



Centre for Aerospace and Defence Laws

DDE-NALSAR
M.A.(Maritime Laws)

Response to Marine Pollution Casualties

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The Beginning

- The IMO Convention entered into force in 1958
- IMO --> Specialized Agency of UN
- The IMO is the source of approximately **sixty legal instruments** that **guide the regulatory development** of its Member States to improve:
 - > Safety at sea;
 - > Facilitate trade among seafaring states; and
 - > Protect the marine environment.

- Following its establishment, the IMO initially introduced a series of measures designed to prevent tanker accidents and to minimize their consequences.
- The Organization also tackled the environmental threat caused by routine operations, such as the cleaning of oil cargo tanks and the disposal of engine room wastes, which, in tonnage terms, is a bigger menace than accidental pollution.
- In 1954, the first international treaty that aimed to protect the sea from pollution by oil tankers, the International Convention for the Prevention of Pollution of the Sea by Oil, 1954 (OILPOL), was adopted, with the IMO taking over responsibility for it in 1959.

SS Torrey Canyon Oilspill

- Liberian-flagged Supertanker SS Torrey Canyon: Owned by American subsidiary of Union Oil Company, California
- 1967: ran aground off the coast of Cornwall, United Kingdom
- Oil Spill: **100,000 tonnes of crude oil** from Kuwait into the English Channel
 - Initial attempts to contain the oil using **containment booms failed** because the booms were too fragile
 - To minimize the spill, the British government decided to **bomb the wreck** to burn off the remaining oil

Impact on Environment and Human Life

- The oil spill **significantly impacted marine life**, particularly **seabirds**, during their migration period
- An estimated 25,000 birds died due to oil ingestion and exposure to harmful cleaning agents
- The spill **also affected the livelihoods of local people** and changed how people viewed the environment
- Approximately **10,000 tonnes of dispersants** were sprayed on the oil slick
- However, it was later discovered that **some dispersants were more toxic** than the oil itself
- It took **five to eight years for the shores to be cleaned naturally**, while areas affected by the **oil/dispersant mixture took nine to ten years**

Response Policy

- The Torrey Canyon disaster led to the first elements of French, British, and European oil spill prevention and **response policies**
- The British government organized a meeting of the **Intergovernmental Maritime Consultative Organization (IMCO)**, later the IMO, to address changes in international maritime laws
- The incident raised certain questions about:
 - A. The **measures then in place to prevent oil pollution** from ships; and
 - B. **Adequacies for providing compensation** to those affected, following accidents at sea.

For the next several years, initiatives were taken to find solutions to these questions, mainly through the IMO.

1969 Intervention Convention

- IMO introduced the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (1969 Intervention Convention), adopted on 29 November 1969 and in force since 6 May 1975.

Right of a coastal State: To take **such measures** on the high seas as may be necessary to prevent, mitigate or eliminate danger to its coastline or related interests from pollution by oil, or the threat thereof, following from a **maritime casualty**.

Limitation: The coastal State is, however, empowered to take **only such action** as is **necessary** and, **after due consultations** with appropriate interests, including, in particular, **the flag State** or **States of the ship** or ships involved, the **owners of the ships** or **cargoes in question** and, where circumstances permit, **independent experts** appointed for this purpose

Overreach: A coastal State which takes **measures beyond** those permitted under the Convention is **liable to pay compensation** for any damage caused by such measures

Settlement of Disputes: Convention provides for the settlement of disputes arising from the application of the Convention.

Dispute Resolution Process:

A **Conciliation Commission** is established upon request of one party to another. The request includes a statement of the case and supporting documents. The Commission consists of three members: one nominated by the coastal State, one by the State whose nationals or property have been affected, and a third presiding conciliator selected by both parties. The commission aids in clarifying the dispute and reconciling the parties, and it can make recommendations, but these are not binding.

