

Agenda item 4

Enforcement of MARPOL Annex VI, overview

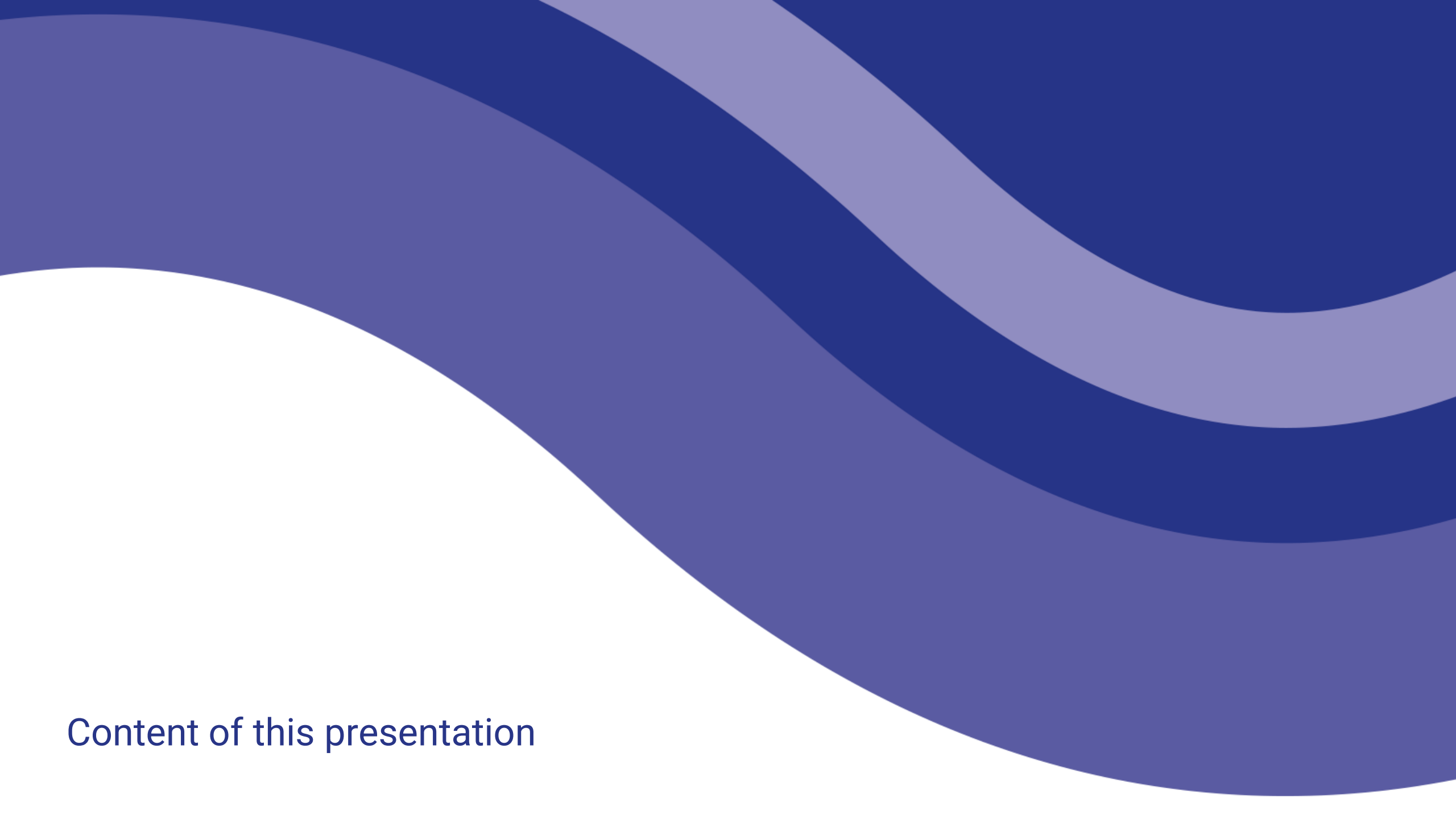
Regional Expert Meeting on the Possible Designation of the Mediterranean, as a whole,
as a Nitrogen Oxides Emission Control Area (Med NO_x ECA),
Malta, 18 to 19 November 2025



**Mediterranean
Action Plan**
Barcelona
Convention



**Marie Caillerie, consultant
for REMPEC**
November 2025



Content of this presentation

Agenda item 4

Enforcement of MARPOL Annex VI, overview

Content of this presentation

- Quick recap on accession to MARPOL Annex VI
- Legal background
- MARPOL Convention: key Articles (5, 6 and 7)
- Roles and responsibilities of Administrations
- Flag State obligations
- Port State obligations and PSC
- PSC in relation to NOx emissions
- Reference to IMO documents



Quick recap on accession to MARPOL Annex VI

Ratification / Accession

Ratification

Ratification defines the act whereby a **state indicates its consent to be bound to a treaty...**

The usual procedure is for the depositary to collect the ratifications of all states...

