# *IMO*
## *CONVENTIONS AND CODES*


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# *ΑΚΑΔΗΜΙΑ ΕΜΠΟΡΙΚΟΥ ΝΑΥΤΙΚΟΥ*
# *Α.Ε.Ν ΜΑΚΕΔΟΝΙΑΣ*

# ΠΤΥΧΙΑΚΗ ΕΡΓΑΣΙΑ

**ΕΠΙΒΛΕΠΩΝ ΚΑΘΗΓΗΤΗΣ: Παπαλεωνίδα Παρασκευή**

***ΘΕΜΑ***
***IMO***
***CONVENTIONS AND CODES***

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***Ο ΔΙΕΥΘΥΝΤΗΣ ΣΧΟΛΗΣ :***

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# PROLOGUE

In order for the safety of life, the environment, the ship and the cargo to be promoted at the merchant maritime field it was necessary that all countries should cooperate and work together to succeed in that. The outcome of this was the birth of an international body called the International Maritime Organization (IMO).

In this project we will go through everything around it, not only in general but in detail.

In the first chapter we will review everything that IMO is, does and how it works, and that alone can provide us with knowledge all around IMO in general.

In the second chapter we will read about its history in detail.

In the third chapter we will see who is a part of IMO and who its members consists of.

In the fourth chapter we will understand what its structure is and how its committees cooperate together to achieve their goals.

In the fifth chapter we will read in which way IMO develops and what their structure are.

In the sixth chapter we will learn about the main weapon of the IMO, which is its conventions, and how they are adopted and are entering into force, how the states accept them etc. and we will go through the four major IMO conventions in detail SOLAS, MARPOL, STCW and IAMSAR.

In the seventh chapter we will see other conventions and the regulations based on categories according to maritime issues, which are maritime safety, security and piracy, marine environment, legal matters, human element and facilitation. Here we can read the various issues that arise through the years and how the IMO managed to carry them out with different actions for each.

The eighth chapter is all about the technical cooperation that IMO provides to the world.

Finally, we can find the epilogue and the references that made this subject real.

I would like to thank my professor Ms. Papaleonida Paraskevi for assisting me to go through the whole process of creating this project.

# Chapter 1: INTRODUCTION.

## IMO - WHAT IT IS

*Because of the international nature of the shipping industry, it has long been recognized that action to improve safety in maritime operations is more effective if carried out at the international level rather than by individual countries acting unilaterally and without co-ordination.*

It was against this background that a conference held by the United Nations in 1948 adopted a convention establishing the International Maritime Organization (IMO)* as the first ever international body devoted exclusively to maritime matters.

In the 10-year period between the adoption of the convention and its entry into force in 1958, other problems related to safety but requiring slightly different emphasis had attracted international attention. One of the most important of these was the threat of marine pollution from ships, particularly pollution by oil carried in tankers. An international convention on this subject was adopted in 1954, and responsibility for administering and promoting it was assumed by IMO in January 1959. From the very beginning, the improvement of maritime safety and the prevention of marine pollution have been IMO's most important objectives. In the early 2000s, maritime security became another major focus for the Organization.

The overall objectives are summed up in the IMO slogan: *safe, secure and efficient shipping on clean oceans.*

The Organization is the only United Nations specialized agency to have its Headquarters in the United Kingdom. It currently (June 2013) has 170 Member States and three Associate Members. Its governing body, the Assembly, meets once every two years. Between sessions, the Council, consisting of 40 Member Governments elected by the Assembly, acts as IMO's governing body.

IMO is a technical organization and most of its work is carried out in a number of committees and sub-committees.

The Maritime Safety Committee (MSC) was one of the main organs, along with the Assembly and Council, established by the 1948 Convention on IMO. Today, the MSC deals with all matters relating to the safety of shipping, as well as addressing maritime security issues and piracy and armed robbery against ships.

The Marine Environment Protection Committee (MEPC) was established by the Assembly in November 1973. It is responsible for coordinating the Organization's activities in the prevention and control of pollution of the environment from ships.

The Legal Committee was originally established to deal with the legal problems arising from the Torrey Canyon accident of 1967, but it was subsequently made a permanent committee. It is responsible for considering any legal matters within the scope of the Organization.

The Technical Co-operation Committee is responsible for coordinating the work of the Organization in the provision of technical assistance in the maritime field, in particular to developing countries.

The Facilitation Committee is responsible for IMO's activities and functions relating to the facilitation of international maritime traffic. These are aimed at reducing the formalities and simplifying the documentation required of ships when entering or leaving ports or other terminals.

There are seven sub-committees: Sub-Committee on Human Element, Training and Watchkeeping (HTW); Sub-Committee on Implementation of IMO Instruments (III); Sub-Committee on Navigation, Communications and Search and Rescue (NCSR); Sub-Committee on Pollution Prevention and Response (PPR); Sub-Committee on Ship Design and Construction (SDC); Sub-Committee on Ship Systems and Equipment (SSE); and Sub-Committee on Carriage of Cargoes and Containers (CCC).

All the technical bodies of IMO, and the IMO Assembly, are open to participation by all Member Governments on an equal basis.

The IMO Secretariat is headed by the Secretary-General, who is assisted by a staff of some 300 international civil servants. The Secretary-General is appointed by the Council, with the approval of the Assembly.

## IMO - WHAT IT DOES

*IMO has promoted the adoption of some 50 conventions and protocols and adopted more than 1,000 codes and recommendations concerning maritime safety and security, the prevention of pollution and related matters.*

### SAFETY

The first conference organized by IMO in 1960 was, appropriately enough, concerned with maritime safety. That conference adopted the International Convention on Safety of Life at Sea (SOLAS), which came into force in 1965, replacing a version adopted in 1948. The 1960 SOLAS Convention covered a wide range of measures designed to improve the safety of shipping. They included subdivision and stability; machinery and electrical installations; fire protection, detection and extinction; life-saving

appliances; radiotelegraphy and radiotelephony; safety of navigation; carriage of grain; carriage of dangerous goods; and nuclear ships.

IMO adopted a new version of SOLAS in 1974. This incorporated amendments adopted to the 1960 Convention as well as other changes, including an improved amendment procedure under which amendments adopted by the MSC would enter into force on a predetermined date unless they were objected to by a specific number of States. The 1974 SOLAS Convention entered into force on 25 May 1980 and has since been modified on a number of occasions, to take account of technical advances and changes in the industry.

Other safety-related conventions adopted by IMO include the International Convention on Load Lines, 1966 (an update of a previous, 1930, convention); the International Convention on Tonnage Measurement of Ships, 1969; the Convention on International Regulations for Preventing Collisions at Sea, 1972 (COLREG) which made traffic separation schemes adopted by IMO mandatory and considerably reduced the number of collisions in many areas; and the International Convention on Maritime Search and Rescue, 1979.

In 1976 IMO adopted the Convention on the International Maritime Satellite Organization (INMARSAT) and its Operating Agreement. The Convention came into force in July 1979 and later resulted in the establishment of the International Mobile Satellite Organization (IMSO), which, like IMO, is based in London. (Inmarsat remains as a commercial company.)

Fishing is so different from other forms of maritime activity that hardly any of the conventions of IMO could be made directly applicable to fishing vessels. The 1977 Torremolinos International Convention for the Safety of Fishing Vessels was intended to remedy some of these problems, but technical difficulties meant that the Convention never entered into force. It was modified by a protocol in 1993. A Conference in South Africa in October 2012 adopted an agreement which will assist in bringing the treaty into force.

IMO has always attached the utmost importance to the training of ships' personnel. In 1978 the Organization convened a conference which adopted the first ever International Convention on Standards of Training, Certification and Watchkeeping for Seafarers. The STCW Convention entered into force in April 1984. It established, for the first time, internationally acceptable minimum standards for crews. It was revised in 1995, giving IMO the power to audit the administrative, training and certification procedures of Parties to the Convention. The amendments entered into force in 1997. Following a comprehensive review, substantive revisions to update the STCW Convention, and its related STCW Code, were adopted in 2010, at a Conference held in the Philippines (the so-called "Manila amendments").

MARITIME SECURITY

Maritime security issues first came to prominence on the IMO agenda following the hijacking of the Italian cruise ship **Achille Lauro**, in October 1985. IMO adopted a resolution on Measures to prevent unlawful acts which threaten the safety of ships and the security of their passengers and crews and in 1986, issued the Guidance on measures to prevent unlawful acts against passengers and crew on board ships.

In March 1988, the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (the SUA Convention) was adopted, with a protocol extending its requirements to unlawful acts against fixed platforms located on the Continental Shelf. Both were updated and revised in 2005.

In the light of terrorist atrocities around the world, several of which have been aimed at transport infrastructures, IMO adopted a comprehensive set of maritime security measures in 2002, which came into force in July 2004.

The most important and far reaching of these is the International Ship and Port Facility Security Code (ISPS Code). Among its requirements are that Governments should undertake risk assessments to establish the level of security threat in their ports and that both ships and ports should appoint dedicated security officers and have formal security plans drawn up and approved by their Governments.

IMO has adopted other maritime security instruments including recommendations on security measures for passenger ferries on international voyages shorter than 24 h, and on security measures for ports; guidelines on the allocation of responsibilities to seek the successful resolution of stowaway cases, and guidelines for the prevention and suppression of the smuggling of drugs, psychotropic substances and precursor chemicals on ships engaged in international maritime traffic.

Piracy and armed robbery against ships

The problem of increasing acts of piracy and armed robbery against ships was first raised at IMO in the early 1980s. In the late 1990s, IMO initiated an anti-piracy project, with the aim of fostering the development of regional agreements on implementation of counter-piracy measures. The Regional Co-operation Agreement on Combating Piracy and Armed Robbery against ships in Asia (RECAAP), which was concluded in November 2004 by 16 countries in Asia, and includes the RECAAP Information Sharing Centre (ISC) for facilitating the sharing of piracy-related information, is a good example of successful regional co-operation which IMO seeks to replicate elsewhere.

Today, high-risk areas for piracy include the seas off Somalia and in the Gulf of Aden. Off the west coast of Africa, including the Gulf of Guinea, is another area of concern.

Guidance to Governments and to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships was first issued in the 1990s and this guidance has been kept updated and revised.

More recently, guidance has been issued on piracy and armed robbery against ships in waters off the coast of Somalia. IMO has also developed and issued interim guidance to shipowners, ship operators and shipmasters on the use of privately-contracted armed security personnel on board ships in the High Risk Area; guidance for flag

States on measures to prevent and mitigate Somalia-based piracy; and interim guidance to private maritime security companies providing privately contracted armed security personnel on board ships in the High Risk Area.

In 2009, an important regional agreement was adopted in Djibouti by States in the region, at a high-level meeting convened by IMO. The Djibouti Code of Conduct concerning the repression of piracy and armed robbery against ships in the Western Indian Ocean and the Gulf of Aden recognizes the extent of the problem of piracy and armed robbery against ships in the region and, in it, the signatories declare their intention to co-operate to the fullest possible extent, and in a manner consistent with international law, in the repression of piracy and armed robbery against ships.

A dedicated Project Implementation Unit has developed a detailed implementation plan, funded primarily through the IMO Djibouti Code Trust Fund, in co-operation with the 20 signatory States to the Djibouti Code of Conduct. Signatories to the Djibouti Code of Conduct undertake to co-operate in a variety of activities, including:

- the investigation, arrest and prosecution of persons reasonably suspected of having committed acts of piracy and armed robbery against ships, including those inciting or intentionally facilitating such acts;

- the interdiction and seizure of suspect ships and property on board such ships;

- the rescue of ships, persons and property subject to piracy and armed robbery and the facilitation of proper care, treatment and repatriation of seafarers, fishermen, other shipboard personnel and passengers subject to such acts, particularly those who have been subjected to violence; and

- the conduct of shared operations - both among signatory States and with navies from countries outside the region - such as nominating law enforcement or other authorized officials to embark on patrol ships or aircraft of another signatory.

The Djibouti Code encourages the sharing of related information, and a regional network has been established, with three Information Sharing Centers based in Sana'a, Mombasa and Dar es Salaam.

Signatories to the Code also undertake to review their national legislation with a view to ensuring that there are laws in place to criminalize piracy and armed robbery against ships and to make adequate provision for the exercise of jurisdiction, conduct of investigations and prosecution of alleged offenders.

All signatories partake in a regular programme of regional training, co-ordinated through the Djibouti Regional Training Centre, established by IMO.

