



RINA

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# Classification Societies & The Marine Regulatory Regime

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# What are Classification Societies?

□ Classification Societies are organizations that establish and apply technical standards in relation to the design, construction and survey of marine facilities including ships and offshore structures.

□ As an independent, self-regulating, externally audited, body, a classification society has no commercial interests related to ship design, ship building, ship ownership, ship operation, ship management, ship maintenance or repairs, insurance, or chartering.

# What are Classification Rules?

□ Classification rules are developed to assess the structural strength and integrity of essential parts of the ship's hull and the reliability and the function of the propulsion and steering systems, power generation and those other features which have been built into the ship in order to maintain essential services on board.

**Classification rules are not intended as a design code and in fact cannot be used as such.**

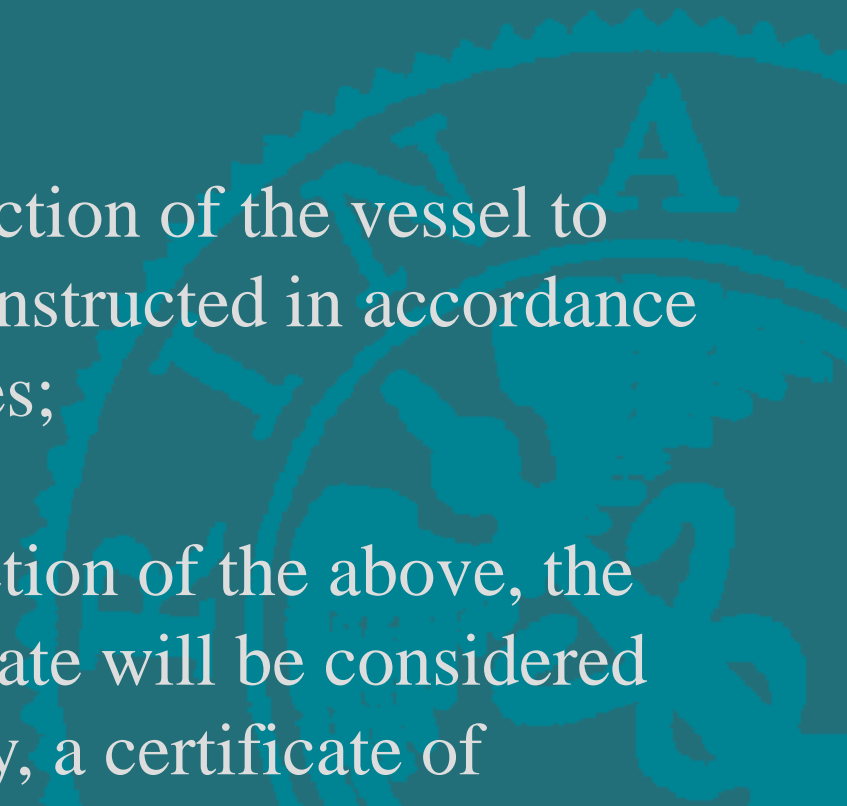
# Where did they start?

- ❑ Late 18th century based at Lloyd's coffee house in London, insurers developed a system for the independent inspection of the hull and equipment of ships presented to them for insurance cover.
- ❑ The condition of the hull was classified A, E, I, O or U, according to the excellence of its construction
- ❑ Equipment was G, M, or B: simply, good, middling or bad.
- ❑ Bureau Veritas (BV) was founded in Antwerp in 1828
- ❑ Registro Italiano Navale (RINA) dates from 1861

# Scope Of Classification

The classification process consists of:

- ❑ A technical review of the design plans for a new vessel to verify compliance with the applicable rules;
- ❑ Attendance at the construction of the vessel to verify that the vessel is constructed in accordance with the classification rules;
- ❑ Upon satisfactory completion of the above, the issuance of a class certificate will be considered and, if deemed satisfactory, a certificate of classification will be issued.