The **necessary time-frame** is given to seek the approval for the treaty on the **domestic level** and to enact the necessary legislation to give domestic effect to that treaty.

[Arts.2 (1) (b), 14 (1) and 16, Vienna Convention on the Law of Treaties 1969]

Accession

Accession is the act whereby a State **accepts the offer or the opportunity to become a party** to a treaty **already negotiated and signed** by other states. **It has the same legal effect as ratification.**

Accession usually occurs **after the treaty has entered into force.**

[Arts.2 (1) (b) and 15, Vienna Convention on the Law of Treaties 1969]

One may say that “accession” is a type of ratification.

Ratification / Accession

Recalling Resolution MEPC.361(79) which introduced the Med SO_x ECA and contained the following invitation:

*“Invites coastal States of the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter to **ratify and effectively implement MARPOL Annex VI, as soon as possible**, if they have not yet done so, at least by the date of entry into force of the said amendments”*

Party to Annex VI	In the process of accession
Albania Croatia Cyprus France Greece Italy Israel Malta Monaco Montenegro Morocco Slovenia Spain The Syrian Arab Republic Tunisia Türkiye	Algeria Bosnia and Herzegovina Egypt Lebanon Libya

Benefits

- Demonstrates commitment
- Fosters positive relationships
- Better access to TC and funding

NB: A State has to be a party to MARPOL to accede to MARPOL Annex VI.

Annexes I (Oil) and II (Noxious liquid substances) are mandatory for all parties to MARPOL. Annexes III (Packaged goods) IV (sewage), V Garbage) and VI (air pollution) are “optional”.

Transposition

Toolbox for States and Maritime Administrations

Detailed guidance on the incorporation/transposition of MARPOL Annex VI into national law is available in various IMO publications.

ToolBox	
Incorporation of MARPOL Annex VI into national law, 2018 (free access here)	
Clause-by-clause analysis of MARPOL Annex VI, 2020 (free access here)	
MARPOL How to do it, 2013 <i>(Not up to date!)</i>	

Accession

- by the **State**, to become a **Party** (State level action)

Transposition

(integration into national legislation)

- by the relevant **State bodies** (State level action)