PREVENTING POLLUTION... PROVIDING COMPENSATION

Although the International Convention for the prevention of pollution of the sea by oil, 1954, (OILPOL) was amended in 1962, the wreck of the **Torrey Canyon** in 1967 resulted in a series of conventions and other instruments, including further amendments to the 1954 Convention, which were adopted in 1969.

The International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969, which established the right of coastal States to intervene in incidents on the high seas which are likely to result in oil pollution, entered into force in 1975.

The International Convention on Civil Liability for Oil Pollution Damage, 1969, and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, together established a regime to provide compensation to victims of oil pollution.

In 1971, the International Convention for the prevention of pollution of the sea by oil, 1954, (OILPOL) was amended again, but it was generally felt that a completely new instrument was required to control pollution of the seas from ships, and in 1973 IMO convened a major conference to discuss the whole problem of marine pollution from ships. It resulted in the adoption of the first ever comprehensive anti-pollution convention, the International Convention for the Prevention of Pollution from Ships (MARPOL).

In 1978, IMO convened the Conference on Tanker Safety and Pollution Prevention, which adopted a protocol to the 1973 MARPOL Convention introducing further measures, including requirements for certain operational techniques and a number of modified constructional requirements. The Protocol of 1978 relating to the 1973 MARPOL Convention in effect absorbs the parent Convention with modifications. This combined instrument is commonly referred to as MARPOL 73/78 and entered into force in October 1983. The Convention has been amended on several occasions since then.

The MARPOL Convention deals not only with pollution by oil, but also pollution from chemicals, other harmful substances, garbage, sewage and, under an Annex VI adopted in 1997, air pollution and emissions from ships. A revised Annex VI was adopted in 2008 and it entered into force in 2010, phasing in a progressive reduction in sulphur oxide (SOX) from ships and further reductions in nitrogen oxide (NOX) emissions from marine engines. Amendments adopted in 2011 set mandatory measures to reduce emissions of greenhouse gases (GHGs) from international shipping, with the Energy Efficiency Design Index (EEDI) made mandatory for new

ships, and the Ship Energy Efficiency Management Plan (SEEMP) made a requirement for all ships. These amendments entered into force on 1 January 2013.

IMO is also discussing market-based measures which, once adopted, would complement the global regulatory regime to limit and reduce greenhouse gas emissions from shipping operations and thus contribute to the deceleration of climate change.

In 1990, IMO adopted the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC). It is designed to improve the ability of nations to cope with a sudden emergency. It entered into force in May 1995. A related Protocol covering hazardous and noxious substances (OPRC-HNS Protocol) was adopted in 2000, it entered into force in 2007.

In 1996, IMO adopted the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention). The Convention establishes a two-tier system for providing compensation up to a total of around £250 million. It covers not only pollution aspects but other risks such as fire and explosion. A Protocol to update the 1996 Convention was adopted in 2010.

IMO carries out Secretariat functions in connection with the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention). It entered into force in 1975. The 1996 Protocol to the London Convention, which entered into force in 2006, will eventually supersede the 1972 Convention. The 1996 Protocol prohibits the dumping of wastes at sea, except for certain materials on an approved list.

IMO adopted the International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS) in 2001. It prohibits the use of harmful organotins in anti-fouling paints used on ships and will establish a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems. It entered into force in 2008.

The International Convention for the Control and Management of Ships' Ballast Water and Sediments was adopted in 2004, to prevent the potentially devastating effects of the spread of invasive harmful aquatic organisms carried by ships' ballast water.

In May 2009, IMO adopted the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships.

SUSTAINABLE MARITIME DEVELOPMENT

IMO attended the "Rio+20" United

Nations Conference on Sustainable Development in Rio de Janeiro, in June 2012, and explained how international shipping contributes significantly to the three pillars of sustainable development, the eradication of poverty and the widespread development of green growth. IMO also presented its vision of a framework for Sustainable Maritime Development, and its plans to develop Sustainable Development Goals for the maritime industry, focusing on eight pillars:

1. safety culture and environment stewardship;
2. energy efficiency;
3. new technology and innovation;
4. maritime education and training;
5. maritime security and anti-piracy actions;
6. maritime traffic management;
7. maritime infrastructure development; and
8. adoption and implementation of global standards by IMO.

Shipping is the most efficient and cost-effective method of international transportation for most goods; it provides a dependable, low cost means of transporting goods globally, facilitating commerce and helping to create prosperity among nations and peoples.

OTHER MATTERS

In 1965 IMO adopted the Convention on Facilitation of International Maritime Traffic. Its primary objectives are to prevent unnecessary delays in maritime traffic, to aid co-operation between Governments, and to secure the highest practicable degree of uniformity in formalities and procedures in connection with the arrival, stay and departure of ships at ports. The Convention came into force in 1967.

In 1971 IMO, in association with the International Atomic Energy Agency and the European Nuclear Agency of the Organization for Economic Co-operation and Development, convened a conference which adopted the Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material.

In 1974 IMO adopted the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, which established a regime of liability for damage suffered by passengers carried on seagoing vessels.

The general question of the liability of owners of ships was dealt with in a convention adopted in 1957. In 1976 IMO adopted a new Convention on Limitation of Liability for Maritime Claims (LLMC) which raised the limits, in some cases by 300%. Limits

are specified for two types of claim - those for loss of life or personal injury and property claims, such as damage to ships, property or harbor works.

For most of the last century, salvage at sea was based on a formula known as "no cure, no pay". While it was successful in most cases, the formula did not take pollution into account: a salvor who prevents massive pollution damage but does not save the ship and its cargo can expect no compensation. The 1989 International Convention on Salvage was adopted to remedy this defect. It entered into force in July 1996.

In 2007, IMO adopted the Nairobi International Convention on the Removal of Wrecks, 2007, which provides the legal basis for States to remove, or have removed, shipwrecks that may have the potential to affect adversely the safety of lives, goods and property at sea, as well as the marine environment.

IMO'S CODES AND RECOMMENDATIONS

In addition to conventions and other formal treaty instruments, IMO has adopted several hundred recommendations dealing with a wide range of subjects.

Some of these constitute codes, guidelines or recommended practices on important matters not considered suitable for regulation by formal treaty instruments. Although recommendations - whether in the form of codes or otherwise - are not usually binding on Governments, they provide guidance in framing national regulations and requirements. Some Codes have been made mandatory under the relevant provisions of SOLAS and/or MARPOL.

Many Governments do, in fact, apply the provisions of the recommendations by incorporating them, in whole or in part, into national legislation or regulations. In some cases, important codes have been made mandatory by including appropriate references in a convention.

In appropriate cases, the recommendations may incorporate further requirements which have been found to be useful or necessary in the light of experience gained in the application of the previous provisions. In other cases the recommendations clarify various questions which arise in connection with specific measures and thereby ensure their uniform interpretation and application in all countries.

Examples of the principal recommendations, codes, etc., adopted over the years are:

- International Maritime Dangerous Goods Code (IMDG Code) first adopted in 1965; made mandatory under SOLAS amendments adopted in 2002;

- Code of Safe Practice for Solid Bulk Cargoes (BC Code) (1965); the International Maritime Solid Bulk Cargoes Code (IMSBC Code)(2008) was made mandatory under SOLAS amendments adopted in 2008;

- International Code of Signals (all functions in respect of the Code were assumed by the Organization in 1965);
- Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)(1971);
- Code of Safe Practice for Ships Carrying Timber Deck Cargoes (1973);
- Code of Safety for Fishermen and Fishing Vessels (1974);
- Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (1975);
- Code of Safety for Dynamically Supported Craft (1977);
- Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code) (1979);
- Code on Noise Levels on Board Ships (1981);
- Code of Safety for Nuclear Merchant Ships (1981);
- Code of Safety for Special Purpose Ships (1983);
- International Gas Carrier Code (IGC Code) (1983; mandatory under SOLAS);
- International Bulk Chemicals Code (IBC Code) (1983; mandatory under SOLAS and MARPOL);
- Code of Safety for Diving Systems (1983);
- International Code for the Safe Carriage of Grain in Bulk (International Grain Code) (1991; mandatory under SOLAS);
- International Safety Management Code (ISM Code) (1993; mandatory under SOLAS);
- International Code of Safety for High-Speed Craft (HSC Code) (1994 and 2000; mandatory under SOLAS);
- International Life-Saving Appliance Code (LSA Code) (1996; mandatory under SOLAS);
- International Code for Application of Fire Test Procedures (FTP Code) (1996; mandatory under SOLAS);
- Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines (NOX Technical Code - 1997; mandatory under MARPOL).

Other important recommendations have dealt with such matters as traffic separation schemes (which separate ships moving in opposite directions by creating a central

prohibited area); the adoption of technical manuals such as the Standard Marine Communication Phrases (SMCP), the International Aeronautical and Maritime Search and Rescue Manual (jointly with the International Civil Aviation Organization) and the Manual on Oil Pollution; crew training; performance standards for ship borne equipment; and many other matters. There are also guidelines to help the implementation of particular conventions and instruments.

TECHNICAL ASSISTANCE

The purpose of IMO's technical assistance programme is to assist developing countries, to ratify IMO conventions and to reach the standards contained in international maritime conventions such as SOLAS and MARPOL. As part of this programme, a number of advisers and consultants are employed by IMO to advise Governments, and each year the Organization arranges or participates in numerous seminars, workshops and other events which are designed to assist in the implementation of IMO measures. Some activities are held at IMO Headquarters, many others in the developing countries themselves.

In 1977, recognizing how important it was to implement the instruments it adopted, the Organization took steps to institutionalize its Technical Co-operation Committee - the first United Nations agency to do so.

IMO has established a modest presence in selected developing regions, thereby facilitating IMO's input into national and regional development policies and providing active field-level participation in the development, execution and co-ordination of the delivery of IMO's Integrated Technical Co-operation Programme (ITCP). IMO currently has one regional maritime adviser for the Caribbean, based in Port of Spain, Trinidad and Tobago, and four regional coordinators based in: Abidjan, Cote d'Ivoire for West and Central Africa (Francophone), Accra, Ghana for West and Central Africa (Anglophone), Nairobi, Kenya for Eastern and Southern Africa and Manila, Philippines for East Asia.

A key element of the technical assistance programme is training. IMO measures can only be implemented effectively if those responsible are fully trained, and IMO has helped to develop or improve maritime training academies in many countries around the world. Some of them cater purely for national needs. Others have been developed to deal with the requirements of a region - a very useful approach where the demand for trained personnel in individual countries is not sufficient to justify the considerable financial outlay needed to establish such institutions. IMO has also developed a series of model courses for use in training academies.

While IMO supplies the expertise for these projects, the finance comes from various sources, including multi-donor trust funds and financial arrangements held by IMO as well as from donor organizations and through partnership agreements with various countries. Individual countries also provide generous in-kind support - for example, by providing hostship facilities for workshops and by providing training opportunities

for cadets and other personnel from developing countries. This has enabled IMO to build up a successful fellowship programme which, over the years, has helped to train thousands of people.

The most ambitious of all IMO's technical assistance projects is the World Maritime University in Malmo, Sweden, which opened in 1983. Its objective is to provide high-level training facilities for people from developing countries who have already reached a relatively high standard in their own countries but who would benefit from further intensive training. The University has capacity to train about 200 students at a time, on one-or two-year courses.

IMO has also established the International Maritime Law Institute, in Malta, to help ensure that sufficient maritime law experts, with appropriate knowledge and skills, are available to assist in the implementation and enforcement of international maritime law and, more particularly, the vast body of rules and regulations developed under the aegis of IMO -especially within developing countries.

Since 2006, a linkage between the ITCP and the United Nations Millennium Development Goals (MDGs) has been established to ensure that those ITCP activities that contribute to the MDGs be given high priority, taking into account the special needs of LDCs and SIDS and the particular transport needs of Africa.

The issue of sustainable development is also coming into focus with support for new initiatives to promote sustainable maritime development.

THE IMO MEMBER STATE AUDIT SCHEME

IMO is progressing towards the adoption of a mandatory audit scheme, following the successful introduction of the Voluntary IMO Member State Audit Scheme, which was adopted in 2005. The Audit Scheme is intended to provide Member States with a comprehensive and objective assessment of how effectively they administer and implement those mandatory IMO instruments which are covered by the scheme.