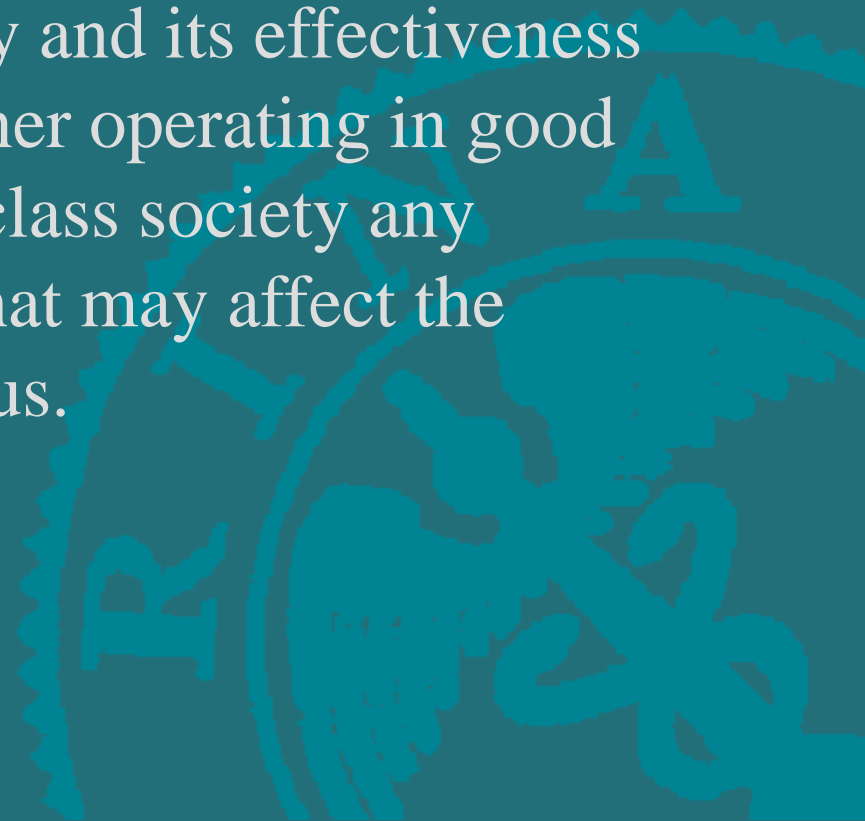
# Scope Of Classification

- Once in service, the owner must submit the vessel to a clearly specified program of periodical class surveys, carried out onboard the vessel, to verify that the ship continues to meet the relevant rule conditions for continuation of class.

**Class rules do not cover every piece of structure or item of equipment on board a vessel, nor do they cover operational elements.**

# Scope Of Classification

- ❑ The shipowner who has total control over a vessel, including the manner in which it is operated and maintained
- ❑ Classification is voluntary and its effectiveness depends upon the shipowner operating in good faith by disclosing to the class society any damage or deterioration that may affect the vessel's classification status.



# Scope Of Classification

- ❑ A class surveyor may only go on board a vessel once in a twelve-month period it is neither possible, nor expected that the surveyor scrutinize the entire structure of the vessel or its machinery.
- ❑ The survey involves a sampling, for which guidelines exist based upon empirical experience which may indicate those parts of the vessel or its machinery that may be subject to corrosion, or are exposed to the highest incidence of stress, or may be likely to exhibit signs of fatigue or damage.