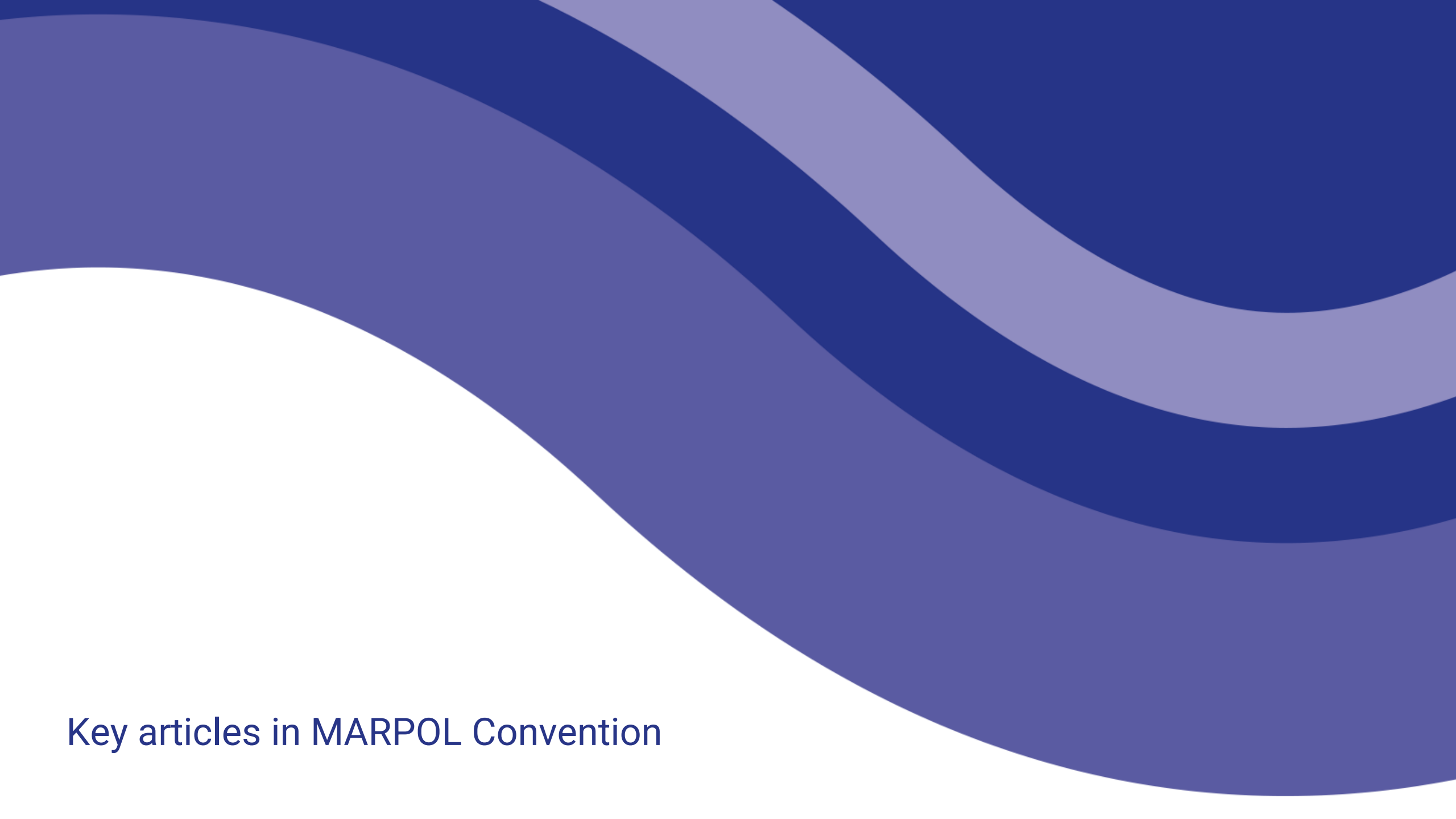
Implementation

- by the relevant **Administrations** (flag, coastal and port States actions)
- Compliance by **ships/industry**

Enforcement

(control)

- by the **flag State or port State**, coastal State in some cases



Key articles in MARPOL Convention

MARPOL Article 4

Article 4 Violations and sanctions

MARPOL requires Parties to **prohibit violations** and to **provide sanctions** under their law and **take procedures against offenders**. Parties are required to:

- .1 apply **MARPOL regulations to ships flying their flag**, wherever they may be;
- .2 take **proceedings against ships flying their flag** if sufficient information and evidence of **a violation** is provided by another Party;
- .3 take **proceedings against ships flying another flag** which commit a **violation** within their jurisdiction **or inform the flag Administration** and provide information and evidence of the violation;
- .4 make penalties **adequate in severity** to discourage violations.

MARPOL Articles 5 and 6

Article 5 **Issue and acceptance of certificates**

- Other Parties should **accept a certificate** issued under the authority of a Party to MARPOL.
- A ship required to hold a MARPOL certificate may be **subject to inspection** by officers of a port State which is a Party to MARPOL in its ports/offshore terminals.
- **Parties are required to apply the requirements of MARPOL to non-Party ships to ensure that no more favourable treatment is given to such ships.**

Article 6 **Detection of violations and enforcement**

- Parties to MARPOL agree to **cooperate in monitoring compliance and detecting violations.**
- Where requested or felt necessary, a **coastal or port State** shall **inspect a ship** to collect evidence to verify whether it has made a prohibited discharge and, where such a discharge is proved, shall take appropriate measures.
- A port State shall, **in response to a request from another Party**, inspect a ship to collect evidence or to verify whether it has committed **a violation in other waters.**

MARPOL Articles 7 and 11

Article 7 **Undue delay to ships**

Flag States and port or coastal States should avoid **unnecessary or undue delay** to a ship on account of measures taken under articles 4, 5 or 6.

Where undue delay does occur, the owner or master is entitled to **compensation for any loss or damage suffered**.

Article 11 **Communication of information**

Parties to MARPOL undertake **to provide IMO with different types of documents** or info., for circulation :

- texts of laws, orders, or regulations published on matters within the scope of MARPOL,
- list of RO's authorized to act on behalf of the State administration
- specimens of their certificates issued
- list of reception facilities -- and many more.

The IMO Global Integrated Shipping Information System **GISIS** is designed to assist States in carrying **out their communication and reporting duties**.



Roles and responsibilities of Administrations

Roles and responsibilities of Administrations

A Maritime Administration?

The nature and extent of **duties** for Administrations are based on the **three** capacities of a State:

Flag
Coastal
Port

there is inevitably a degree of overlap between the 3 when it comes to **implementation and enforcement** of MARPOL Annex VI provisions.