The Audit Scheme is expected to bring about many benefits, such as identifying where capacity-building activities (for example, the provision of technical assistance by IMO to Member States) will have the greatest effect. The Member States themselves receive valuable feedback, intended to assist them in improving their own capacity to put the applicable instruments into practice; and generic lessons learnt from audits are provided to all Member States so that the benefits can be widely shared. The first audits under the voluntary Scheme were conducted in 2006.

To make the Scheme mandatory, it is expected that the IMO Assembly in 2013 will adopt the IMO Instruments Implementation Code (III Code), which sets the audit standard and is intended to be used to determine the extent to which Contracting Governments give full and complete effect to the provisions of key IMO international treaties. The relevant treaty instruments will then be amended to make the III Code mandatory under those instruments, to include the International Convention for the

Safety of Life at Sea, 1974, (SOLAS), as amended; the International Convention for the Prevention of Pollution from Ships (MARPOL); the International Convention on Load Lines, 1966 (LL 1966) and its 1988 Protocol; the International Convention on Tonnage Measurement of Ships, 1969 (TONNAGE 1969); the Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG 1972); and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW, 1978).

## IMO - HOW IT WORKS

*IMO works through a number of specialist committees and sub-committees. Each of these bodies is composed of representatives of Member States.*

Formal arrangements for co-operation have been established with more than 60 inter-governmental organizations, while more than 70 non-governmental international organizations have been granted consultative status to participate in the work of various bodies in an observer capacity. These organizations represent a wide spectrum of maritime, legal and environmental interests and they contribute to the work of the various organs and committees through the provision of information, documentation and expert advice. However, none of these organizations has a vote.

The initial work on a convention is normally done by a committee or sub-committee; a draft instrument is produced, which is submitted to a conference to which delegations from all States within the United Nations system - including States which may not be IMO Members - are invited. The conference adopts a final text, which is submitted to Governments for ratification.

An instrument so adopted comes into force after fulfilling certain requirements, which always include ratification by a specified number of countries. Generally speaking, the more important the convention, the more stringent the requirements for entry into force. Implementation of the requirements of a convention is mandatory in countries which are parties to it. Some codes are made mandatory under one or more of the international conventions, while other codes and recommendations which are adopted by the IMO Assembly are not binding on Governments; however, their contents can be just as important, and in many cases they are implemented by Governments through incorporation into domestic legislation.

## MEMBER STATES OF IMO (AS AT SEPTEMBER 2012)

Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bolivia (Plurinational State of), Bosnia and Herzegovina, Brazil, Brunei Darussalam, Bulgaria, Cambodia, Cameroon, Canada, Cape Verde, Chile, China, Colombia, Comoros, Congo, Cook Islands, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the

Congo, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Latvia, Lebanon, Liberia, Libya, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia (Republic of), Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Sweden, Switzerland, Syrian Arab Republic, Thailand, the former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Vanuatu, Venezuela (Bolivarian Republic of), Viet Nam, Yemen, Zimbabwe.

## ASSOCIATE MEMBERS

Faroes; Hong Kong, China; Macao, China.

# Chapter 2: HISTORY.

It has always been recognized that the best way of improving safety at sea is by developing international regulations that are followed by all shipping nations and from the mid-19th century onwards a number of such treaties were adopted. Several countries proposed that a permanent international body should be established to promote maritime safety more effectively, but it was not until the establishment of the United Nations itself that these hopes were realized. In **1948** an international conference in **Geneva** adopted a convention formally establishing IMO (the original name was the Inter-Governmental Maritime Consultative Organization, or IMCO, but the name was changed in 1982 to IMO).

The IMO Convention entered into force in **1958** and the new Organization met for the first time the following year.

The purposes of the Organization, as summarized by Article 1(a) of the Convention, are "*to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships*". The Organization is also empowered to deal with administrative and legal matters related to these purposes.

IMO's first task was to adopt a new version of the **International Convention for the Safety of Life at Sea (SOLAS)**, the most important of all treaties dealing with maritime safety. This was achieved in 1960 and IMO then turned its attention to such matters as the facilitation of international maritime traffic, load lines and the carriage of dangerous goods, while the system of measuring the tonnage of ships was revised.

But although safety was and remains IMO's most important responsibility, a new problem began to emerge - pollution. The growth in the amount of oil being transported by sea and in the size of oil tankers was of particular concern and the **Torrey Canyon** disaster of **1967**, in which 120,000 tonnes of oil was spilled, demonstrated the scale of the problem.

During the next few years IMO introduced a series of measures designed to prevent tanker accidents and to minimize their consequences. It also tackled the environmental threat caused by routine operations such as the cleaning of oil cargo tanks and the disposal of engine room wastes - in tonnage terms a bigger menace than accidental pollution.

The most important of all these measures was the **International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)**. It covers not only accidental and operational oil pollution but also pollution by chemicals, goods in packaged form, sewage, garbage and air pollution.

IMO was also given the task of establishing a system for providing compensation to those who had suffered financially as a result of pollution. Two treaties were adopted, in 1969 and 1971, which enabled victims of oil pollution to obtain compensation much more simply and quickly than had been possible before. Both treaties were amended in 1992, and again in 2000, to increase the limits of compensation payable to victims of pollution. A number of other legal conventions have been developed since, most of which concern liability and compensation issues.

Also in the 1970s a global search and rescue system was initiated, with the establishment of the International Mobile Satellite Organization (IMSO), which has greatly improved the provision of radio and other messages to ships.

**The Global Maritime Distress and Safety System (GMDSS)** was adopted in **1988** and began to be phased in from 1992. In February 1999, the GMDSS became fully operational, so that now a ship that is in distress anywhere in the world can be virtually guaranteed assistance, even if the ship's crew do not have time to radio for help, as the message will be transmitted automatically.

Two initiatives in the 1990s are especially important insofar as they relate to the human element in shipping. On 1 July **1998** the **International Safety Management Code** entered into force and became applicable to passenger ships, oil and chemical tankers, bulk carriers, gas carriers and cargo high speed craft of 500 gross tonnage and

above. It became applicable to other cargo ships and mobile offshore drilling units of 500 gross tonnage and above from 1 July 2002.

On 1 February 1997, the 1995 amendments to the **International Convention on Standards of Training, Certification and Watchkeeping** for Seafarers, **1978** entered into force. They greatly improve seafarer standards and, for the first time, give IMO itself powers to check Government actions with Parties required to submit information to IMO regarding their compliance with the Convention. A major revision of the STCW Convention and Code was completed in 2010 with the adoption of the "Manila amendments to the STCW Convention and Code".

New conventions relating to the marine environment were adopted in the 2000s, including one on anti-fouling systems (**AFS 2001**), another on ballast water management to prevent the invasion of alien species (**BWM 2004**) and another on ship recycling (**Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009**).

The 2000s also saw a focus on maritime security, with the entry into force in July 2004 of a new, comprehensive security regime for international shipping, including the **International Ship and Port Facility Security** (**ISPS**) Code, made mandatory under amendments to SOLAS adopted in **2002**.

In 2005, IMO adopted amendments to the **Convention for the Suppression of Unlawful Acts (SUA) Against the Safety of Maritime Navigation**, **1988** and its related Protocol (the 2005 SUA Protocols), which amongst other things, introduce the right of a State Party desires to board a ship flying the flag of another State Party when the requesting Party has reasonable grounds to suspect that the ship or a person on board the ship is, has been, or is about to be involved in, the commission of an offence under the Convention.

As IMO instruments have entered into force and been implemented, developments in technology and/or lessons learned from accidents have led to changes and amendments being adopted.

The focus on implementation continues, with the technical co-operation programme a key strand of IMO's work.

Key issues on the IMO agenda in the 2010s include:

- responding to the scourge of modern-day piracy, in particular in the waters off Somalia and in the Gulf of Aden

- addressing the reduction of greenhouse gas emissions from ships and thereby ensuring IMO's contribution to the climate change issue

- keeping the safety of life at sea and the human element, especially the seafarer, at the heart of IMO's work.

IMO's mission statement, as stated in Resolution A.1011(26), which sets out the Strategic plan for the Organization (for the six year period 2010 to 2015:

"*The mission of the International Maritime Organization (IMO) as a United Nations specialized agency is to promote safe, secure, environmentally sound, efficient and sustainable shipping through cooperation. This will be accomplished by adopting the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships, as well as through consideration of the related legal matters and effective implementation of IMO's instruments with a view to their universal and uniform application*."

# Chapter 3: MEMBERSHIP.

## Member States

IMO currently has 170 Member States and three Associate Members.

## Non-Governmental Organizations (NGOs)

Non-governmental international organizations that have the capability to make a substantial contribution to the work of IMO may be granted consultative status by the Council with the approval of the Assembly.

Any organization seeking consultative status with IMO has to demonstrate considerable expertise as well as the capacity to contribute, within its field of competence, to the work of IMO. It must also show that it has no means of access to the work of IMO through other organizations already in consultative status and that it is "truly international" in its membership, namely that it has a range of members covering a broad geographical scope and, usually, more than one region.

The application procedure is initiated by sending, by post or e-mail, a formal letter addressed by the Executive Head of the NGO (or the person in charge) to the Secretary-General of IMO, informing him of the wish of the NGO to obtain consultative status with IMO.

The IMO Council considers applications for consultative status by non-governmental international organizations once a year, at its first session, which is usually held in June. Applications, including the letter, the questionnaire and any additional relevant documentation must have reached the IMO Secretariat by 31 March in order to be

submitted to the Council session held in June that year; applications received after that date will be considered the following year.

You may consult the Rules and Guidelines for consultative status of non-governmental organizations with the International Maritime Organization.

To date there are 77 international non-governmental organizations in consultative status with IMO.

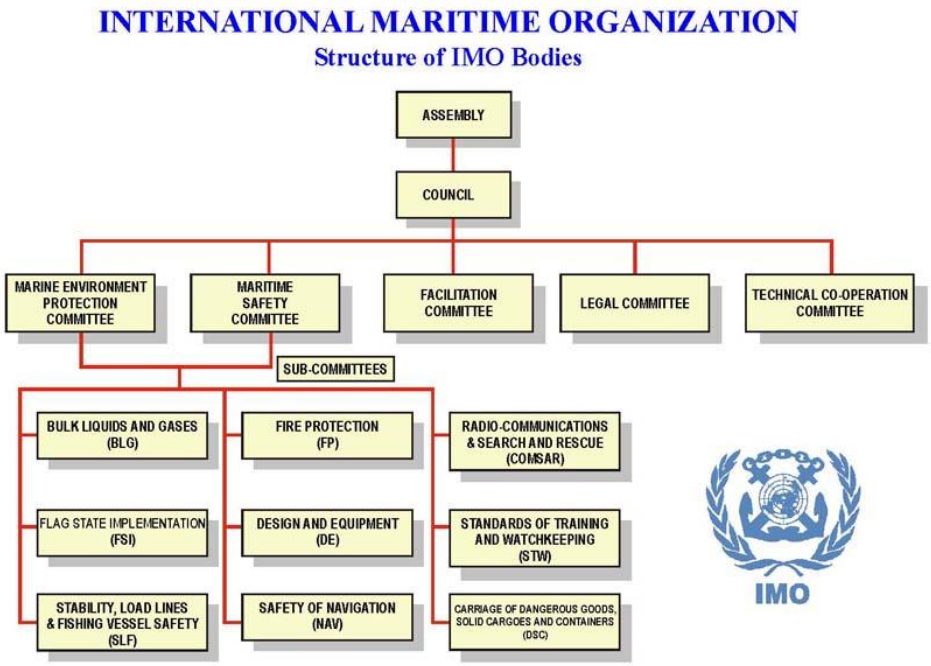
## Intergovernmental organizations (IGOs)

IMO may enter into agreements of co-operation with other intergovernmental organizations on matters of common interest with a view to ensuring maximum co-ordination in respect of such matters.

To date there are 63 intergovernmental organizations which have signed agreements of co-operation with IMO.

# Chapter 4: STRUCTURE

## IMO Organization Structure




The Organization consists of an Assembly, a Council and five main Committees: the Maritime Safety Committee; the Marine Environment Protection Committee; the Legal Committee; the Technical Co-operation Committee and the Facilitation Committee and a number of Sub-Committees support the work of the main technical committees.

### Assembly

This is the highest Governing Body of the Organization. It consists of all Member States and it meets **once every two years** in regular sessions, but may also meet in an extraordinary session if necessary. The Assembly is responsible for approving the work programme, voting the budget and determining the financial arrangements of the Organization. The Assembly also elects the Council.

### Council

The Council is elected by the Assembly for two-year terms beginning after each regular session of the Assembly.