# Surveys

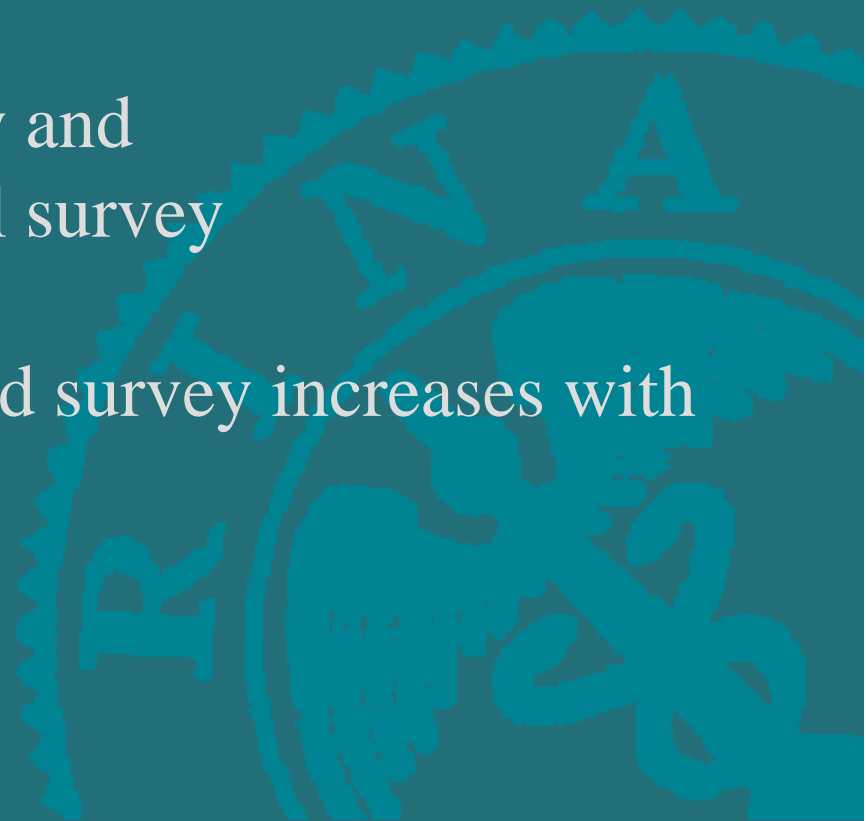
A classification survey is a visual examination that normally consists of:

- ❑ an overall examination of the items for survey,
- ❑ detailed checks of selected parts,
- ❑ witnessing tests, measurements and trials where applicable.



# Surveys

- ❑ Each classed vessel is subject to a specified program of periodic surveys after delivery.
- ❑ These are based on a five-year cycle and consist of
  - annual surveys,
  - an intermediate survey and
  - a class renewal/special survey
- ❑ The rigor of each specified survey increases with the age of the vessel.



# UNCLOS

The United Nations Convention on the Law of the Sea (UNCLOS) is an umbrella convention concerned with many aspects of the sea and its uses, including the granting of registration of a ship by a State. Once a ship is registered, the flag State has certain duties laid out in UNCLOS.

In particular, under Article 94, the flag State must

*“effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag”* and take

*“such measures for ships flying its flag as are necessary to ensure safety at sea.....”*

# International Maritime Organisation

The Convention establishing the International Maritime Organization was adopted on 6 March 1948 by the United Nations Maritime Conference that was convened in Geneva on 19 February 1948.

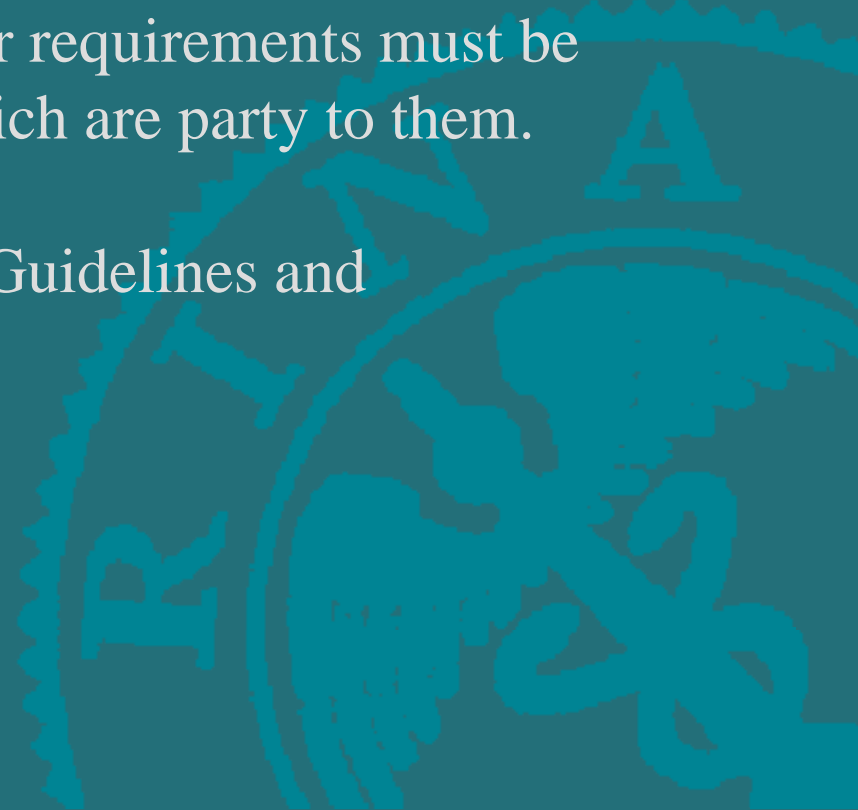
The Convention, then known as the Convention on the Inter-Governmental Maritime Consultative Organization, entered into force on 17 March 1958.