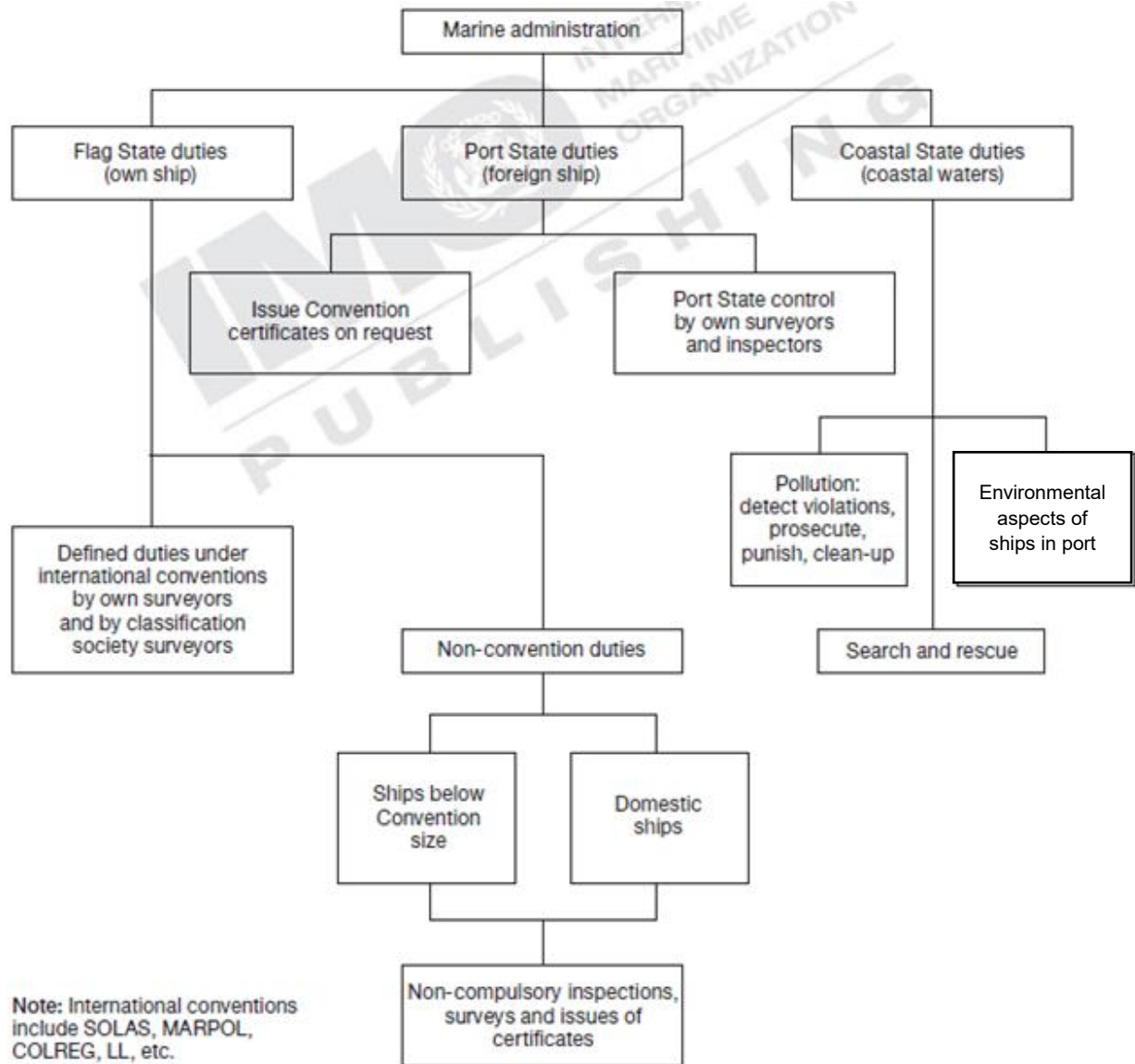


Figure 10 – Convention and non-Convention duties of marine administrations

Source: MARPOL How to do it – 2013 Manual
**Enforcement of
MARPOL Annex VI**
November 2025

Roles and responsibilities of Administrations

The III Code

The Code for the Implementation of Mandatory IMO Instruments ([III Code](#)) provides guidance and assistance to governments for the **implementation** and **enforcement** of IMO mandatory instruments.

IMO also publishes a **Non-exhaustive list of obligations under instruments relevant to the III Code** (Assembly resolution [A.1187\(33\)](#) – will be updated in December 2025).

This document provides helpful guidance as it **compiles all the obligations and responsibilities** spread across the different IMO mandatory instruments, for Governments, flag, coastal and port States.