The Council is the Executive Organ of IMO and is responsible, under the Assembly, for supervising the work of the Organization. Between sessions of the Assembly the Council performs all the functions of the Assembly, except the function of making recommendations to Governments on maritime safety and pollution prevention which is reserved for the Assembly by Article 15(j) of the Convention.

Other functions of the Council are to:

(a) co-ordinate the activities of the organs of the Organization;

(b) consider the draft work programme and budget estimates of the Organization and submit them to the Assembly;

(c) receive reports and proposals of the Committees and other organs and submit them to the Assembly and Member States, with comments and recommendations as appropriate;

(d) appoint the Secretary-General, subject to the approval of the Assembly;

(e) enter into agreements or arrangements concerning the relationship of the Organization with other organizations, subject to approval by the Assembly.

Council members for the 2012-2013 biennium

Category (a): 10 States with the largest interest in providing international shipping services:

China, Greece, Italy, Japan, Norway, Panama, Republic of Korea, Russian Federation, United Kingdom, United States.

Category (b): 10 other States with the largest interest in international seaborne trade:

Argentina, Bangladesh, Brazil, Canada, France, Germany, India, Netherlands, Spain, Sweden.

Category (c): 20 States not elected under (a) or (b) above which have special interests in maritime transport or navigation, and whose election to the Council will ensure the representation of all major geographic areas of the world:

Australia, Bahamas, Belgium, Chile, Cyprus, Denmark, Egypt, Indonesia, Jamaica, Kenya, Liberia, Malaysia, Malta, Mexico, Morocco, Philippines, Singapore, South Africa, Thailand, Turkey.

## Maritime Safety Committee (MSC)

The MSC is the highest technical body of the Organization. It consists of all Member States. The functions of the Maritime Safety Committee are to *"consider any matter within the scope of the Organization concerned with aids to navigation, construction*

*and equipment of vessels, manning from a safety standpoint, rules for the prevention of collisions, handling of dangerous cargoes, maritime safety procedures and requirements, hydrographic information, log-books and navigational records, marine casualty investigations, salvage and rescue and any other matters directly affecting maritime safety"*.

The Committee is also required to provide machinery for performing any duties assigned to it by the IMO Convention or any duty within its cope of work which may be assigned to it by or under any international instrument and accepted by the Organization. It also has the responsibility for considering and submitting recommendations and guidelines on safety for possible adoption by the Assembly.

The expanded MSC adopts amendments to conventions such as SOLAS and includes all Member States as well as those countries which are Party to conventions such as SOLAS even if they are not IMO Member States.

## The Marine Environment Protection Committee (MEPC)

The MEPC, which consists of all Member States, is empowered to *consider any matter within the scope of the Organization concerned with prevention and control of pollution from ships*. In particular it is concerned with the adoption and amendment of conventions and other regulations and measures to ensure their enforcement.

The MEPC was first established as a subsidiary body of the Assembly and raised to full constitutional status in **1985**.

## Sub-Committees

The MSC and MEPC are assisted in their work by a number of sub-committees which are also open to all Member States:

Sub-Committee on Human Element, Training and Watchkeeping (HTW);

Sub-Committee on Implementation of IMO Instruments (III);

Sub-Committee on Navigation, Communications and Search and Rescue (NCSR);

Sub-Committee on Pollution Prevention and Response (PPR);

Sub-Committee on Ship Design and Construction (SDC);

Sub-Committee on Ship Systems and Equipment (SSE); and

Sub-Committee on Carriage of Cargoes and Containers (CCC).

(Until 2013 there were nine Sub-Committees as follows:

Bulk Liquids and Gases (BLG)

Carriage of Dangerous Goods, Solid Cargoes and Containers(DSC)

Fire Protection (FP)

Radio-communications and Search and Rescue (COMSAR)

Safety of Navigation (NAV)

Ship Design and Equipment (DE)

Stability and Load Lines and Fishing Vessels Safety (SLF)

Standards of Training and Watchkeeping (STW)

Flag State Implementation (FSI) )

## Legal Committee

The Legal Committee is empowered to deal with any legal matters within the scope of the Organization. The Committee consists of all Member States of IMO. It was established in **1967** as a subsidiary body to deal with legal questions which arose in the aftermath of the Torrey Canyon disaster.

The Legal Committee is also empowered to perform any duties within its scope which may be assigned by or under any other international instrument and accepted by the Organization.

## Technical Co-operation Committee

The Technical Co-operation Committee is required to consider any matter within the scope of the Organization concerned with the implementation of technical co-operation projects for which the Organization acts as the executing or co-operating agency and any other matters related to the Organization's activities in the technical co-operation field.

The Technical Co-operation Committee consists of all Member States of IMO, was established in **1969** as a subsidiary body of the Council, and was institutionalized by means of an amendment to the IMO Convention which entered into force in 1984.

## Facilitation Committee

The Facilitation Committee was established as a subsidiary body of the Council in May **1972**, and became fully institutionalized in December 2008 as a result of an amendment to the IMO Convention. It consists of all the Member States of the

Organization and deals with IMO's work in eliminating unnecessary formalities and "red tape" in international shipping by implementing all aspects of the Convention on Facilitation of International Maritime Traffic 1965 and any matter within the scope of the Organization concerned with the facilitation of international maritime traffic. In particular in recent years the Committee's work, in accordance with the wishes of the Assembly, has been to ensure that the right balance is struck between maritime security and the facilitation of international maritime trade.

## Secretariat

The Secretariat of IMO consists of the Secretary-General and some 300 international personnel based at the headquarters of the Organization in London.

The Secretary-General of the Organization is Mr. Koji Sekimizu of Japan who was appointed to the position with effect from 1 January 2012.

The holders of the office have been:

Ove Nielsen (Denmark) 1959-1961

William Graham (United Kingdom, Acting) 1961-1963

Jean Roullier (France) 1964-1967

Colin Goad (United Kingdom) 1968-1973

Chandrika Prasad Srivastava (India) 1974-1989

William A. O'Neil (Canada) 1990-2003

Efthimios E. Mitropoulos (Greece) 2004-2011

Koji Sekimizu (Japan) 2012-

## Regional Presence

IMO has now five regional coordinators/advisors for technical co-operation activities, in Côte d'Ivoire, Ghana, Kenya, Philippines and Trinidad and Tobago.

## Budget 2014-2015

The IMO Assembly in November 2013 adopted the Organization's budget for the next biennium, approving a budget of £64,304,000 for 2014 to 2015, comprising an appropriation of £31,686,000 for 2014 and £32,618,000 for 2015.

Contributions to the IMO budget are based on a formula which is different from that used in other United Nations agencies: the amount paid by each Member State depends primarily on the tonnage of its merchant fleet.

The top ten contributors for 2012 were assessed as follows (the figures show the amount payable in £s ):

| | |
|---|---|
| Panama | 5.40 million |
| Liberia | 2.94 million |
| Marshall Islands | 1.78 million |
| United Kingdom | 1.36 million |
| Bahamas | 1.32 million |
| Singapore | 1.29 million |
| Malta | 1.09 million |
| Greece | 1.08 million |
| China | 1.04 million |
| Japan | 0.96 million |

# Chapter 5: STRATEGIC AND HIGH-LEVEL ACTION PLANS AND PROCEDURES.


The IMO Assembly, which meets once every two years, adopts the **Strategic Plan (covering a six-year period)** and **High-level Action Plan (covering the next biennium)** for the Organization.

The **Strategic Plan** contains key strategic directions enabling IMO to achieve its mission objectives.

The **High-level Action Plan** has been developed to enable the Organization to effectively address those strategic directions by identifying high-level actions that are necessary for the achievement of IMO's objectives and the priorities over a biennium resulting from those identified actions, thereby providing the linkage between the Organization's strategy, the work of the various IMO organs and the biennial budget,

The Guidelines on the application of the Strategic Plan and the High level Action Plan (Resolution A.1062(28), were adopted in order to ensure uniform implementation of the Strategic and High-level Action Plans of the Organization by all its organs.

The Introduction to the Guidelines on the application of the Strategic Plan and the High level Action Plan highlights the key elements of the GAP with a view to facilitating the application of the Guidelines.

The introduction to the Guidelines on the Organization and Method of Work of the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) and their subsidiary bodies highlights the key elements of these Guidelines (MSC-MEPC.1/Circ.4/Rev.2).

# Chapter 6: CONVENTIONS.


## Introduction

The industrial revolution of the eighteenth and nineteenth centuries and the upsurge in international commerce which followed resulted in the adoption of a number of international treaties related to shipping, including safety. The subjects covered included tonnage measurement, the prevention of collisions, signaling and others.

By the end of the nineteenth century suggestions had even been made for the creation of a permanent international maritime body to deal with these and future measures. The plan was not put into effect, but international co-operation continued in the twentieth century, with the adoption of still more internationally-developed treaties.

By the time **IMO** came into existence in **1958**, several important international conventions had already been developed, including the **International Convention for the Safety of Life at Sea** of **1948**, the **International Convention for the Prevention of Pollution of the Sea by Oil** of **1954** and treaties dealing with **load lines** and the **prevention of collisions at sea**.

IMO was made responsible for ensuring that the majority of these conventions were kept up to date. It was also given the task of developing new conventions as and when the need arose.

The creation of IMO coincided with a period of tremendous change in world shipping and the Organization was kept busy from the start developing new conventions and ensuring that existing instruments kept pace with changes in shipping technology. It is now responsible for nearly 50 international conventions and agreements and has adopted numerous protocols and amendments.

## Adopting a convention

This is the part of the process with which IMO as an Organization is most closely involved. IMO has six main bodies concerned with the adoption or implementation of conventions. The Assembly and Council are the main organs, and the committees involved are the Maritime Safety Committee, Marine Environment Protection Committee, Legal Committee and the Facilitation Committee. Developments in shipping and other related industries are discussed by Member States in these bodies,

and the need for a new convention or amendments to existing conventions can be raised in any of them.

Normally the suggestion is first made in one of the committees, since these meet more frequently than the main organs. If agreement is reached in the committee, the proposal goes to the Council and, as necessary, to the Assembly.

If the Assembly or the Council, as the case may be, gives the authorization to proceed with the work, the committee concerned considers the matter in greater detail and ultimately draws up a draft instrument. In some cases the subject may be referred to a specialized sub-committee for detailed consideration.

Work in the committees and sub-committees is undertaken by the representatives of Member States of the Organization. The views and advice of intergovernmental and international non-governmental organizations which have a working relationship with IMO are also welcomed in these bodies. Many of these organizations have direct experience in the various matters under consideration, and are therefore able to assist the work of IMO in practical ways.

The draft convention which is agreed upon is reported to the Council and Assembly with a recommendation that a conference be convened to consider the draft for formal adoption.

Invitations to attend such a conference are sent to all Member States of IMO and also to all States which are members of the United Nations or any of its specialized agencies. These conferences are therefore truly global conferences open to all Governments who would normally participate in a United Nations conference. All Governments participate on an equal footing. In addition, organizations of the United Nations system and organizations in official relationship with IMO are invited to send observers to the conference to give the benefit of their expert advice to the representatives of Governments.

Before the conference opens, the draft convention is circulated to the invited Governments and organizations for their comments. The draft convention, together with the comments thereon from Governments and interested organizations is then closely examined by the conference and necessary changes are made in order to produce a draft acceptable to all or the majority of the Governments present. The convention thus agreed upon is then adopted by the conference and deposited with the Secretary-General who sends copies to Governments. The convention is opened for signature by States, usually for a period of 12 months. Signatories may ratify or accept the convention while non-signatories may accede.

The drafting and adoption of a convention in IMO can take several years to complete although in some cases, where a quick response is required to deal with an emergency situation, Governments have been willing to accelerate this process considerably.

## Entry into force

The adoption of a convention marks the conclusion of only the first stage of a long process. Before the convention comes into force - that is, before it becomes binding upon Governments which have ratified it - it has to be accepted formally by individual Governments.

Each convention includes appropriate provisions stipulating conditions which have to be met before it enters into force. These conditions vary but generally speaking, the more important and more complex the document and the more stringent are the conditions for its entry into force. For example, the International Convention for the Safety of Life at Sea, 1974, provided that entry into force requires acceptance by 25 States whose merchant fleets comprise not less than 50 per cent of the world's gross tonnage; for the International Convention on Tonnage Measurement of Ships, 1969, the requirement was acceptance by 25 States whose combined merchant fleets represent not less than 65 per cent of world tonnage.

