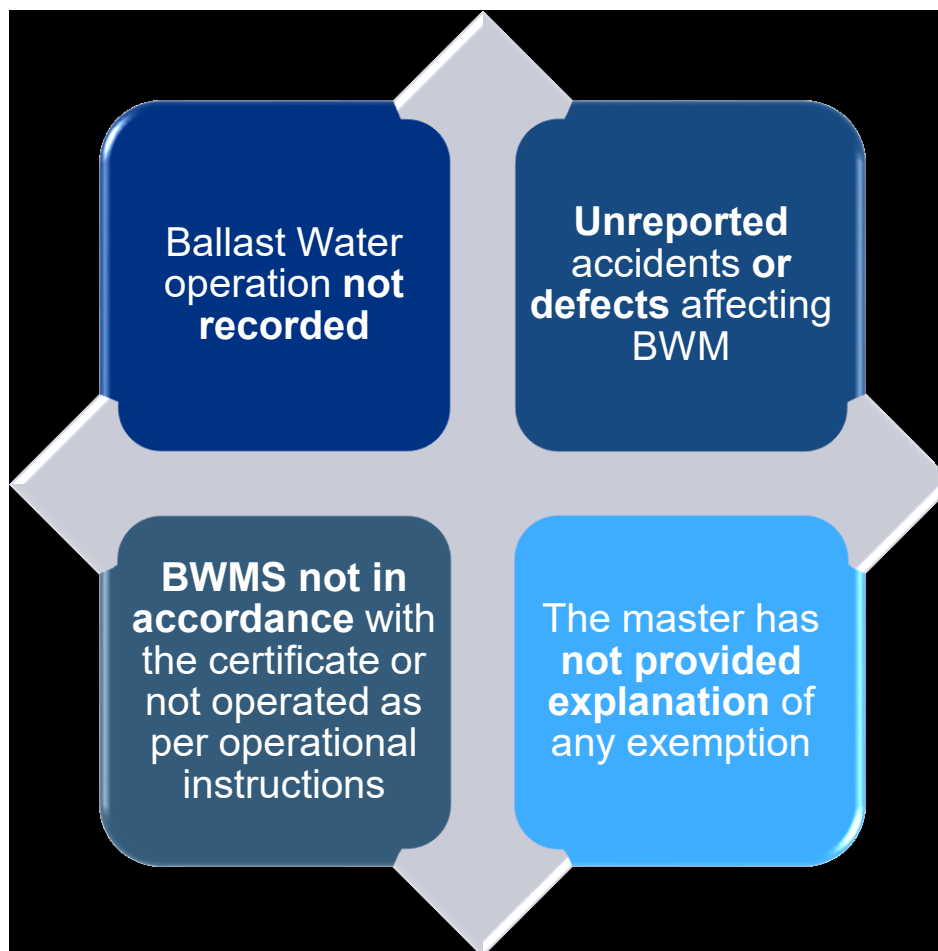
- **Document review**
- **Discharge areas** both international and local (if any)
- **Sampling?**

- ❑ **Sequential method** – A process by which a ballast tank intended for the carriage of water ballast is **first emptied and then refilled** with replacement ballast water to achieve **at least a 95% volumetric exchange**.
- ❑ **Flow-through method** – A process by which **replacement ballast water** is pumped into a ballast tank intended for the carriage of water ballast, allowing water to flow **through overflow or other arrangements**. **At least three times the tank volume** is to be pumped through the tank.
- ❑ **Dilution method** – A process by which **replacement ballast water is filled through the top of the ballast tank** intended for the carriage of water ballast with **simultaneous discharge from the bottom** at the same flow rate and maintaining a constant level in the tank throughout the ballast exchange operation. **At least three times the tank volume** is to be pumped through the tank.





# More clear grounds:



## Stage 2: More detailed inspection

If a more detailed inspection  
is to be carried out:



The port State will take such  
steps to ensure the ship not  
discharge ballast water until  
it can do so as per article 9.3  
of the BWM Convention.