Arbitration If conciliation fails, arbitration can be requested within 180 days of the failure. The Arbitration Tribunal consists of three members: one arbitrator nominated by the coastal State, one by the State whose nationals or property have been affected, and a third, who acts as chairman, nominated by agreement between the first two. The Tribunal's decision is final and without appeal

Type of Vessels under The Convention: Applies to all seagoing vessels, except warships or other vessels owned or operated by a State and used on Government non-commercial service.

The 1969 Intervention Convention **did not cover casualties involving other types of substances.**

The 1969 Brussels Conference **had recognized** the need to extend the Convention to cover substances other than oil.

1973 Protocol to the 1969 Intervention Convention

- The 1973 London Conference on Marine Pollution adopted the Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by **Substances other than Oil**.
 - This extended the regime of the 1969 Intervention Convention to substances which are either listed in the **Annex to the Protocol** or which have characteristics substantially similar to those substances.
 - The 1973 Protocol entered into force in 1983 and was subsequently amended to include substances

The 1973 Protocol extended the Convention to cover substances other than oil. "Substances other than oil" are:

- (a) those substances enumerated in a list established by an appropriate body designated by the IMO and which shall be annexed to the present Protocol; and
- (b) those other substances which are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.

The list mentioned in (a) has been updated on several occasions.

Action on (b) substance: If an intervening Party takes action with regard to a substance referred to in (b), that Party shall have the burden of establishing that the substance, under the circumstances present at the time of the intervention, could reasonably pose a grave and imminent danger analogous to that posed by any of the substances enumerated in the list referred to in (a).

MARPOL

- **The Torrey Canyon** was also a major driver for the establishment of the **International Convention for the Prevention of Pollution from Ships (MARPOL)**, the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes, which was adopted on 2 November **1973** at the IMO.
- In **1997**, a **Protocol** which entered into force on 19 May 2005, was adopted to amend the Convention and a **new Annex VI** addressing **air pollution from ships** was added.

MARPOL has been updated by amendments through the years. The Convention includes regulations aimed at preventing and minimizing pollution from ships—**both accidental pollution and that from routine operations**—and currently includes six technical Annexes.

Special Areas with strict controls on operational discharges are included in most Annexes.

MARPOL regulates the discharges at sea of harmful substances from ships and covers **pollution of the sea by oil (Annex I)**, by noxious liquid substances in bulk (**Annex II**), by harmful substances carried by sea in packaged form (**Annex III**), by sewage from ships (**Annex IV**), and by garbage from ships (**Annex V**). This much amended instrument remains the flagship pollution prevention treaty amongst the array of IMO instruments.

SOPEP

- **Regulation 37 of Annex I** of MARPOL with regards to **oil pollution prevention**, in particular, requires that **oil tankers of 150 tons gross tonnage** or more and all **ships of 400 tons gross tonnage** or more carry an approved **shipboard oil pollution plan** (SOPEP).
- The **International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990**, also requires such a plan for certain ships.
- **Regulation 17 of Annex II** of MARPOL makes similar stipulations for all ships of 150 tons gross tonnage and above carrying noxious liquid substances in bulk, which are required to carry on board an approved **marine pollution emergency plan** for noxious liquid substances.
- The **latter should be combined with a SOPEP**, since most of their contents are the same and the combined plan is more practical than two separate ones in case of an emergency.
- To make it clear that the plan is a combined one, it should be referred to as a **shipboard marine pollution emergency plan** (SMPEP).

Pollution from ships can be divided into **operational pollution** and into **accidental/incidental pollution**.

Operational pollution

Operational pollution at sea can be the result of **tanker operations**, usually associated with the **cleaning of oil cargo residues** (clingage).

Not only oil cargo residues can be discharged at sea but also residues from chemical tankers.

In the past, discharges of oil contaminated ballast water from oil tankers taking ballast water into the oil cargo spaces was a serious problem.

Nowadays, most oil tankers are equipped with **segregated or dedicated ballast tanks**. All ships (also fishing vessels) can be potential dischargers of oil residues and/or oil contaminated residues (bilge water). **Garbage and sewage from ships have traditionally been dumped or discharged into the sea** as a matter of course. Pollution by operational discharges is regulated by the IMO in the [International Convention for the Prevention of Pollution from Ships, 1973](#), as [modified](#) by the [Protocol of 1978, MARPOL73/78](#), and amended from time to time.