Roles and responsibilities of Administrations

List of obligations - Extracts

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 8.4	Measures taken regarding provision of reception facilities – notifying the Organization	
Reg. 9	Port State control on operational requirements	
Reg. 10.5	Inspection of Garbage Record Book or ship's official log-book	
Annex VI		
Reg. 5.3.3	Necessary assistance to the surveyor as referred to in the paragraph	
Reg. 10	Port State control on operational requirements – in relation to chapter 4 of Annex VI, limiting of inspection to verification that there are valid Statement of Compliance related to fuel oil consumption reporting and operational carbon intensity rating, International Energy Efficiency Certificate and SEEMP on board, with inclusion of implementation of SEEMP by the ships	
Regs. 15.2 and 15.3	Volatile organic compounds – approvals of vapour emission control systems and notifying IMO	
Reg. 17.1	Reception facilities as referred to in the paragraph	
Regs. 17.3 and 17.4	Ports and terminals where reception facilities are/are not available to manage and process the substances as referred to in regulation 17.1 – communication to IMO	
Reg. 18.1	Availability of fuel oils and communication to IMO	
Reg. 18.2.1	Ship not compliant with fuel oil standards	
Reg. 18.2.3	Action taken, including not taking control measures	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENT
Chapter 2	Issue of the Engine International Air Pollution Prevention Certificate, arrangements for the parent engine test and pre-certification of engines, usage of the engine family/engine group concepts and approval of the technical file and any subsequent amendments	
Chapter 2, Para. 2.2.5.1	Approval and pre-certification of the combined engine/NO _x -reducing device	
Chapter 3	Acceptance of modification of engine speed at E2 test cycle 25% power mode point	
Chapter 4	Assignment of engine family/engine group status, as applicable, and selection of associated parent engine; acceptance of conformity of production arrangements; adjustment of parent engine relative to engine group reference values	
Chapter 5	Ensuring that the parent engine test and subsequent calculations are undertaken in accordance with Code requirements and that, where alternatives are applied, these meet the Code's equivalency requirements and any deviations are within the permitted margins; filing of parent engine test report	
NO_x Technical Code 2008		
Chapter 1	Assumption of full responsibility for the approval of documentation as required by the Code together with the acceptance of procedures and alternatives as permitted by the Code	



Flag State obligations

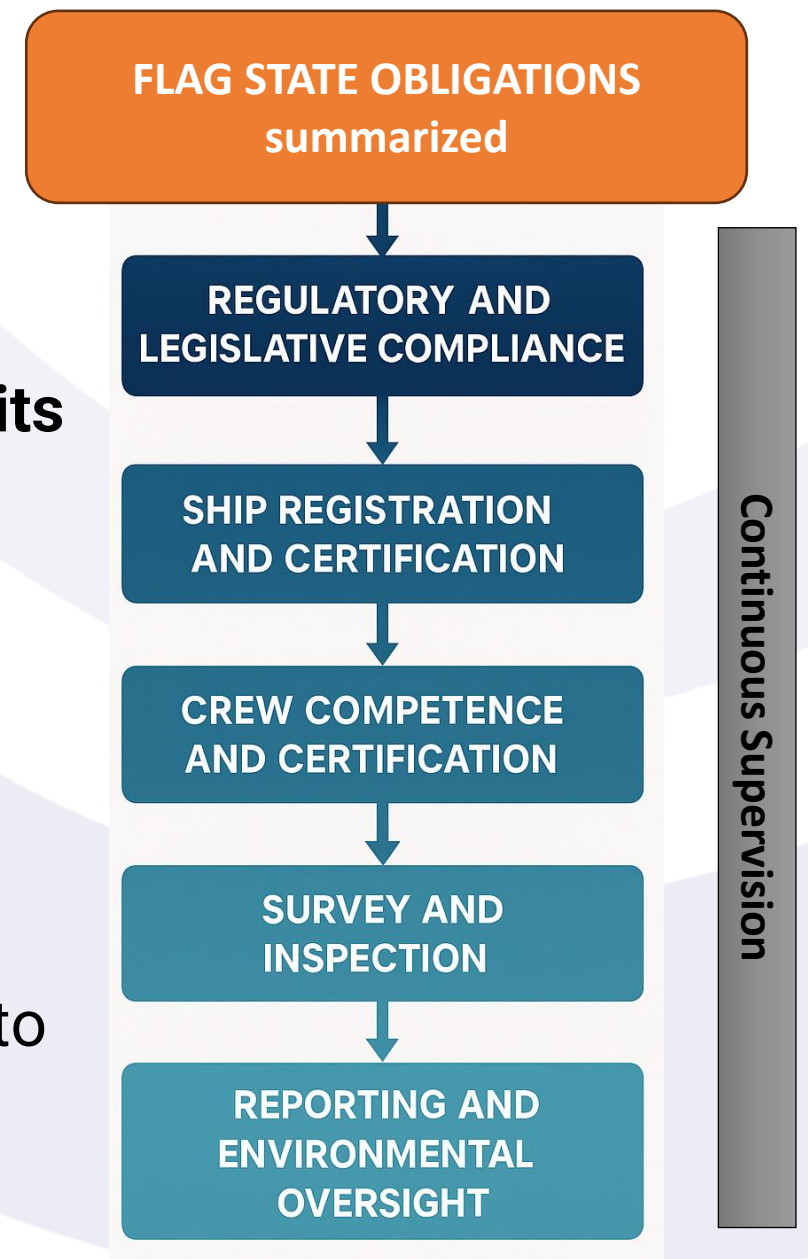
Flag State obligations – in general

A flag State assumes jurisdiction over ships under its flag.