## Article 9.3 of the BWM Convention

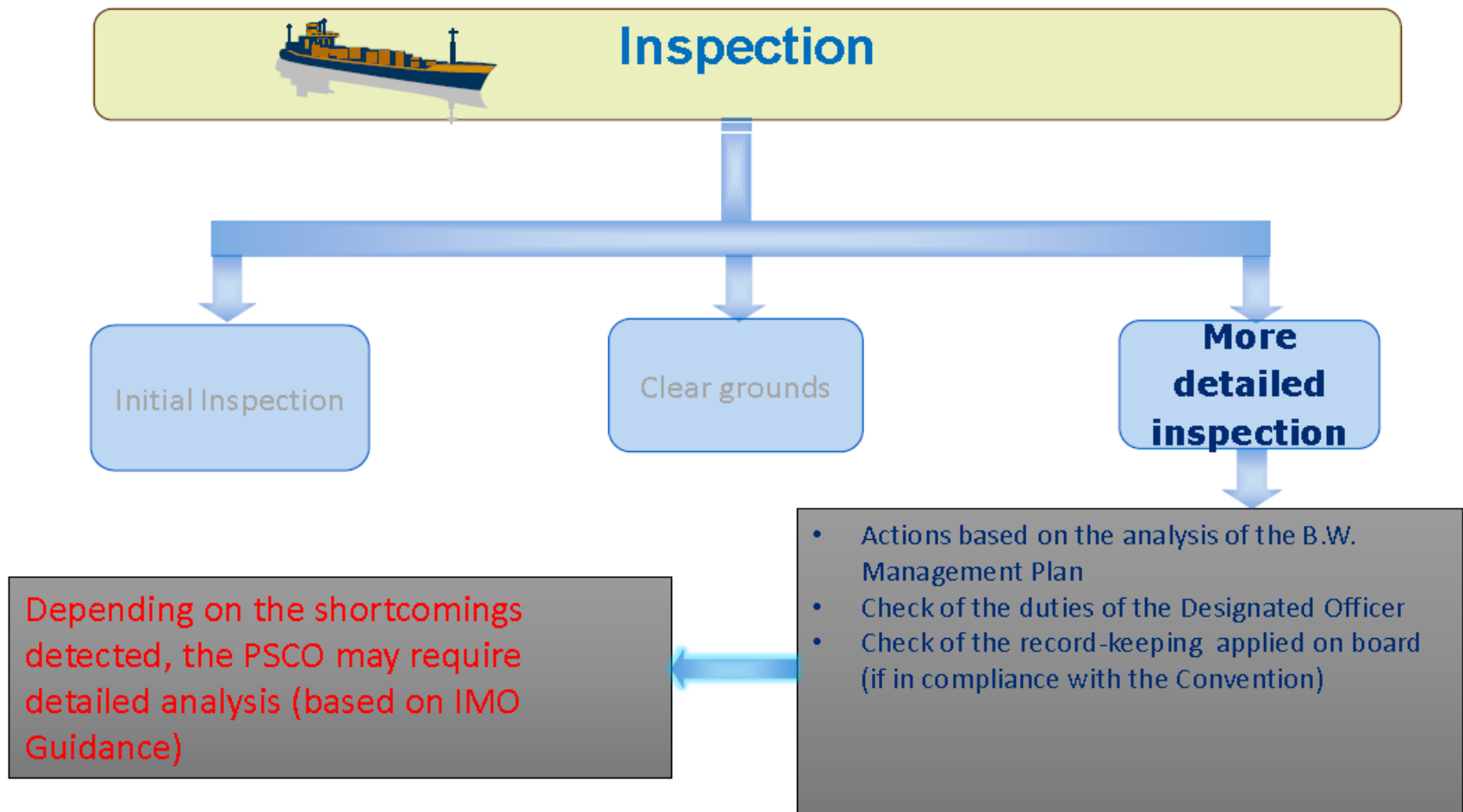
In the circumstances given in paragraph 2\* of this Article, the Party carrying out the inspection shall take such steps as will ensure that the ship shall not discharge Ballast Water until it can do so without presenting a threat of harm to the environment, human health, property or resources.