MARPOL 73/78 and amendments, cover technical aspects to prevent and reduce pollution from ships.

A **new and important feature of the 1973 Convention** was the concept of “special areas” that are considered so vulnerable to pollution by oil that oil discharges within them have been completely prohibited, with minor and well defined exceptions.

Under Annex I and Annex V, the North Sea is a special area.

In special areas more stringent discharge standards apply and ports bordering these areas have to supply sufficient reception facilities.

Accidental pollution

Oil pollution arising from accidents with oil tankers, through oil spills (Torrey Canyon, Amoco Cadiz, Exxon Valdez, Erika, Prestige, etc.) contribute a **comparatively small percentage of the total oil volume entering the sea** each year (depending of the number of accidents and the volume spilt), **but the consequences of an accident can be disastrous to the immediate sea area and coastline**, particularly if the accident occurs close to the coastline.

Although **prevention of tanker accidents** is mainly the task of the **flag state** (technical standards) and the **owner of the ship** (manning and maintenance of equipment), **ports and coastal states** have an important role to play in port state control and the issuing of **navigation safety measures** (the latter especially by applying the **Convention on International Regulations for Preventing Collisions at Sea (COLREG 1972)** and the **routing measures of the International Convention for the Safety of Life at Sea (SOLAS 1974/78)**

Although most public concern about marine pollution from ships has concentrated on problems associated with oil, many of the **chemicals carried by sea are far more dangerous** to the marine environment and mostly the consequences are not well known.

The amount of **hazardous or noxious substances** carried by sea is only a fraction of oil transported each year.

Many hazardous or noxious substances are carried in bulk form in tankers especially designed for this purpose. These tankers are generally smaller in size than oil tankers, ranging from 500 BT tot about 40,000 BT. They are however extremely complex.

Not only must the cargo be given maximum protection, the ship may also carry different substances at the same time with particular properties and requiring different handling.

Other chemicals are carried in packaged form, such as in drums, portable tanks or containers. The environmental threat which some of these substances represents, bears no relation to the size of the unit in which they are carried.

Ships carrying dangerous cargo are subject to [chapter VII of SOLAS](#), which [regulates safety measures, including their safe packaging and stowage](#), applicable to the carriage of dangerous goods by sea. This chapter is supplemented by several IMO codes:

1. International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), made mandatory under SOLAS in accordance with regulation VII/10 and under MARPOL 73/78;
2. International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) (regulation VII/13), made mandatory for Parties to SOLAS in accordance with regulation VII/13;
3. International Maritime Dangerous Goods Code (IMDG Code), mandatory under SOLAS and Annex III of MARPOL 73/78; and
4. Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes in Flasks on Board Ships (INF Code), applies, in addition to SOLAS and IMDG regulations, to all ships carrying certain high level radioactive material, mandatory under SOLAS Chapter VII.

Building standards for oil tankers: Double Hull

In **1992**, **MARPOL 73/78** was amended to make it **mandatory** for new oil tankers to have **double hulls** and obliged existing single-hull tankers to fit double hulls at the latest 30 years after delivery.

After the **ERIKA incident** in December 1999 when this tanker spilled about 14,000 tons of oil off the coast of Brittany in France, the European Union announced more stringent measures in regards to double hulls for ships entering European Union ports, finally resulting in **EC Regulation 417/2002 phasing out single hull tankers**.

Under European pressure within IMO, the 2001 amendment to Annex I (in force since 1 September 2002) was accepted. This amendment introduced a new global timetable for accelerating the phase-out of single-hull oil tankers setting **2015 as the principal cut-off date** for all single-hull tankers.

Reporting

Reporting obligations for ships are not restricted to cases of serious accidents, but are also mandatory in case of operational discharges in contravention with MARPOL 73/78 discharge limits.