When the appropriate conditions have been fulfilled, the convention enters into force for the States which have accepted - generally after a period of grace intended to enable all the States to take the necessary measures for implementation.

In the case of some conventions which affect a few States or deal with less complex matters, the entry into force requirements may not be so stringent. For example, the Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, 1971, came into force 90 days after being accepted by five States; the Special Trade Passenger Ships Agreement, 1971, came into force six months after three States (including two with ships or nationals involved in special trades) had accepted it.

For the important technical conventions, it is necessary that they be accepted and applied by a large section of the shipping community. It is therefore essential that these should, upon entry into force, be applicable to as many of the maritime states as possible. Otherwise they would tend to confuse, rather than clarify, shipping practice.

Accepting a convention does not merely involve the deposit of a formal instrument. A Government's acceptance of a convention necessarily places on it the obligation to take the measures required by the convention. Often national law has to be enacted or changed to enforce the provisions of the convention; in some cases, special facilities may have to be provided; an inspectorate may have to be appointed or trained to carry out functions under the convention; and adequate notice must be given to shipowners, shipbuilders and other interested parties so they make take account of the provisions of the convention in their future acts and plans.

At present IMO conventions enter into force within an average of five years after adoption. The majorities of these instruments are now in force or are on the verge of fulfilling requirements for entry into force.

## Signature, ratification, acceptance, approval and accession

The terms signature, ratification, acceptance, approval and accession refer to some of the methods by which a State can express its consent to be bound by a treaty.

## Signature

Consent may be expressed by signature where:

- the treaty provides that signature shall have that effect;
- it is otherwise established that the negotiating States were agreed that signature should have that effect;
- the intention of the State to give that effect to signature appears from the full powers of its representatives or was expressed during the negotiations (Vienna Convention on the Law of Treaties, 1969, Article 12.1).

A State may also sign a treaty "subject to ratification, acceptance or approval". In such a situation, signature does not signify the consent of a State to be bound by the treaty, although it does oblige the State to refrain from acts which would defeat the object and purpose of the treaty until such time as it has made its intention clear not to become a party to the treaty (Vienna Convention on the Law of Treaties, Article 18(a)).

## Signature subject to ratification, acceptance or approval

Most multilateral treaties contain a clause providing that a State may express its consent to be bound by the instrument by signature subject to ratification.

In such a situation, signature alone will not suffice to bind the State, but must be followed up by the deposit of an instrument of ratification with the depositary of the treaty.

This option of expressing consent to be bound by signature subject to ratification, acceptance or approval originated in an era when international communications were not instantaneous, as they are today.

It was a means of ensuring that a State representative did not exceed their powers or instructions with regard to the making of a particular treaty. The words "acceptance" and "approval" basically mean the same as ratification, but they are less formal and non-technical and might be preferred by some States which might have constitutional difficulties with the term ratification.

Many States nowadays choose this option, especially in relation to multinational treaties, as it provides them with an opportunity to ensure that any necessary legislation is enacted and other constitutional requirements fulfilled before entering into treaty commitments.

The terms for consent to be expressed by signature subject to acceptance or approval are very similar to ratification in their effect. This is borne out by Article 14.2 of the Vienna Convention on the Law of Treaties which provides that "the consent of a State to be bound by a treaty is expressed by acceptance or approval under conditions similar to those which apply to ratification."

## Accession

Most multinational treaties are open for signature for a specified period of time. Accession is the method used by a State to become a party to a treaty which it did not sign whilst the treaty was open for signature.

Technically, accession requires the State in question to deposit an instrument of accession with the depositary. Article 15 of the Vienna Convention on the Law of Treaties provides that consent by accession is possible where the treaty so provides, or where it is otherwise established that the negotiating States were agreed or subsequently agreed that consent by accession could occur.

## Amendment

Technology and techniques in the shipping industry change very rapidly these days. As a result, not only are new conventions required but existing ones need to be kept up to date. For example, the International Convention for the Safety of Life at Sea (SOLAS), 1960 was amended six times after it entered into force in 1965 - in 1966, 1967, 1968, 1969, 1971 and 1973. In 1974 a completely new convention was adopted incorporating all these amendments (and other minor changes) and has itself been modified on numerous occasions.

In early conventions, amendments came into force only after a percentage of Contracting States, usually two thirds, had accepted them. This normally meant that more acceptances were required to amend a convention than were originally required to bring it into force in the first place, especially where the number of States which are Parties to a convention is very large.

This percentage requirement in practice led to long delays in bringing amendments into force. To remedy the situation a new amendment procedure was devised in IMO. This procedure has been used in the case of conventions such as the Convention on the International Regulations for Preventing Collisions at Sea, 1972, the International Convention for the Prevention of Pollution from Ships, 1973 and SOLAS 1974, all of

which incorporate a procedure involving the "tacit acceptance" of amendments by States.

Instead of requiring that an amendment shall enter into force after being accepted by, for example, two thirds of the Parties, the “tacit acceptance” procedure provides that an amendment shall enter into force at a particular time unless before that date, objections to the amendment are received from a specified number of Parties.

In the case of the 1974 SOLAS Convention, an amendment to most of the Annexes (which constitute the technical parts of the Convention) is `deemed to have been accepted at the end of two years from the date on which it is communicated to Contracting Governments...' unless the amendment is objected to by more than one third of Contracting Governments, or Contracting Governments owning not less than 50 per cent of the world's gross merchant tonnage. This period may be varied by the Maritime Safety Committee with a minimum limit of one year.

As was expected the "tacit acceptance" procedure has greatly speeded up the amendment process. Amendments enter into force within 18 to 24 months, generally Compared to this, none of the amendments adopted to the 1960 SOLAS Convention between 1966 and 1973 received sufficient acceptances to satisfy the requirements for entry into force.

## Enforcement

The enforcement of IMO conventions depends upon the Governments of Member Parties.

Contracting Governments enforce the provisions of IMO conventions as far as their own ships are concerned and also set the penalties for infringements, where these are applicable.

They may also have certain limited powers in respect of the ships of other Governments.

In some conventions, certificates are required to be carried on board ship to show that they have been inspected and have met the required standards. These certificates are normally accepted as proof by authorities from other States that the vessel concerned has reached the required standard, but in some cases further action can be taken.

The 1974 SOLAS Convention, for example, states that "the officer carrying out the control shall take such steps as will ensure that the ship shall not sail until it can proceed to sea without danger to the passengers or the crew".

This can be done if "there are clear grounds for believing that the condition of the ship and its equipment does not correspond substantially with the particulars of that certificate".

An inspection of this nature would, of course, take place within the jurisdiction of the port State. But when an offence occurs in international waters the responsibility for imposing a penalty rests with the flag State.

Should an offence occur within the jurisdiction of another State, however, that State can either cause proceedings to be taken in accordance with its own law or give details of the offence to the flag State so that the latter can take appropriate action.

Under the terms of the 1969 Convention Relating to Intervention on the High Seas, Contracting States are empowered to act against ships of other countries which have been involved in an accident or have been damaged on the high seas if there is a grave risk of oil pollution occurring as a result.

The way in which these powers may be used are very carefully defined, and in most conventions the flag State is primarily responsible for enforcing conventions as far as its own ships and their personnel are concerned.

The Organization itself has no powers to enforce conventions.

However, IMO has been given the authority to vet the training, examination and certification procedures of Contracting Parties to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978. This was one of the most important changes made in the 1995 amendments to the Convention which entered into force on 1 February 1997. Governments have to provide relevant information to IMO's Maritime Safety Committee which will judge whether or not the country concerned meets the requirements of the Convention.

## Relationship between Conventions and interpretation

Some subjects are covered by more than one Treaty. The question then arises which one prevails. The Vienna Convention on the Law of Treaties provides in Article 30 for rules regarding the relationship between successive treaties relating to the same subject-matter. Answers to questions regarding the interpretation of Treaties can be found in Articles 31, 32 and 33 of the Vienna Convention on the Law of Treaties. A Treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose. When a Treaty has been authenticated in two or more languages, the text is equally authoritative in each language, unless the treaty provides or the parties agree that, in case of divergence, a particular text shall prevail.

## Uniform law and conflict of law rules

A substantive part of maritime law has been made uniform in international Treaties. However, not every State is Party to all Conventions and the existing Conventions do not always cover all questions regarding a specific subject. In those cases conflict of

law rules are necessary to decide which national law applies. These conflict of law rules can either be found in a Treaty or, in most cases, in national law.

## IMO conventions

The majority of conventions adopted under the auspices of IMO or for which the Organization is otherwise responsible, fall into three main categories.

The first group is concerned with maritime safety; the second with the prevention of marine pollution; and the third with liability and compensation, especially in relation to damage caused by pollution. Outside these major groupings are a number of other conventions dealing with facilitation, tonnage measurement, unlawful acts against shipping and salvage, etc.

## Tacit acceptance procedure

The amendment procedures contained in the first Conventions to be developed under the auspices of IMO were so slow that some amendments adopted have never entered into force. This changed with the introduction of the "tacit acceptance" procedure.

Tacit acceptance is now incorporated into most of IMO's technical Conventions. It facilitates the quick and simple modification of Conventions to keep pace with the rapidly-evolving technology in the shipping world. Without tacit acceptance, it would have proved impossible to keep Conventions up to date and IMO's role as the international forum for technical issues involving shipping would have been placed in jeopardy.

In the spring of 1968, IMO - then still called IMCO, the Inter-Governmental Maritime Consultative Organization - celebrated the 20th anniversary of the adoption of the IMO Convention. It should have been an occasion for some congratulations. But all was not well. Many of the Organization's Member States were not happy with the progress that had been made so far.

Many were concerned about the Organization's structure and its ability to respond to the changes taking place in shipping. In March, 1967, the oil tanker Torrey Canyon had gone aground off the coast of England, resulting in what was then the world's biggest oil spill. IMO was called upon to take action to combat oil pollution and to deal with the legal issues that arose. But would it be able to do so?

The general disquiet was summed up by Canada in a paper submitted to the 20th session of the IMO Council in May 1968. It stated that "the anticipations of twenty years ago have not been fulfilled" and went on to complain of the effort required by Member States in attending meetings and dealing with the technical problems raised by IMO. The paper was discussed by the Council which agreed to establish a working group to prepare a draft statement of the objectives of IMO and an inventory of

further objectives which the Organization could usefully fulfill in the field of international maritime transport.

In November 1968 the working group reported back to the Council. It outlined a list of activities, far broader than the programmes undertaken by IMO so far. This was approved by the Council, which also agreed that IMO needed to improve its working methods.

The working group was asked to report to the Council again at its 22nd session in May 1969.This time it put forward a number of proposals for improving IMO's working methods, the most important of which concerned the procedures for amending the various Conventions that had been adopted under IMO's auspices.

The problem facing IMO was that most of its Conventions could only be updated by means of the "classical" amendment procedure. Amendments to the 1960 SOLAS Convention, for example, would enter into force "twelve months after the date on which the amendment is accepted by two-thirds of the Contracting Governments including two-thirds of the Governments represented on the Maritime Safety Committee. This did not seem to be a difficult target when the Convention was adopted, because to enter into force the Convention had to be accepted by only 15 countries, seven of which had fleets consisting of at least 1 million gross tons of merchant shipping.

But by the late 1960s the number of Parties to SOLAS had reached 80 and the total was rising all the time as new countries emerged and began to develop their shipping activities. As the number of Parties rose, so did the total required to amend the Convention. It was like trying to climb a mountain that was always growing higher and the problem was made worse by the fact that Governments took far longer to accept amendments than they did to ratify the parent Convention.

The Council approved the working group's proposal that "it would be a useful first step to undertake a comparative study of the conventions for which IMO is depositary and similar instruments for which other Members of the United Nations family are responsible." This proposal was endorsed by the 6th regular session of the IMO Assembly in October 1969 and the study itself was completed in time to be considered by the Assembly at its 7th session in 1971.

It examined the procedures of four other UN agencies: the International Civil Aviation Organization (ICAO), the International Telecommunications Union (ITU), the World Meteorological Organization (WMO) and the World Health Organization (WHO).

It showed that all of these organizations were able to amend technical and other regulations. These amendments became binding on Member States without a further act of ratification or acceptance being required.

On the other hand, IMO had no authority to adopt, let alone amend conventions. Its mandate allowed it only to "provide for the drafting of conventions, agreements or other instruments and to recommend these to Governments and to intergovernmental organizations and to convene such conferences as may be necessary." Article 2 of the IMO Convention specifically stated that IMO's functions were to be "consultative and advisory".