The new Organization was inaugurated on 6 January 1959 when the Assembly held its first session.

The name of the Organization was changed to the International Maritime Organization in 22 May 1982.

# International Maritime Organisation

- In order to achieve its objectives IMO has promoted the adoption of over 40 conventions and protocols, nearly all of which are now in force.
- Conventions and protocols are binding legal instruments, and upon entry into force their requirements must be implemented by all States which are party to them.
- In additions there are many Guidelines and Recommendations.



# Statutory Certification

International Conventions have been agreed, setting out uniform standards to facilitate acceptance of a ship registered in one country in the waters and ports of another.

These standards are commonly referred to as ‘statutory’ requirements. Broadly, they cover three distinct areas:

- 1) Aspects of the ship’s design and its structural integrity – load line and stability in the intact and damaged condition, essential propulsion, steering equipment, etc.;
- 2) Accident prevention, including navigational aids and pollution and fire prevention;
- 3) The situation after an accident (fire, flooding) including containment and escape.

**Some or all of these may also be reproduced in a**

# Major Conventions

## Safety

International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS)

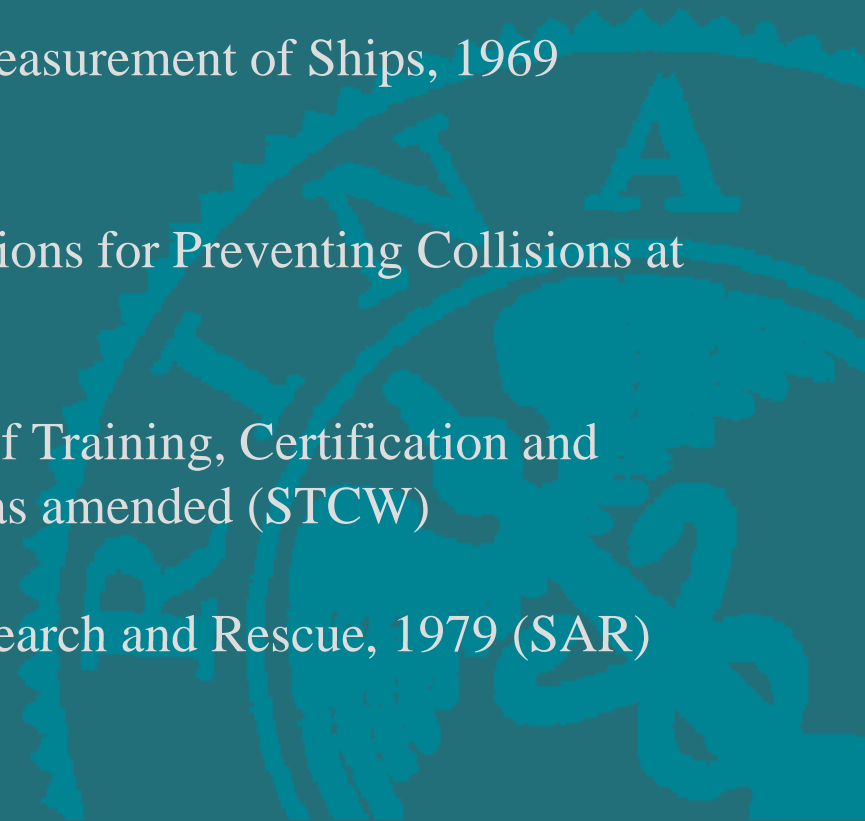
International Convention on Load Lines, 1966 (LL)