In accordance with UNCLOS, when a state becomes aware of cases in which the marine environment is in danger of being damaged or has been damaged by pollution, it must give immediate notification to other states likely to be affected by such damage and to the competent international organizations.

Provisions regarding reporting of pollution or imminent threats of pollution from the ship to the nearest coastal radio station are contained in Protocol I to MARPOL.

Article 8, MARPOL 73/78 requires that:

1. A report of an incident shall be made **without delay** to the fullest extent possible in accordance with Protocol I;
2. Each party to the Convention shall make all arrangements necessary for an appropriate officer or agency to receive and process all reports on incidents;
3. Reports on incidents shall be relayed without delay to the administration of the ship involved and to any state which may be affected; and
4. Each party shall issue instructions to its maritime inspection vessels and aircrafts and to other appropriate services to report the incident to its authorities.

SOLAS 74/78 regulation V/8-1 enables states to adopt and implement mandatory ship reporting in accordance with guidelines and criteria developed by IMO. The regulation makes it mandatory for ships entering areas covered by ship reporting systems to report in to the coastal authorities giving details of sailing plans. Other information may also be required in the case of certain categories of ships and ships carrying certain cargoes.

OPRC

- Oil Pollution, Preparedness, Response and Co-operation (OPRC)
- The **1989 Exxon Valdez** incident that occurred in Alaska was an important driver for change. Within one year of its occurrence, Governments came together and the OPRC Convention was adopted in November 1990 and came into force in May 1995.
- This Convention provided an international framework for **cooperation and mutual assistance** in **preparing for and responding to major oil pollution incidents** and required **States to plan and prepare** by developing **national emergency response structures** in their **respective countries**, and by **maintaining adequate capacity and resources to address oil pollution emergencies**.

- Possibly the most important aspect of the OPRC Convention is the international cooperation dimension, which **enables a Party** to **request international assistance** from other State Parties.
- Through the provisions concerning regional arrangements, States are urged to **develop bilateral and multilateral agreements** for preparedness and response to increase national capacity in the event of major pollution incidents.

OPRC Main Requirements

The OPRC Convention encompasses **ten key elements** which are also found in other regional instruments:

–**Oil pollution emergency plans** (Article 3): Operators of offshore unit, authorities in charge of ports, and oil handling facilities under the jurisdiction of the Party to the Convention are required to have an oil pollution emergency plan. Such plans shall be coordinated with the national system. Ships are also required to have on board an oil pollution emergency plan in accordance with practices provided for in existing international Conventions (Regulation 37 of Annex I of MARPOL and Regulation 17 of Annex II of MARPOL requiring shipboard oil pollution plans (SOPEP)).

–**Oil pollution reporting procedures** (Article 4): Persons in charge of ships, offshore units, sea ports and oil handling facilities, maritime inspection vessels or aircraft, and pilots of civil aircraft are requested to report any discharge of probable discharge of oil or the presence of oil.

–**Action on receiving an oil pollution report** (Article 5): Upon receipt of the pollution report, immediate assessment is required. Information on the assessment and action taken shall be communicated to States whose interests are affected or likely to be affected. This information shall also be communicated directly to the IMO or through the relevant regional organization or arrangements, when the severity of such oil pollution incident so justifies.

–**National and regional systems for preparedness and response** (Article 6): Designation of competent authorities for oil spill preparedness and response, receipt and transmission of pollution report and for deciding to render assistance are minimum requirements of the Convention together with the establishment of a national contingency plan. In addition, this Article call for a minimum level of pre-positioned oil spill combating equipment, a programme of training and exercise, a communication plan, and a mechanism to coordinate response.

–**International Co-operation in pollution response** (Article 7): Subject to capabilities and availability of resources, Parties agree to cooperate and provide advisory services, technical support, and equipment upon the request of the affected country.

–**Research and development** (Article 8): The Convention calls for exchange of information on research and development relating to the enhancement of the state-of-the-art of oil pollution preparedness and response and encourages dialogue and the development of standards for compatible techniques and equipment.