The Organization could arrange a conference - but it was up to the conference to decide whether the Convention under discussion should or should not be adopted and to decide how it should be amended. The study concluded that "any attempt to bring IMO procedure and practice into line with the other organizations would, therefore, entail a change either in the constitutional and institutional structure of the Organization itself or in the procedure and practice of the diplomatic conferences which adopt the conventions of IMO.

The first might involve an amendment to the IMO Convention itself. The second might require that diplomatic conferences convened by IMO should grant greater power to the organs of IMO in regard to the review and revision of the instruments.

The study was discussed at length by the Assembly. Canada pointed out that the amendments adopted to the 1960 SOLAS Convention in 1966, 1967, 1968 and 1969 had failed to enter into force and this "sufficed to show that IMO would henceforth have to tackle serious institutional problems." A note submitted to the conference by Canada stated that "unless the international maritime community is sufficiently responsive to these changed circumstances, States will once again revert to the practice of unilaterally deciding what standards to apply to their own shipping and to foreign flag shipping visiting their ports."

The result was the adoption of resolution A.249(VII) which referred to the need for an amendment procedure "which is more in keeping with the development of technological advances and social needs and which will expedite the adoption of amendments." It called for the Legal Committee and Maritime Safety Committee to prepare draft proposals for consideration by the 8th Assembly.

A growing urgency was added by the fact that IMO was preparing a number of new conventions for adoption during the next few years. Conferences to consider a new Convention on the International Regulations for Preventing Collisions at Sea and an International Convention for Safe Containers were both scheduled for 1972, a major Convention dealing with the Prevention of Marine Pollution from Ships for 1973 and a conference to revise SOLAS was scheduled for 1976. All of these treaties required a new, easier amendment procedure than the traditional method.

The MSC discussed the amendment question at its 25th session in March 1972. A working group was formed to discuss the matter in detail and concluded that at current rates of acceptance the requisite "two-thirds" target needed to amend SOLAS 1960 "will not be achieved...for many years, possibly never." Moreover, any future

amendments would almost certainly suffer the same fate. This would include any amendments intended to improve the amendment procedure itself.

The working group reported: "It follows that the only realistic way of bringing an improved amending procedure into effect within a reasonable period of time is to incorporate it into new or revised technical conventions.

A few weeks later, the Legal Committee held its 12th session. Among the documents prepared for the meeting was a report on discussions that had taken place at the MSC and a detailed paper prepared by the Secretariat. The paper analysed the entry into force and amendment processes of various IMO Conventions and referred to two possible methods that had been considered by the Assembly, for speeding up the amendment procedure. Alternative I was to revise each Convention so that greater authority for adopting amendments might be delegated to the appropriate IMO organs. Alternative II was to amend the IMO Convention itself and give IMO the power to amend Conventions.

The study then considered Alternative I in greater detail. The main reason why amendments took so long to enter into force was the time taken to gain acceptance by two-thirds of Contracting Governments. One way of reducing this period would be by "specifying a date ...of entry into force after adoption by the Assembly, unless that date of amendment is explicitly rejected by a certain number or percentage of Contracting Governments." The paper said that this procedure "has the advantage that all Contracting Governments would be able to advance the preparatory work for implementing the amended regulations and the industry would be in a position to plan accordingly."

The Committee established a working group to consider the subject and prepared a preliminary study based on its report, which again referred to the disadvantages of the classical amendment system. The study continued: "The remedy for this, which has proved to be workable in practice, in relation to a number of conventions, is what is known as the 'tacit' or 'passive' acceptance procedure. This means that the body which adopts the amendment at the same time fixes a time period within which contracting parties will have the opportunity to notify either their acceptance or their rejection of the amendment, or to remain silent on the subject. In case of silence, the amendment is considered to have been accepted by the party...".

The tacit acceptance idea immediately proved popular. The Council, at its meeting in May, decided that the next meeting of the Legal Committee should consist of technical as well as legal experts so that priority could be given to the amendment issue. The Committee was asked to give particular attention to tacit acceptance.

The idea was given non-governmental support by the International Chamber of Shipping, which had consultative status with IMO and submitted a paper stating that the lack of an effective amendment procedure created uncertainties and was detrimental to effective planning by the industry. The classical procedure had also

encouraged some governments to introduce unilateral legislation that, however well intentioned, was "seriously disruptive to international shipping services." The paper said that if other Governments did the same " the disruption to international shipping and the world trade which it serves would become increasingly severe. Such unilateral action strikes at the purpose of IMO."

By the time the Legal Committee met for its 14th session in September 1972, there was general agreement that tacit acceptance offered the best way forward. Other ideas, such as amending the IMO Convention itself, had too many disadvantages and would take too long to introduce. There was some concern about what would happen if a large number of countries did reject an amendment and the Committee members agreed that tacit acceptance should apply only to the technical content of Conventions, which was often contained in annexes. The non-technical articles should continue to be subject to the classical (or "positive") acceptance procedure.

The Committee also generally agreed that alternative procedures for amending the technical provisions should be retained but it did not reach consensus on another issue: should amendments be prepared and adopted by an appropriate IMO body, such as the Maritime Safety Committee - or by Contracting Parties to the Convention concerned? This was an important point at the time, since many Contracting Parties to IMO Conventions were not yet Members of IMO itself and might object to treaties they had ratified being amended without them even being consulted.

This issue was still unsettled when the Conference on Revision of the International Regulations for Preventing Collisions at Sea opened in October 1972. The purpose of the conference was to update the Collision Regulations and to separate them from the SOLAS Convention (the existing regulations were annexed to SOLAS 1960).

The amendment procedure is contained in Article VI. Amendments to the Collision Regulations adopted by the MSC (by a two-thirds majority) have to be communicated to Contracting Parties and IMO Member States at least six months before being considered by the Assembly. If adopted by the Assembly (again by a two-thirds majority), the amendments enter into force on a date determined by the Assembly unless more than one third of Contracting Parties notify IMO of their objection. On entry into force, any amendment shall "for all Contracting Parties which have not objected to the amendment, replace and supersede any previous provision to which the amendment refers."

Less than two months later, on 2 December 1972 a conference held in Geneva adopted the International Convention for Safe Containers, Article X of which contains procedures for amending any part or parts of the Convention. The procedure is the traditional "positive" acceptance system, under which amendments enter into force twelve months after being adopted by two-thirds of Contracting Parties. However, Article XI contains a special procedure for amending the technical annexes which also incorporates tacit acceptance. The procedure is slightly different from that used in the

Collision Regulations, one difference being that the amendments can be adopted by the MSC "to which all Contracting Parties shall have been invited to participate and vote." This answered the question of how to take into account the interests of Parties to Conventions that were not Member States of IMO.

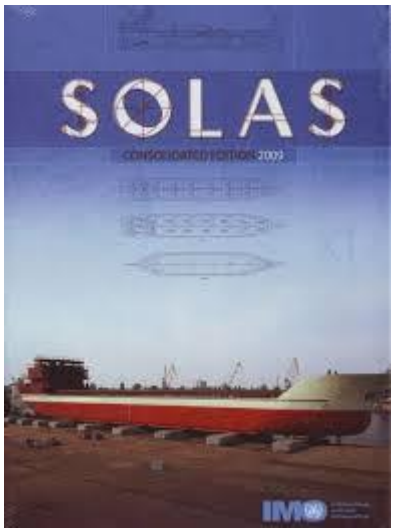
The next Convention to be considered was the International Convention for the Prevention of Pollution from Ships (MARPOL), which was successfully adopted in May 1973. It, too, incorporated tacit acceptance procedures for amending the technical annexes. In the meantime, IMO was preparing for a new SOLAS convention. This was considered necessary because none of the amendments adopted to the 1960 version had entered into force and did not appear likely to do so in the near future. The 1966 Load Lines Convention also contained a classical amendment procedure and the intention was to combine the two instruments in a new Convention, which was scheduled to be considered in 1976.

The MSC discussed this proposal at its 26th session in October-November, but it was clear that this would be a daunting and time-consuming task. The combined instrument might be a good idea for the future - but the real priority was to get the amendments to SOLAS 1960 into force as quickly as possible and to make sure that future amendments would not be delayed. A working group was set up to consider the various alternatives, but opinion began to move in favor of a proposal by the United Kingdom that IMO should concentrate on an interim Convention designed to bring into force the amendments adopted since 1960. The new Convention, it was suggested, would consist of the 1960 text with the addition of a tacit acceptance amendment procedure and the addition of amendments that had already been adopted.

Another advantage, the United Kingdom pointed out, was that the conference called to adopt the revised Convention "might be held considerably earlier than 1976 since comparatively little preparation would be needed." The subject was discussed again at the MSC's 27th session in the spring of 1973 and, although some delegations wanted a more comprehensive revision, others felt that the workload would be so great that the conference would be seriously delayed. By a vote of 12 in favor and four abstentions, the Committee decided to call a conference with limited scope, as proposed by the United Kingdom.

On 21 October, 1974, the International Conference on Safety of Life at Sea opened in London and on 1 November a new SOLAS Convention was adopted, which incorporated the tacit acceptance procedure.

The tacit acceptance amendment procedure has now been incorporated into the majority of IMO's technical Conventions and has been extended to some other instruments as well. Its effectiveness can be seen most clearly in the case of SOLAS 1974, which has been amended on many occasions since then. In the process, the Convention's technical content has been almost completely re-written.




## SOLAS

The SOLAS Convention in its successive forms is generally regarded as the most important of all international treaties concerning the safety of merchant ships. The first version was adopted in **1914**, in response to the Titanic disaster, the **second** in **1929**, the **third** in **1948**, and the **fourth** in **1960**. The **1974** version includes the tacit acceptance procedure - which provides that an amendment shall enter into force on a specified date unless, before that date, objections to the amendment are received from an agreed number of Parties.

As a result the 1974 Convention has been updated and amended on numerous occasions. The Convention in force today is sometimes referred to as SOLAS, 1974, as amended.

Technical provisions

The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety. Flag States are responsible for ensuring that ships under their flag comply with its requirements, and a number of certificates are prescribed in the Convention as proof that this has been done. Control provisions also allow Contracting Governments to inspect ships of other Contracting States if there are clear grounds for believing that the ship and its equipment do not substantially comply with the requirements of the Convention - this procedure is known as **port State control**. The current SOLAS Convention includes Articles setting out general obligations, amendment procedure and so on, followed by an Annex divided into 12 Chapters.

Chapter I - General Provisions

Includes regulations concerning the survey of the various types of ships and the issuing of documents signifying that the ship meets the requirements of the Convention. The Chapter also includes provisions for the control of ships in ports of other Contracting Governments.

Chapter II-1 - Construction - Subdivision and stability, machinery and electrical installations

The subdivision of passenger ships into watertight compartments must be such that after assumed damage to the ship's hull the vessel will remain afloat and stable. Requirements for watertight integrity and bilge pumping arrangements for passenger ships are also laid down as well as stability requirements for both passenger and cargo ships.

The degree of subdivision - measured by the maximum permissible distance between two adjacent bulkheads - varies with ship's length and the service in which it is engaged. The highest degree of subdivision applies to passenger ships.

Requirements covering machinery and electrical installations are designed to ensure that services which are essential for the safety of the ship, passengers and crew are maintained under various emergency conditions.

"Goal-based standards" for oil tankers and bulk carriers were adopted in 2010, requiring new ships to be designed and constructed for a specified design life and to be safe and environmentally friendly, in intact and specified damage conditions, throughout their life. Under the regulation, ships should have adequate strength, integrity and stability to minimize the risk of loss of the ship or pollution to the marine environment due to structural failure, including collapse, resulting in flooding or loss of watertight integrity.

Chapter II-2 - Fire protection, fire detection and fire extinction

Includes detailed fire safety provisions for all ships and specific measures for passenger ships, cargo ships and tankers.

They include the following principles: division of the ship into main and vertical zones by thermal and structural boundaries; separation of accommodation spaces from the remainder of the ship by thermal and structural boundaries; restricted use of combustible materials; detection of any fire in the zone of origin; containment and extinction of any fire in the space of origin; protection of the means of escape or of access for fire-fighting purposes; ready availability of fire-extinguishing appliances; minimization of the possibility of ignition of flammable cargo vapour.