International Convention on Tonnage Measurement of Ships, 1969 (TONNAGE)

Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG)

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)

International Convention on Maritime Search and Rescue, 1979 (SAR)



# Major Conventions

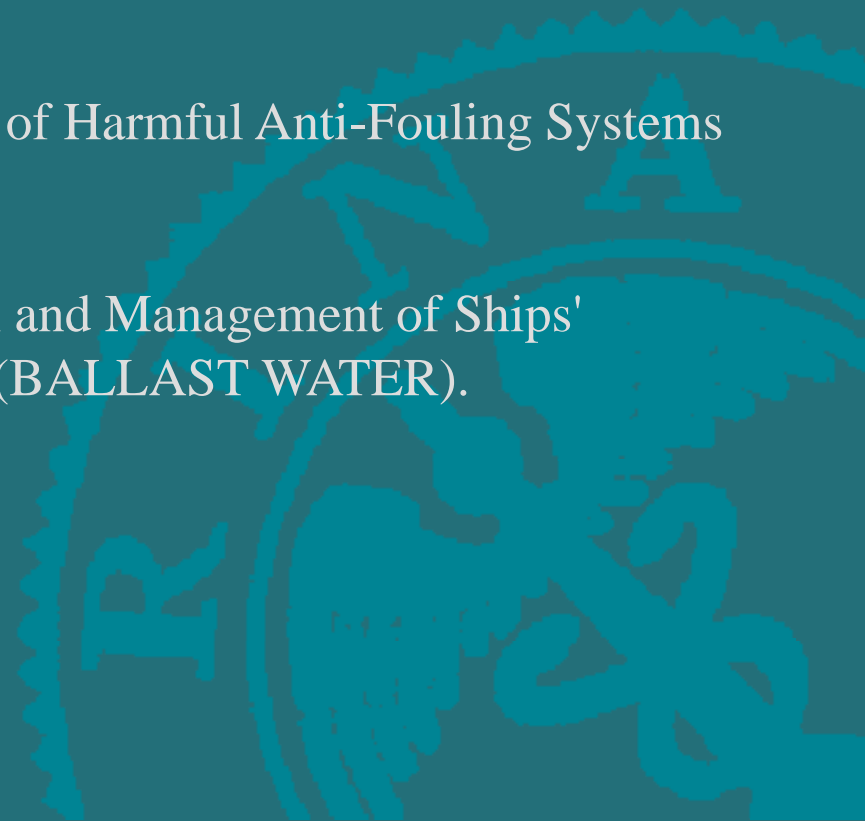
## Preventing marine pollution

International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978, as amended (MARPOL 73/78)

International Convention on Oil Pollution Preparedness and Response, 1990, as amended (OPRC)

International Convention on the Control of Harmful Anti-Fouling Systems (ANTI- FOULING)

International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BALLAST WATER).