- Technical cooperation** (Article 9): Parties are required to provide support on training personnel, transfer of technology, equipment and facilities, and joint research and development programmes.
- Promotion of bilateral and multilateral cooperation in preparedness and response** (Article 10): The Convention call for the establishment of bilateral and multilateral agreements for oil pollution preparedness and response.
- Institutional arrangements** (Article 12): the IMO is designated to perform functions and activities related to information services, education and training, technical services and technical assistance.
- Reimbursements of cost of assistance** (Annex): Guidance is provided on the reimbursement of costs of assistance in accordance with the provisions of the International Oil Pollution Compensation Funds Conventions.

OPRC/HNS 2000 Protocol

The Protocol on Preparedness, Response and Cooperation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC/HNS Protocol) follows the principles of OPRC

Like the OPRC Convention, the OPRC/HNS Protocol aims to provide a global framework for international cooperation in combating major incidents or threats of marine pollution.

Parties to the OPRC/HNS Protocol will be required to establish measures for dealing with HNS pollution incidents, either nationally or in cooperation with other countries.

Ships are required to carry a Shipboard Marine Pollution Emergency Plan (**SMPEP**) to deal specifically with incidents involving HNS.

HNS are defined by reference to lists of substances included in various IMO Conventions and Codes.

These include oils; other liquid substances defined as noxious or dangerous; liquefied gases; liquid substances with a flashpoint not exceeding 60°C; dangerous, hazardous and harmful materials and substances carried in packaged form; and solid bulk materials defined as possessing chemical hazards.

Regulations also require ships to establish on board disaster plans to deal with incidents involving oil or chemical spills from ships.

1969 CLC and 1971 Fund Convention

- *The Torrey Canyon* incident also provided a major stimulus to the establishment of a regime providing **compensation** to those who had **suffered financially** as a result of oil pollution.
- As a result, two treaties were adopted, in 1969 and 1971, which enabled victims of oil pollution to obtain compensation much **more simply and quickly** than had ever been possible before.
- The original Conventions were the [1969 International Convention on Civil Liability for Oil Pollution Damage](#) ('1969 CLC') and the [1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage](#) ('1971 Fund Convention').
- Both treaties were amended in 1992, and in October 2000, in the wake of the *Erika accident* off the coast of France, the **limits** of both the 1992 CLC and 1992 Fund Convention **were further increased**.
- Discussions on the establishment of a regime offering an even higher level of compensation continued after the *Erika incident*

2003 Supplementary Fund

- The need for such a fund was confirmed by the *Prestige incident* that occurred in Spain.
- As a result, a new Protocol creating the International Supplementary Fund for Compensation for Oil Pollution Damage ('Supplementary Fund'), was adopted in May 2003.
- This new '**third tier**' Fund, which was closely modelled on the 1992 Fund, was designed to address the concerns of those States that were of the view that the enhanced 1992 CLC and Fund limits were still insufficient to meet in full all valid claims arising from a major tanker accident.
- The Supplementary Fund substantially increased the limits of compensation available to Parties to roughly one billion US dollars.
- It has not been amended since.

HNS Convention

The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS Convention), which **extended the compensation** and liability framework to **chemical substances**, was adopted in May 1996.

The Convention aims to ensure adequate, prompt, and effective compensation for damage to persons and property, costs of clean-up and reinstatement measures and economic losses caused by the maritime transport of hazardous and noxious substances (HNS), **but has yet to enter into force**.

To overcome this challenge and some of the other issues thought to be acting as barriers to ratification of the HNS Convention, a **draft Protocol was adopted in 2010** to address the practical problems that were believed to have prevented States from ratifying the Convention.

In spite of the new measures introduced to facilitate and promote the ratification of the HNS Convention.

Criticisms against the HNS Convention 1996

1. Lack of Comprehensive List of Substances: HNS Convention **fails** to create a **specific list** of hazardous and noxious substances tailored to its objectives. Instead, it incorporates existing lists from other conventions, which may not accurately reflect what should be considered hazardous under this framework. This lack of clarity can hinder effective control over hazardous substances and complicate enforcement efforts.