\*the condition of the ship or its equipment does not correspond...

\*the master or the crew are not familiar ...



## Stage 2: More detailed inspection



# Stage 2: More detailed inspection

**Ballast Water Management procedure exists on board**

**BWM Plan provides adequate information on:**

**Details of specific operational or safety restrictions which effect the ship and or the crew including procedures for safe tank entry**

**Details of specific safety aspects of BWMS**

**Details of method(s) used on board for the management of ballast and for sediment control including step-by-step operational procedures**

**Procedures for the disposal of sediments at sea and to shore**

**List and/or diagram indicating the locations of sampling and access points in pipelines and ballast water tanks**

**Outline the duties of the designated officer**

**Details of the record-keeping requirements**

## Stage 2: More detailed inspection

**If the Ballast water management plan requires a BWM System:**

-Is the equipment in good order?

-Has the Designated officer the sufficient knowledge of the system?

-Is the crew following the safety operational procedures?

-Has the system been bypassed?

-Is the BWMS operated as per instructions?

-Is the treatment process fully operational?



The quantity of the sampling water to be taken and location in the ship chosen should be in accordance with the Guidelines for ballast water sampling (G2) BWM.2 / Circ.42 / Rev.1 and associated guidance documents developed by the IMO.

**Every effort will be made to avoid any undue delays to the ship.**

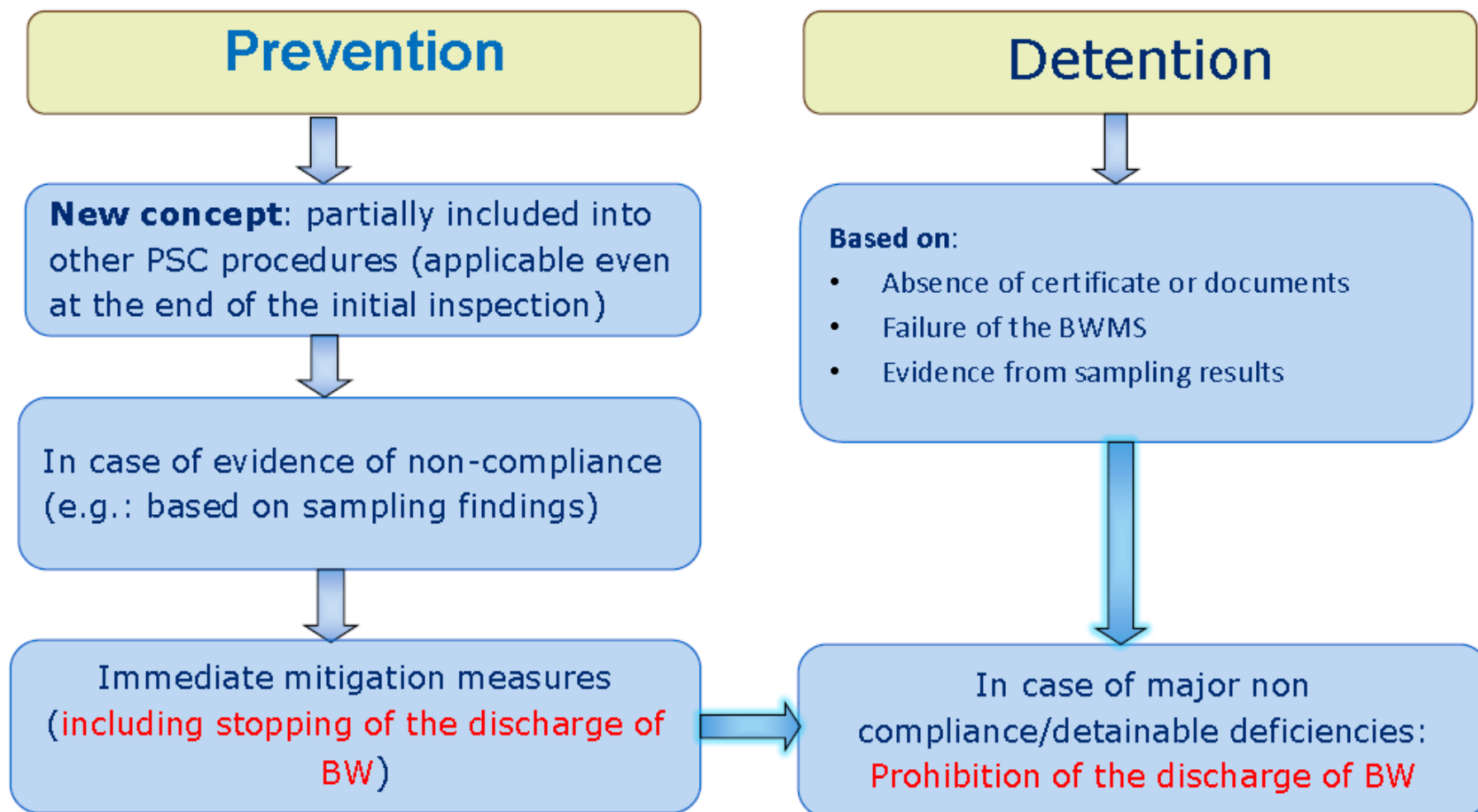
## Stage 3 & 4: Indicative & Detailed test