# Codes & Guidelines

## Cargoes

International Maritime Dangerous Goods Code (IMDG Code)

Code of Safe Practice for Solid Bulk Cargoes (BC Code)

International Code for the Safe Carriage of Grain in Bulk  
(IGC Code)

Code of Safe Practice for Ships Carrying Timber Deck  
Cargoes

Emergency Procedures for Ships Carrying Dangerous Goods

Code of Safe Practice for Cargo Stowage and Securing

# Codes & Guidelines

## Marine technology

**International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code)**

**International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code)**

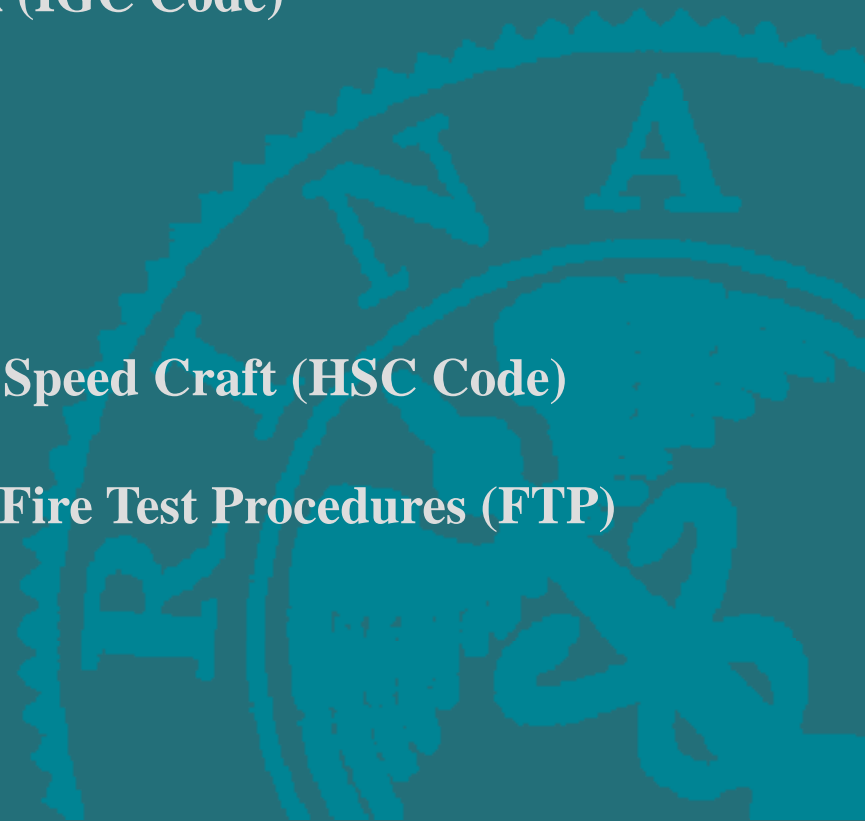
**Code on Noise Levels on Board Ships**

**Code on Alarms and Indicators**

**International Code of Safety for High Speed Craft (HSC Code)**

**International Code for Application of Fire Test Procedures (FTP) Code**

**Fire Safety Systems (FSS) Code**



# Codes & Guidelines

## **Marine environment**

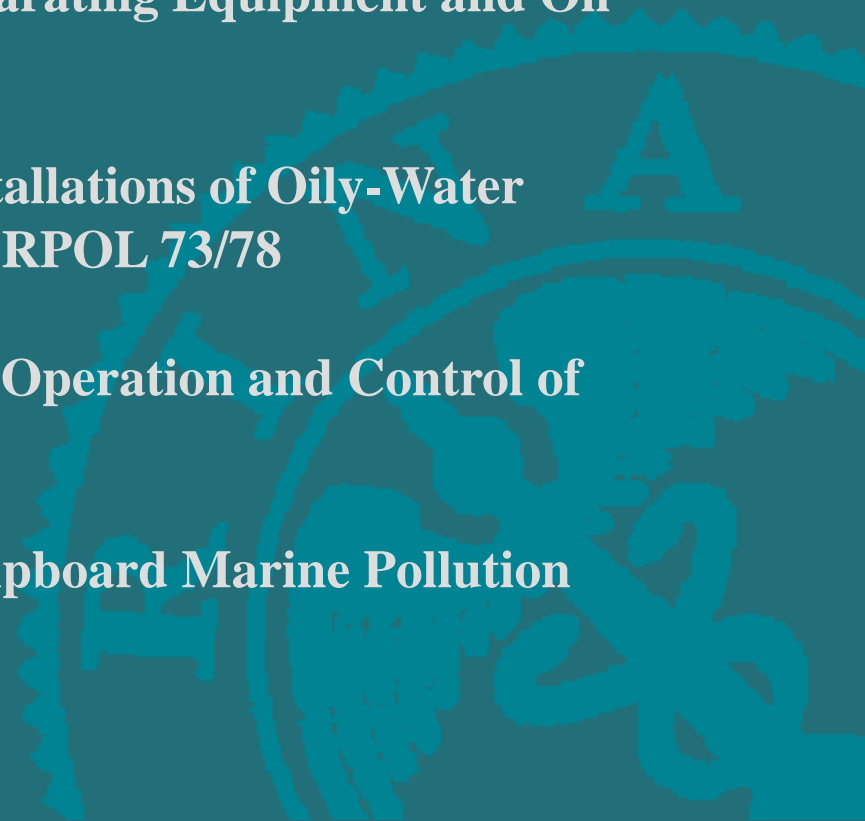
**Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers**