The 'Administration' exercises **regulatory control over its fleet**.

With a **Compliance and enforcement strategy**:

- A regulatory framework to **transpose IMO conventions** into appropriate measures
- **Control** through approvals and surveys, for ships and their equipment. This role may be delegated to Recognised Organisations.





Port State obligations and PSC regime

Port State obligations

Under MARPOL Annex VI

- Inspection of foreign ships in ports – **PSC**
- Investigation and prosecution of alleged violation
- Regulation of **local suppliers of fuel oil** and providers of **reception facilities**

The **maritime administration** is usually competent for all those matters.

Port States must have in place measures **to perform PSC inspection**, which include the power to detain ships when necessary.

PORT STATE OBLIGATIONS UNDER MARPOL ANNEX VI

Under MARPOL Annex VI, Port State obligations involve mainly:



the inspection of foreign ships for compliance with MARPOL Annex VI (PSC)



investigation and prosecution of alleged violation (discharges or emissions)



the regulation of local suppliers of fuel oil



the regulation of providers of reception facilities

Port State obligations – in detail

Compliant fuel oil – regulation 18

Annex VI places obligations on the **port State** to **promote the availability of compliant fuel oils** in its ports and terminals.

Administrations should develop a **compliance monitoring and enforcement regime** to maintain fuel oil quality:

- **list of local fuel oil suppliers**, requiring them to provide **bunker delivery notes + bunker samples**
- authority to **take action against suppliers** of non-compliant fuel

An efficient mechanism to address the supply of the non-compliant fuel relies on access to **independent testing laboratories**.

Port State obligations – in detail

Reception facilities – regulation 17

MARPOL Annex VI-related wastes:

- ☐ **ozone-depleting substances**
- ☐ **exhaust gas cleaning residues** (scrubber waste)

MARPOL does not set any prescriptive standards for port reception facilities, other than requiring that they are “**adequate**”.

Ports are encouraged to develop **Port Waste Management Plans**.

Available guidance:

- *Consolidated guidance for port reception facilities providers and users* (MEPC.1/Circ.834/rev.1)
- *Guidelines for reception facilities under MARPOL Annex VI* (MEPC.199(62))
- *Regional arrangements for port reception facilities under MARPOL Annex VI* (MEPC.217(63))



GloLitter
partnerships



Port State Control

Port State control is a system of **harmonized inspection procedures** originally designed to target **sub-standards ships**.

*Nota Bene! The responsibility for ensuring that ships **comply** with the provisions of IMO instruments rests upon the **owners, masters and the flag States**.*

Inspections of **foreign ships** take place in **national ports** to **verify** that:

- the **conditions of the ship + equipment** comply with **international regulations**
- the ship is **manned** and operated in compliance with these rules.

Several IMO instruments contain specific provisions that permit PSC, such as reg.10 in MARPOL Annex VI.

The PSC regime is further structured by a series of IMO documents, incl.:

- **Procedures of Port State Control, 2023** (Assembly resolution A.1185(33))