Chapter III - Life-saving appliances and arrangements

The Chapter includes requirements for life-saving appliances and arrangements, including requirements for life boats, rescue boats and life jackets according to type of ship. The **International Life-Saving Appliance (LSA) Code** gives specific technical requirements for LSAs and is mandatory under Regulation 34, which states that all life-saving appliances and arrangements shall comply with the applicable requirements of the LSA Code.

Chapter IV - Radiocommunications

The Chapter incorporates the **Global Maritime Distress and Safety System (GMDSS)**. All passenger ships and all cargo ships of 300 gross tonnage and upwards on international voyages are required to carry equipment designed to improve the chances of rescue following an accident, including satellite emergency position indicating radio beacons (EPIRBs) and search and rescue transponders (SARTs) for the location of the ship or survival craft.

Regulations in Chapter IV cover undertakings by contracting governments to provide radiocommunication services as well as ship requirements for carriage of radiocommunications equipment. The Chapter is closely linked to the Radio Regulations of the International Telecommunication Union.

Chapter V - Safety of navigation

Chapter V identifies certain navigation safety services which should be provided by Contracting Governments and sets forth provisions of an operational nature applicable in general to all ships on all voyages. This is in contrast to the Convention as a whole, which only applies to certain classes of ship engaged on international voyages.

The subjects covered include the maintenance of meteorological services for ships; the ice patrol service; routeing of ships; and the maintenance of search and rescue services.

This Chapter also includes a general obligation for masters to proceed to the assistance of those in distress and for Contracting Governments to ensure that all ships shall be sufficiently and efficiently manned from a safety point of view.

The chapter makes mandatory the carriage of voyage data recorders (VDRs) and automatic ship identification systems (AIS).

Chapter VI - Carriage of Cargoes

The Chapter covers all types of cargo (except liquids and gases in bulk) "*which, owing to their particular hazards to ships or persons on board, may require special precautions*". The regulations include requirements for stowage and securing of cargo or cargo units (such as containers). The Chapter requires cargo ships carrying grain to comply with the **International Grain Code**.

Chapter VII - Carriage of dangerous goods

The regulations are contained in three parts:

Part A - Carriage of dangerous goods in packaged form - includes provisions for the classification, packing, marking, labeling and placarding, documentation and stowage of dangerous goods. Contracting Governments are required to issue instructions at the national level and the Chapter makes mandatory the **International Maritime Dangerous Goods (IMDG) Code**, developed by IMO, which is constantly updated to accommodate new dangerous goods and to supplement or revise existing provisions.

Part A-1 - Carriage of dangerous goods in solid form in bulk - covers the documentation, stowage and segregation requirements for these goods and requires reporting of incidents involving such goods.

Part B covers Construction and equipment of ships carrying dangerous liquid chemicals in bulk and requires chemical tankers to comply with the **International Bulk Chemical Code (IBC Code)**.

Part C covers Construction and equipment of ships carrying liquefied gases in bulk and gas carriers to comply with the requirements of the **International Gas Carrier Code (IGC Code)**.

Part D includes special requirements for the carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes on board ships and requires ships carrying such products to comply with the **International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code)**.

The chapter requires carriage of dangerous goods to be in compliance with the relevant provisions of the **International Maritime Dangerous Goods Code (IMDG Code)**.

Chapter VIII - Nuclear ships

Gives basic requirements for nuclear-powered ships and is particularly concerned with radiation hazards. It refers to detailed and comprehensive **Code of Safety for Nuclear Merchant Ships** which was adopted by the IMO Assembly in 1981.

Chapter IX - Management for the Safe Operation of Ships

The Chapter makes mandatory the **International Safety Management (ISM) Code**, which requires a safety management system to be established by the shipowner or any person who has assumed responsibility for the ship (the "Company").

Chapter X - Safety measures for high-speed craft

The Chapter makes mandatory the **International Code of Safety for High-Speed Craft (HSC Code)**.

Chapter XI-1 - Special measures to enhance maritime safety

The Chapter clarifies requirements relating to authorization of recognized organizations (responsible for carrying out surveys and inspections on Administrations' behalves); enhanced surveys; ship identification number scheme; and port State control on operational requirements.

Chapter XI-2 - Special measures to enhance maritime security

Regulation XI-2/3 of the chapter enshrines the **International Ship and Port Facilities Security Code (ISPS Code)**. Part A of the Code is mandatory and part B contains guidance as to how best to comply with the mandatory requirements. Regulation XI-2/8 confirms the role of the Master in exercising his professional

judgment over decisions necessary to maintain the security of the ship. It says he shall not be constrained by the Company, the charterer or any other person in this respect.

Regulation XI-2/5 requires all ships to be provided with a ship security alert system. Regulation XI-2/6 covers requirements for port facilities, providing among other things for Contracting Governments to ensure that port facility security assessments are carried out and that port facility security plans are developed, implemented and reviewed in accordance with the ISPS Code. Other regulations in this chapter cover the provision of information to IMO, the control of ships in port, (including measures such as the delay, detention, restriction of operations including movement within the port, or expulsion of a ship from port), and the specific responsibility of Companies.

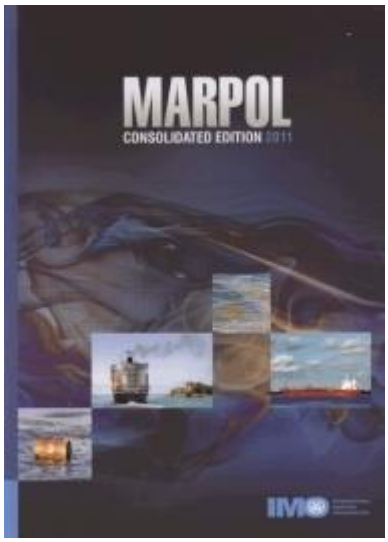
Chapter XII - Additional safety measures for bulk carriers

The Chapter includes structural requirements for bulk carriers over 150 meters in length.

Amendments

The 1974 Convention has been amended many times to keep it up to date.

Amendments adopted by the Maritime Safety Committee (MSC) are listed in MSC Resolutions.




## MARPOL

The International Convention for the Prevention of Pollution from Ships (MARPOL) is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes.

The MARPOL Convention was adopted on 2 November **1973** at IMO. The Protocol of **1978** was adopted in response to a spate of tanker accidents in **1976-1977**. As the **1973** MARPOL Convention had not yet entered into force, the **1978** MARPOL Protocol absorbed the parent Convention. The combined instrument entered into force on 2 October **1983**. In **1997**, a Protocol was adopted to amend the Convention and a new Annex VI was added which entered into force on 19 May **2005**. 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.

**Annex I** Regulations for the Prevention of Pollution by Oil (entered into force 2 October **1983**).

Covers prevention of pollution by oil from operational measures as well as from accidental discharges; the **1992** amendments to Annex I made it mandatory for new oil tankers to have double hulls and brought in a phase-in schedule for existing tankers to fit double hulls, which was subsequently revised in 2001 and 2003.

**Annex II** Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force 2 October **1983**).

Details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk; some 250 substances were evaluated and included in the list appended to the Convention; the discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with.

In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land.

**Annex III** Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July **1992**).

Contains general requirements for the issuing of detailed standards on packing, marking, labeling, documentation, stowage, quantity limitations, exceptions and notifications.

For the purpose of this Annex, "harmful substances" are those substances which are identified as marine pollutants in the **International Maritime Dangerous Goods Code (IMDG Code)** or which meet the criteria in the Appendix of Annex III.

**Annex IV** Prevention of Pollution by Sewage from Ships (entered into force 27 September **2003**).

Contains requirements to control pollution of the sea by sewage; the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment plant or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land; sewage which is not comminuted or disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land.

In July **2011**, IMO adopted the most recent amendments to MARPOL Annex IV which are expected to enter into force on 1 January **2013**. The amendments introduce the Baltic Sea as a special area under Annex IV and add new discharge requirements for passenger ships while in a special area.

**Annex V** Prevention of Pollution by Garbage from Ships (entered into force 31 December **1988**).

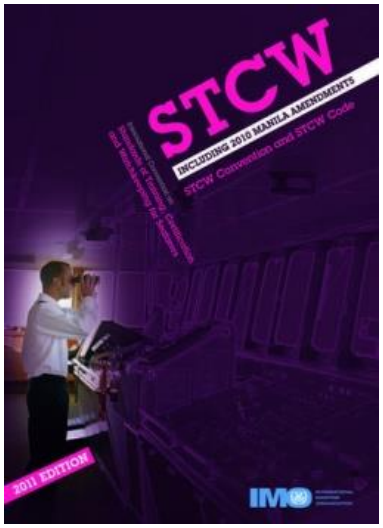
Deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of; the most important feature of the Annex is the complete ban imposed on the disposal into the sea of all forms of plastics.

In July **2011**, IMO adopted extensive amendments to Annex V which are expected to enter into force on 1 January **2013**. The revised Annex V prohibits the discharge of all garbage into the sea, except as provided otherwise, under specific circumstances.

**Annex VI** Prevention of Air Pollution from Ships (entered into force 19 May **2005**).

Sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances; designated emission control areas set more stringent standards for SOx, NOx and particulate matter.

In **2011**, after extensive work and debate, IMO adopted ground breaking mandatory technical and operational energy efficiency measures which will significantly reduce the amount of greenhouse gas emissions from ships; these measures were included in Annex VI and are expected to enter into force on 1 January **2013**.




## STCW

The 1978 STCW Convention was the first to establish basic requirements on training, certification and watchkeeping for seafarers on an international level. Previously the standards of training, certification and watchkeeping of officers and ratings were established by individual governments, usually without reference to practices in other countries. As a result standards and procedures varied widely, even though shipping is the most international of all industries.

The Convention prescribes minimum standards relating to training, certification and watchkeeping for seafarers which countries are obliged to meet or exceed.

The **1995** amendments, adopted by a Conference, represented a major revision of the Convention, in response to a recognized need to bring the Convention up to date and to respond to critics who pointed out the many vague phrases, such as "to the satisfaction of the Administration", which resulted in different interpretations being made.

The **1995** amendments entered into force on 1 February **1997**. One of the major features of the revision was the division of the technical annex into regulations, divided into Chapters as before, and a new STCW Code, to which many technical regulations were transferred. Part A of the Code is mandatory while Part B is recommended.

Dividing the regulations up in this way makes administration easier and it also makes the task of revising and updating them more simple: for procedural and legal reasons there is no need to call a full conference to make changes to Codes.

Another major change was the requirement for Parties to the Convention are required to provide detailed information to IMO concerning administrative measures taken to ensure compliance with the Convention. This represented the first time that IMO had been called upon to act in relation to compliance and implementation - generally, implementation is down to the flag States, while port State control also acts to ensure compliance. Under Chapter I, regulation I/7 of the revised Convention, Parties are required to provide detailed information to IMO concerning administrative measures taken to ensure compliance with the Convention, education and training courses, certification procedures and other factors relevant to implementation.The information is reviewed by panels of competent persons, nominated by Parties to the STCW Convention, who report on their findings to the IMO Secretary-General, who, in turn, reports to the Maritime Safety Committee (MSC) on the Parties which fully comply. The MSC then produces a list of "confirmed Parties" in compliance with the STCW Convention.

STCW Convention chapters

Chapter I: General provisions

Chapter II: Master and deck department

Chapter III: Engine department

Chapter IV: Radiocommunication and radio personnel

Chapter V: Special training requirements for personnel on certain types of ships

Chapter VI: Emergency, occupational safety, medical care and survival functions

Chapter VII: Alternative certification

Chapter VIII: Watchkeeping

The STCW Code

The regulations contained in the Convention are supported by sections in the STCW Code. Generally speaking, the Convention contains basic requirements which are then enlarged upon and explained in the Code. Part A of the Code is mandatory. The

minimum standards of competence required for seagoing personnel are given in detail in a series of tables. Part B of the Code contains recommended guidance which is intended to help Parties implement the Convention. The measures suggested are not mandatory and the examples given are only intended to illustrate how certain Convention requirements may be complied with. However, the recommendations in general represent an approach that has been harmonized by discussions within IMO and consultation with other international organizations.

The Manila amendments to the STCW Convention and Code were adopted on 25 June **2010**, marking a major revision of the STCW Convention and Code. The 2010 amendments entered into force on 1 January 2012 under the tacit acceptance procedure and are aimed at bringing the Convention and Code up to date with developments since they were initially adopted and to enable them to address issues that are anticipated to emerge in the foreseeable future.