**To provide a quick, rough estimate of the number of organisms.**



**To provide a robust, direct measurement of the number of viable organisms.**



**No IBWMC**

**No BWMP**

**No BWMRB**

**Ship or equipment** not in line with the BWMP or IBWMC

**Failure, absence or deterioration** of the equipment

**Crew not familiar** with the BWM procedures or no procedures in place

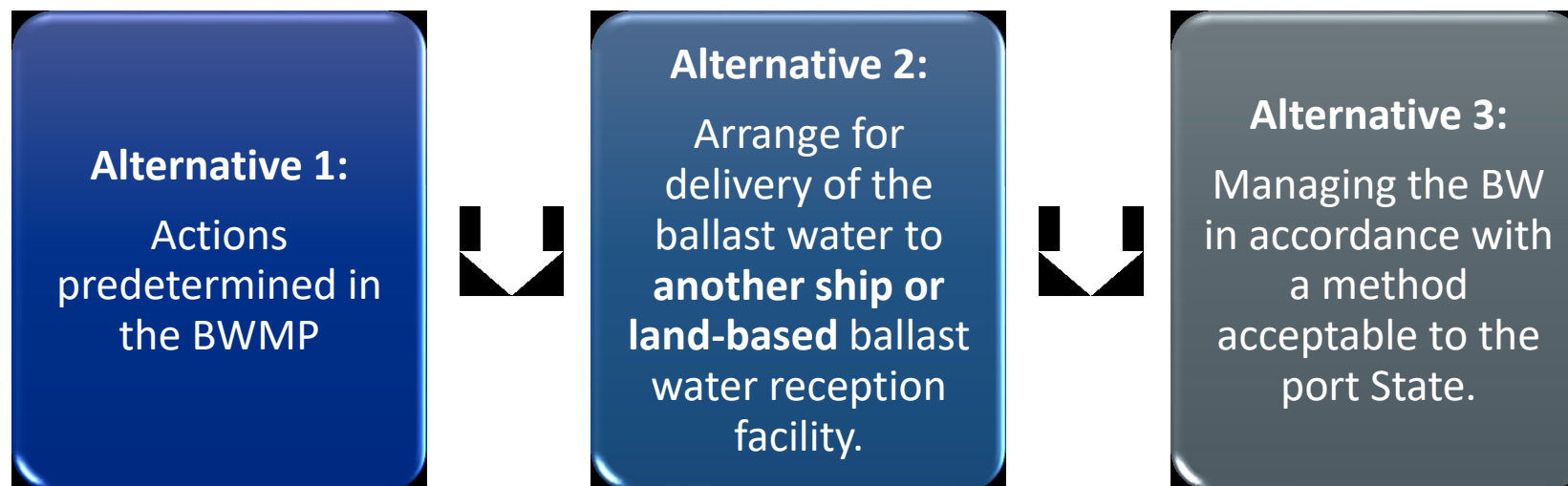