**Recommendations on International Performance and Test Specifications for Oily-Water Separating Equipment and Oil Content Meters**

**Recommendation Concerning the Installations of Oily-Water Separating Equipment under MARPOL 73/78**

**Revised Specifications for the Design, Operation and Control of Crude Oil Washing Systems**

**Guidelines for the Development of Shipboard Marine Pollution Emergency Plans**



# Recognised Organizations

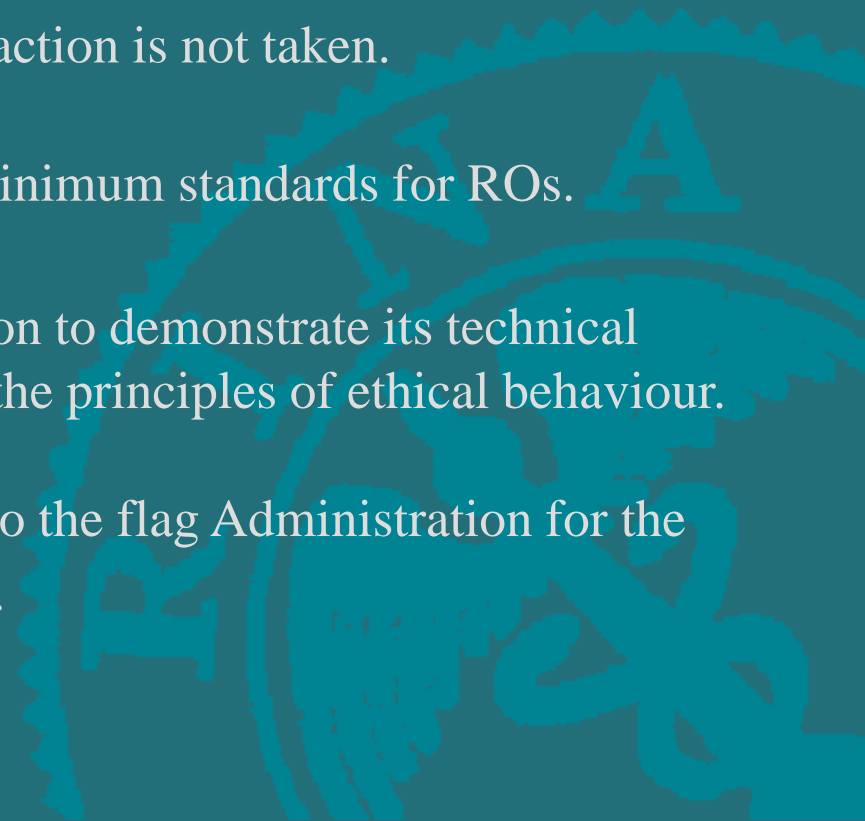
SOLAS and the other International Conventions permit the flag Administration to delegate the inspection and survey of ships to a Recognised Organization (RO).

The organization is empowered to require repairs or other corrective action to a ship and in most cases, to withdraw or invalidate the relevant certificate if the necessary action is not taken.