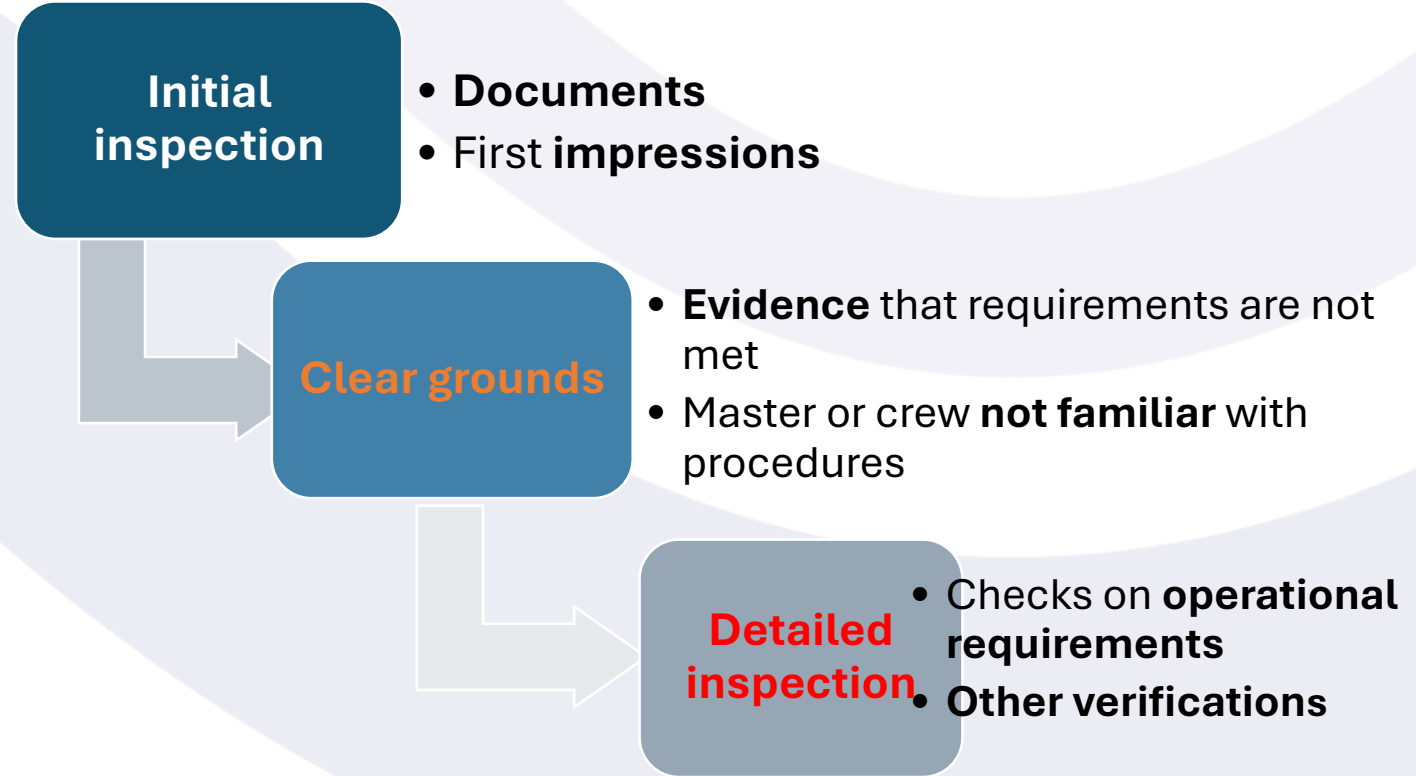
Port State control – General principle

A PSC inspection under MARPOL Annex VI follows the general sequence outlined here.

The **PSC Procedures** (in A.1185(33)) are essential to:

- understand the **conduct** of inspections
- recognize the **deficiencies** of a ship, its equipment, or its crew, and
- apply **control** procedures.

PSC are carried out only by authorized and **qualified port State control officers** (PSCO).



PSC – Background

Outline of the PSC Procedures, in resolution A.1185(33)

Update in
Dec. 2025

- **Appendix 2**
Guidelines for the detention of ships
- **Appendix 18**
specific part for Annex VI inspections

	Outline of the PSC Procedures (resolution A33/Res.1185))
Key principles and application	
	▪ Ships of non-Parties should be given no more favourable treatment ▪ For ships below convention size, specific procedures are recommended ▪ When exercising PSC, Parties should only apply those provisions of the conventions which are in force and accepted ▪ Where the provisions of the relevant conventions are not specific, the PSCO should in principle accept the design arrangement approved by the flag State and when appropriate consult with the flag Administration.
Initial inspection	
	Documentary checks: MARPOL Annex VI certificates and documents required to be onboard;
	Walk around and first impressions: attention is paid to the overall condition of the ship and its MARPOL Annex VI equipment
Clear grounds to conduct a more detailed inspection	
	▪ If, from general impression or observations, the PSCO has clear grounds for believing that the ship, its equipment or its crew does not substantially meet the requirements; or for believing that the master or crew are not familiar with essential shipboard procedures relating to the prevention of air pollution from ships ▪ Examples of "clear grounds": malfunctioning of equipment specified in the certificates, inconsistency between information in the bunker delivery note and the Supplement to the IAPP certificate, evidence that the quantity of fuel used onboard does not comply with the ship's voyage plan, report from remote sensing surveillance of SOX emissions indicating that the ship appears to use non-compliant fuel while in operation/under way, etc.
More detailed inspection	
	Inspection related to operational requirements: the PSCO should physically examine the equipment, such as marine diesel engines or incinerators, and confirm that the master or crew are familiar with the operation and maintenance procedures for all equipment covered by MARPOL Annex VI
Actions	
	Deficiencies of such a serious nature that they warrant the detention of the ship : deficiencies shall be corrected for the ship to sail; // Deficiencies which may be addressed in a timely manner .