The 2010 Protocol does not fully resolve the criticism regarding the lack of a comprehensive list of substances. While it aims to simplify reporting requirements and differentiate between bulk and packaged hazardous substances, it still excludes certain cargoes that have been added to the International Maritime Dangerous Goods (IMDG) Code since 1996. This means that some hazardous substances may not be covered under the protocol, which could leave gaps in liability coverage

2. Insufficient Enforcement Mechanisms: The Convention places the responsibility for enforcement on the flag state and the recycling state, which raises concerns about accountability. Critics note that this could lead to lax enforcement in states with weaker regulatory frameworks, potentially allowing sub-standard practices to persist without proper oversight

The Protocol establishes a two-tier compensation system where compensation is first sought from the shipowner and then from an HNS Fund if necessary. This structure enhances accountability; however, effective enforcement still relies heavily on national jurisdictions and their willingness to implement the Protocol effectively

3. Exemption from Liability for Terrorism: The absence of provisions addressing liability in cases of terrorism has been highlighted as a significant flaw. The insurance market's introduction of terrorism exclusions complicates the ability to provide Certificates of Responsibility (COFR), which are essential for compliance under the Convention. This gap raises concerns about the financial viability of claims related to pollution incidents caused by terrorist acts.

Protocol doesn't address it.

4. Economic Disincentives for Compliance: The Convention does not provide adequate incentives or support mechanisms for developing countries to upgrade their ship recycling facilities. Critics argue that without financial assistance or mandatory funding mechanisms, there is little motivation for these nations to comply with the Convention's standards, leading to continued reliance on unsafe practices.

Protocol doesn't address it.

5. Environmental and Worker Safety Concerns: There are significant worries regarding the environmental impact and worker safety associated with ship recycling practices allowed under the Convention. Critics point out that it does not prohibit harmful methods such as "beaching," which poses serious health risks to workers and environmental hazards. Additionally, the lack of robust standards for worker protection remains a critical issue, as many workers operate in unsafe conditions without adequate training or protective equipment.

Protocol doesn't address it.

Bunkers Convention, 2008

The liability and compensation regime was extended once more through the introduction of the International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunkers Convention), that for the first time, following its entry into force in 2008, provided compensation from spills of bunker fuel from vessels

This convention specifically addresses pollution damage caused by the escape or discharge of bunker oil, which is the fuel used to power ships. It applies to all seagoing vessels and covers any hydrocarbon used for propulsion, not limited to persistent oils.

The CLC focuses solely on oil pollution damage from oil tankers and is limited to persistent oil. It establishes liability for shipowners in cases of oil spills from their cargoes, not including bunker fuel.

This convention serves as a supplementary mechanism to the 1992 CLC, providing additional compensation when damages exceed the shipowner's liability under the CLC or when the shipowner is exempt from liability. It does not cover bunker oil spills directly but rather complements the CLC framework

Compensation Mechanism Difference: Allows direct claims against insurers for pollution damage, providing a streamlined process for victims seeking compensation.

Compensation under the CLC must first be sought from the shipowner, and if inadequate, victims can then turn to the Fund. The Fund compensates when damages exceed limits set by the CLC or when the shipowner cannot fulfill their obligations

UNCLOS

The United Nations Convention on the Law of the Sea (UNCLOS), which entered into force on 16 November 1994, provides the **umbrella or common framework** for the development of laws and policies for managing the world's oceans.

- This Convention expressly recognizes regional cooperation on marine environmental protection and management in cases of accidental marine pollution.

Article 198 requires that if a State becomes **aware of cases** in which the marine environment is in danger of being damaged or has been damaged by pollution, it must **immediately notify other States** likely to be affected by such damage and the **competent international organizations**.

Article 199 requires that affected States shall **cooperate with the competent international organizations**, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. States are further required to jointly develop and promote contingency plans for responding to marine pollution incidents. The **regional agreements** developed for combating accidental marine pollution use these principles.