IMO Resolution A 739(18) lays down minimum standards for ROs.

Fundamentally it requires the organization to demonstrate its technical competence and to be governed by the principles of ethical behaviour.

The RO is responsible and accountable to the flag Administration for the work that it carries out on its behalf.



# Development of Rules & Regulations

## Historical development

Classification rules have been developed over many years by each society through extensive research and development and service experience.

In addition, certain Unified Requirements have been agreed by IACS members and transposed into the individual members' rules.

As mentioned above, 'statutory' requirements have been developed at IMO and where necessary, Unified interpretations of them are adopted by IACS.

# Development of Rules & Regulations

## Future development

There is always room for improvement in the way rules and regulations are developed and framed.

It is anticipated that the IMO will set the top-level goals and levels of risk regarding safety and environmental protection and the class societies enact rules to achieve these goals, within their sphere of activity.

Present class rules do, of course, have goals built in, but these are not always transparent.

The aim is to develop a new and transparent regulatory framework, initially focused on hull structures and representing a significant change to the current complex system of statutory international and national regulations, classification rules and industry standards.

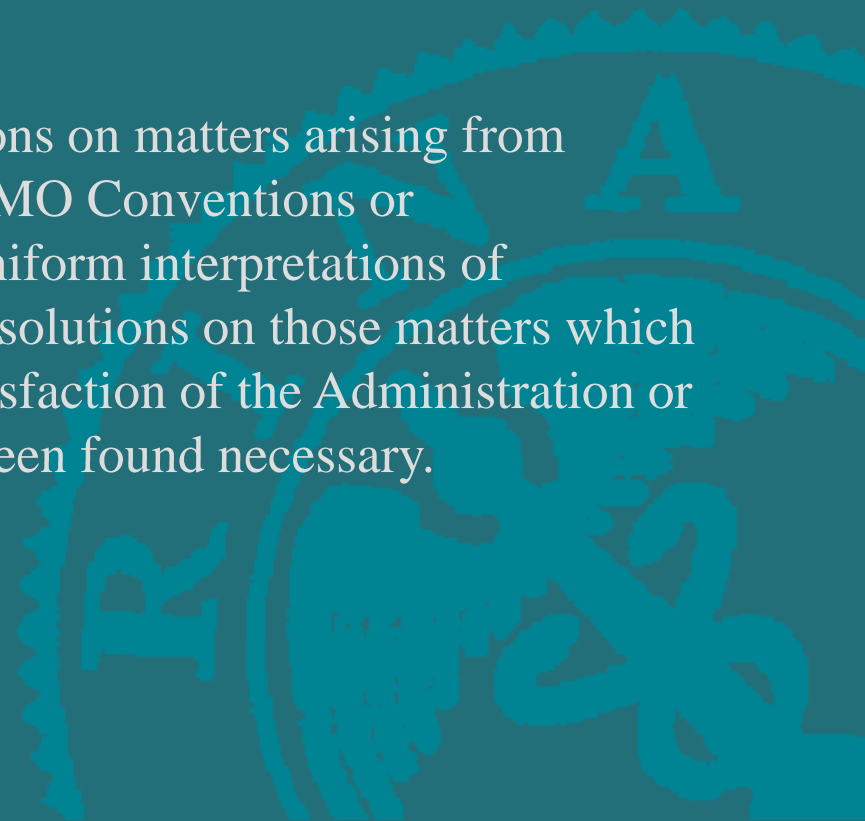
# Development of Rules & Regulations

## Unified Requirements

Unified Requirements (UR) are resolutions on matters directly connected to or covered by specific rule requirements and practices of classification societies and the general philosophy on which the rules and practices of classification societies are established.

## Unified Interpretations

Unified Interpretations (UI) are resolutions on matters arising from implementing the requirements of IMO Conventions or Recommendations. They provide uniform interpretations of Convention Regulations or IMO Resolutions on those matters which in the Convention are left to the satisfaction of the Administration or where more accurate wording has been found necessary.



Thank You For Your Attention

Any Questions?