Port State control in relation to NO_x emissions

Documentary items checked during a PSC

➤ Documentary inspection

- **IAPP Certificate**, including its Supplement
- **EIAPP Certificate** including its Supplement, for each applicable marine diesel engine
- **NO_x Technical File** for each applicable engine

➤ Depending on the method used to demonstrate NO_x compliance for the engine

- **Record Book of Engine Parameters** for each engine using the parameter check method
- **Documentation** relating to the simplified measurement method
- **Documentation** related to the direct measurement and monitoring method

➤ Ship with **engines certified to both Tier II and Tier III**:

- **required log book (e-record book) and recordings for the Tier and on/off status** of those engines when the ship is within an applicable NO_x Tier III emission control area;
- The **Approved Method File** for applicable engines for ships constructed between 1990 to 2000

At the same time, **ascertain that the crew are familiar with the above requirements.**



Reference to IMO documents

MARPOL Amendment process

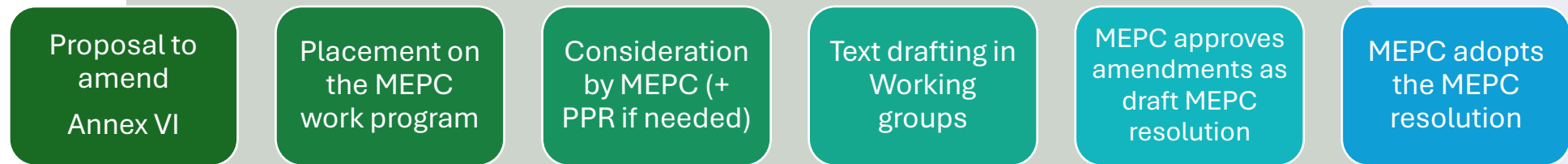
The principles of the **amendment procedure** are set out in article **16 of MARPOL**.

Amendments to Annex VI are adopted by means of **MEPC resolutions**. The procedure relies on the “**tacit acceptance**” mechanism which guarantees a prompt entry into force.

The Marine Environment Protection Committee is the **senior technical body** on marine pollution related matters, **bearing responsibility over MARPOL Convention**.

Different stakeholders, bodies and groups are involved in the decision-making process: IMO Member **States**, intergovernmental organizations (**IGOs**) and non-governmental organizations (**NGOs**).

MEPC’s work is supported by the **Sub-Committee on Pollution Prevention and Response** (PPR); and groups of different types (working groups, drafting groups, intersessional working groups, correspondence groups...).



Guidelines, Codes and other IMO documents relevant to MARPOL Annex VI

- A large number of MARPOL Annex VI regulations require that procedures, equipment, construction and other provisions **follow guidelines or performance standards developed by IMO** (or equivalent national standards).
- Regulations may also refer to **recommendations, guidelines, guidance, including industry standards**, which are intended to assist Administrations and the industry in the implementation of regulations.
- Guidance, recommendations, unified interpretations or other text of **recommendatory status**, are often adopted and circulated by means of MEPC circulars.

Refer to the IMO public website:

[Index of MEPC Resolutions and Guidelines related to MARPOL Annex VI](#)

Index of MEPC Resolutions and Guidelines related to MARPOL Annex VI

[Home](#) → [Our Work](#) → [Marine Environment](#) → [Index of MEPC Resolutions and Guidelines related to MARPOL Annex VI](#)

Index Content of Resolutions and Guidelines

- [Amendments to MARPOL Annex VI and the NOx Technical Code](#)
- [Unified Interpretations to MARPOL Annex VI and the NOx Technical Code 2008](#)
- [Guidelines related to Air Pollution prevention from ships](#)
- [Guidelines and guidance on carbon intensity of international shipping.](#)
- [IMO Life Cycle GHG Assessment \(LCA\) framework](#)
- [Resolution and circular related to the Promotion of technical co-operation and transfer of technology.](#)
- [Black Carbon related documents](#)
- [Relevant Information](#)

Amendments to MARPOL Annex VI and the NOx Technical Code

RESOLUTION	TITLE	DATE OF ENTRY INTO FORCE
 MEPC.398(83)	Amendments to the NOx Technical Code 2008 (Certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation)	1 September 2026
 MEPC.397(83)	Amendments to the NOx Technical Code 2008 (Use of multiple engine operational profiles for a marine diesel engine, including clarifying engine test cycles)	1 March 2027
 MEPC.392(82); MEPC 82/17/Add.1, annex 1	Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto Amendments to MARPOL Annex VI (Designation of the Canadian Arctic and the Norwegian Sea as Emission Control Areas for Nitrogen Oxides, Sulphur Oxides and Particulate	1 March 2026

End of Agenda Item 4: Enforcement of MARPOL Annex VI An overview



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