**No designated officer**

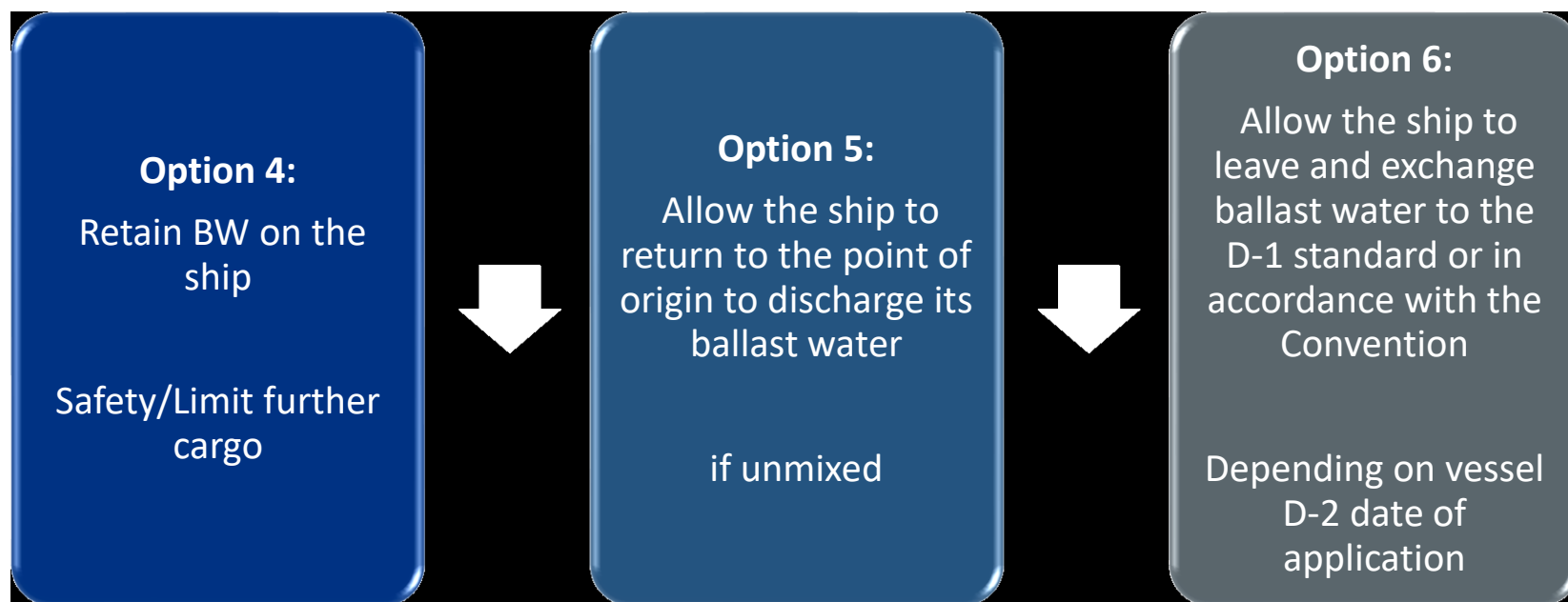
**Ship** has not complied with the BWMP

**Sampling** non compliant

**Ballast water discharged** not according to the Convention (Regulation A-2)

## Guidance on contingency measures under the BWM Convention (BWM.2/Circ.62)







If the sampling indicates that the ship is posing a threat:



prohibit such ship from discharging BW until the threat is removed -Art. 10(3) .



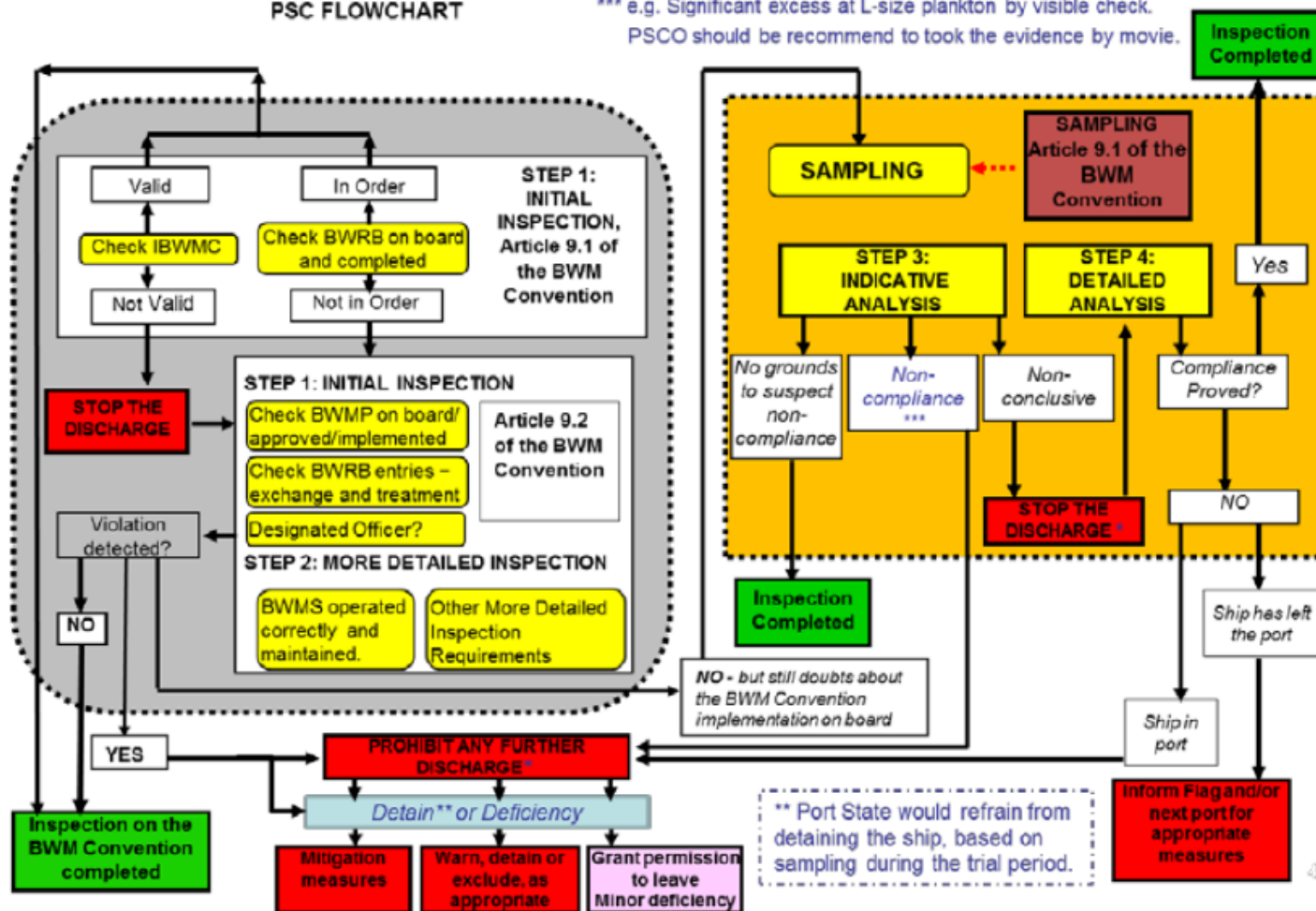
**Report to the flag State,**  
providing evidence of  
the violation and notify  
the RO which issued the  
certificate -Art.11(2).



**Notify the next port of  
call** if the ship is allowed  
to proceed as such.

PSC FLOWCHART

\*\*\* e.g. Significant excess at L-size plankton by visible check.  
PSCO should recommend to take the evidence by movie.



\* If it is reasonable for ship. PSCO should consider safety in prior.

**Who should undertake detailed sampling?**



**How to decide what methodology should be used?**

**PSC Guidelines only has procedures for the D-2 standard, what about D-1 standard?**



**Thank you for your  
attention!  
Any question?**

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