Amongst the amendments adopted, there are a number of important changes to each chapter of the Convention and Code, including:

Improved measures to prevent fraudulent practices associated with certificates of competency and strengthen the evaluation process (monitoring of Parties' compliance with the Convention);

Revised requirements on hours of work and rest and new requirements for the prevention of drug and alcohol abuse, as well as updated standards relating to medical fitness standards for seafarers;

New certification requirements for able seafarers;

New requirements relating to training in modern technology such as electronic charts and information systems (ECDIS);

New requirements for marine environment awareness training and training in leadership and teamwork;

New training and certification requirements for electro-technical officers;

Updating of competence requirements for personnel serving on board all types of tankers, including new requirements for personnel serving on liquefied gas tankers;

New requirements for security training, as well as provisions to ensure that seafarers are properly trained to cope if their ship comes under attack by pirates;

Introduction of modern training methodology including distance learning and web-based learning;

New training guidance for personnel serving on board ships operating in polar waters; and

New training guidance for personnel operating Dynamic Positioning Systems.


## IAMSAR

The 1979 Convention, adopted at a Conference in Hamburg, was aimed at developing an international SAR plan, so that, no matter where an accident occurs, the rescue of persons in distress at sea will be co-ordinated by a SAR organization and, when necessary, by co-operation between neighboring SAR organizations.

Although the obligation of ships to go to the assistance of vessels in distress was enshrined both in tradition and in international treaties (such as the International Convention for the Safety of Life at Sea (SOLAS), 1974), there was, until the adoption of the SAR Convention, no international system covering search and rescue operations. In some areas there was a well-established organization able to provide assistance promptly and efficiently, in others there was nothing at all.

The technical requirements of the SAR Convention are contained in an Annex, which was divided into five Chapters. Parties to the Convention are required to ensure that arrangements are made for the provision of adequate SAR services in their coastal waters. Parties are encouraged to enter into SAR agreements with neighboring States involving the establishment of SAR regions, the pooling of facilities, establishment of common procedures, training and liaison visits. The Convention states that Parties should take measures to expedite entry into its territorial waters of rescue units from other Parties.

The Convention then goes on to establish preparatory measures which should be taken, including the establishment of rescue co-ordination centers and sub centers. It outlines operating procedures to be followed in the event of emergencies or alerts and during SAR operations. This includes the designation of an on-scene commander and his duties.

IMO search and rescue areas

Following the adoption of the 1979 SAR Convention, IMO's Maritime Safety Committee divided the world's oceans into 13 search and rescue areas, in each of which the countries concerned have delimited search and rescue regions for which they are responsible.

Provisional search and rescue plans for all of these areas were completed when plans for the Indian Ocean were finalized at a conference held in Fremantle, Western Australia in September 1998.

Revision of SAR Convention

The 1979 SAR Convention imposed considerable obligations on Parties - such as setting up the shore installations required - and as a result the Convention was not being ratified by as many countries as some other treaties. Equally important, many of the world's coastal States had not accepted the Convention and the obligations it imposed. It was generally agreed that one reason for the small number of acceptances and the slow pace of implementation was due to problems with the SAR Convention itself and that these could best be overcome by amending the Convention.

A revised Annex to the SAR Convention was adopted in May 1998 and entered into force in January 2000.

The revised technical Annex of the SAR Convention clarifies the responsibilities of Governments and puts greater emphasis on the regional approach and co-ordination between maritime and aeronautical SAR operations.

The revised Annex includes five Chapters:

Chapter 1 - Terms and Definitions

This Chapter updates the original Chapter 1 of the same name.

Chapter 2 - Organization and Co-ordination

The Chapter makes clear the responsibilities of Governments. It requires Parties, either individually or in co-operation with other States, to establish basic elements of a search and rescue service, to include:

- legal framework;
- assignment of a responsible authority;
- organization of available resources;
- communication facilities;
- co-ordination and operational functions; and
- processes to improve the service including planning, domestic and international co-operative relationships and training.

Parties should establish search and rescue regions within each sea area - with the agreement of the Parties concerned. Parties then accept responsibility for providing search and rescue services for a specified area.

The Chapter also describes how SAR services should be arranged and national capabilities be developed. Parties are required to establish rescue co-ordination centers and to operate them on a 24-hour basis with trained staff who have a working knowledge of English.

Parties are also required to "ensure the closest practicable co-ordination between maritime and aeronautical services".

Chapter 3 - Co-operation between States

Requires Parties to co-ordinate search and rescue organizations, and, where necessary, search and rescue operations with those of neighboring States. The Chapter states that unless otherwise agreed between the States concerned, a Party should authorize, subject to applicable national laws, rules and regulations, immediate entry into or over its territorial sea or territory for rescue units of other Parties solely for the purpose of search and rescue.

Chapter 4 - Operating Procedures

The Chapter says that each RCC (Rescue Co-ordination Centre) and RSC (Rescue Sub-Centre) should have up-to-date information on search and rescue facilities and communications in the area and should have detailed plans for conduct of search and rescue operations. Parties - individually or in co-operation with others should be capable of receiving distress alerts on a 24-hour basis. The regulations include procedures to be followed during an emergency and state that search and rescue activities should be co-ordinated on scene for the most effective results. The Chapter says that "Search and rescue operations shall continue, when practicable, until all reasonable hope of rescuing survivors has passed".

Chapter 5 - Ship reporting systems

Includes recommendations on establishing ship reporting systems for search and rescue purposes, noting that existing ship reporting systems could provide adequate information for search and rescue purposes in a given area.

IAMSAR Manual

Concurrently with the revision of the SAR Convention, the IMO and the International Civil Aviation Organization (ICAO) jointly develop and publish the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, published in three volumes covering Organization and Management; Mission Co-ordination; and Mobile Facilities.

2004 amendments - persons in distress at sea

Adoption: May 2004

Entry into force: 1 July 2006

The amendments to the Annex to the Convention include:

- addition of a new paragraph in chapter 2 (Organization and co-ordination) relating to definition of persons in distress;

- new paragraphs in chapter 3 (Co-operation between States) relating to assistance to the master in delivering persons rescued at sea to a place of safety; and

- a new paragraph in chapter 4 (Operating procedures) relating to rescue co-ordination centers initiating the process of identifying the most appropriate places for disembarking persons found in distress at sea.

# Chapter 7: MARITIME ISSUES, OTHER CONVENTIONS, CODES, REGULATIONS & RECOMMENDATIONS.


## Maritime Safety

Shipping is perhaps the most international of all the world's great industries - and one of the most dangerous. It has always been recognized that the best way of improving safety at sea is by developing international regulations that are followed by all shipping nations.

IMO's first task when it came into being in 1959 was to adopt a new version of the International Convention for the Safety of Life at Sea (SOLAS), the most important of all treaties dealing with maritime safety.

IMO has also developed and adopted international collision regulations and global standards for seafarers, as well as international conventions and codes relating to search and rescue, the facilitation of international maritime traffic, load lines, the carriage of dangerous goods and tonnage measurement.

The Maritime Safety Committee is IMO's senior technical body on safety-related matters. It is aided in its work by a number of Sub-Committees.

### Cargoes

Revised Recommendations on the safe transport of dangerous cargoes and related activities in port areas

The Revised Recommendations on the safe transport of dangerous cargoes and related activities in port areas were approved as MSC.1/Circ.1216 by the Maritime Safety Committee at its eighty-second session (29 November to 8 December 2006),

recognizing the need to align the relevant provisions of the Recommendations with those of the **IMDG Code**, as amended, and with the **ISPS Code** concerning security provisions.

The contents of the 109-page circular include:

- 1 Introduction
- 2 Application and definitions

2.1 Application, 2.2 Definitions

- 3 Warehouses, terminal areas and infrastructure

3.1 General, 3.2 Land use planning, 3.3 Considerations for specific dangerous cargoes, 3.4 Specific considerations for warehouses and terminal areas

- 4 Training

4.1 Regulatory authorities, 4.2 Management, 4.3 Personnel (cargo interests, berth operators and ships), 4.4 Training content

- 5 Security provisions
- 6 Responsibilities

6.1 Role of regulatory authorities, 6.2 Role of port authorities, 6.3 Role of berth operators and cargo interests, 6.4 Awareness

- 7 General recommendations for regulatory authorities, port authorities, ships, berth operators and cargo interests

7.1 Regulatory authorities and port authorities, 7.2 Ships carrying dangerous cargoes, 7.3 Shore installations, 7.4 Cargo interests

- 8 Dangerous cargoes in packaged form

8.1 Documentation, 8.2 Supervision, 8.3 Information for operational and emergency purposes, 8.4 General handling precautions

- 9 Liquid bulk dangerous cargoes (including liquefied gas)

9.1 General, 9.2 Ships carrying liquid bulk dangerous cargoes, 9.3 Shore installations, 9.4 Handling, 9.5 Special categories, 9.6 Combination carriers

- 10 Solid bulk dangerous cargoes

10.1 Documentation, 10.2 Responsibility for compliance, 10.3 Emission of harmful dusts, 10.4 Emission of dangerous vapour/oxygen deficiency, 10.5 Emission of explosive dusts, 10.6 Spontaneously combustible substances and substances that react with water, 10.7 Oxidizing substances, 10.8 Incompatible materials

- Annex 1 Advance notification
- Annex 2 Transport and handling of explosives of class 1
- Annex 3 Segregation of radioactive materials on shore
- Annex 4 Minimum safety requirements for carrying out hot work
- Annex 5 Bunkering precautions, including bunkering checklist
- Annex 6 Alphabetical index of cross-references between recommendations in sections 3 and 7
- Annex 7 Guide to fumigation
- Appendix 1 Glossary of terminology of relevance to the handling of dangerous cargoes
- Appendix 2 Selected bibliography list of internationally recognized codes and guides relevant to the transport and handling of dangerous cargoes in port areas

Fire Protection, fire detection and fire extinction

Fire can be devastating on a ship - particularly on a passenger ship, where large numbers of people may need to be evacuated, or on a ship carrying inflammable cargo, with serious risks to crewmembers or to ports and harbors.

On 1 July 2002, a comprehensive new set of requirements for fire protection, fire detection and fire extinction on board ships entered into force as a new revised **Chapter II-2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended**, incorporating technological advances in fire detection and extinction as well as lessons learned from fire incidents over the years.

The regulations are designed to ensure that fires are first of all prevented from occurring - for example by making sure that materials such as carpets and wall coverings are strictly controlled to reduce the fire risk; secondly, that any fires are rapidly detected; and thirdly; that any fire is contained and extinguished. Designing ships to ensure easy evacuation routes for crew and passengers are a key element of the chapter.

The following publications are available from IMO:

SOLAS Amendments 2000 - includes the revised chapter II-2 , making the International Code for Fire Safety Systems (FSS Code), adopted by the MSC by resolution MSC.98(73), mandatory under SOLAS

Fire Safety Systems (FSS) Code, 2001

Fire Test Procedures (FTP Code) (1998 Edition)

Model Course: 1.20 - Fire Prevention. & Fire Fighting

Model Course: 2.03 - Advanced Fire Fighting

Model Course: 3.05 - Survey of Fire Appliances

Symbols for Fire Control Plans

Implementation, Control and Coordination

IMO was established to adopt legislation and Governments are responsible for implementing them. When a Government accepts an IMO Convention it agrees to make it part of its own national law and to enforce it just like any other law. The problem is that some countries lack the expertise, experience and resources necessary to do this properly.

There is demonstrated statistical evidence, when analyzing the casualty rates or the port State control detentions of the ships in relation with their respective flags, that a highly significant difference exists between the performances of States with a substantial and organized maritime safety Administration, manned with experienced ship surveyors, and other ones that are not in a position to properly fulfill the different tasks and responsibilities of the flag State in relation with safety certification of ships.

IMO is concerned about this problem and in 1992 set up a special Sub-Committee on **Flag State Implementation (FSI)** to improve the performance of Governments. The FSI Sub-Committee works under the following terms of reference:

"*Under the direct instructions of the Maritime Safety Committee and the Marine Environment Protection Committee, the FSI Sub-Committee, in addressing the effective and consistent global implementation and enforcement of IMO instruments concerning maritime safety and security and the protection of the marine environment, will consider matters related to the following subjects, including the development of any necessary amendments to relevant conventions and other mandatory and non-mandatory instruments, as well as the preparation of new mandatory and non-mandatory instruments, guidelines and recommendations, for consideration by the Committees, as appropriate:*

*.1 comprehensive review of the rights and obligations of States emanating from the IMO treaty instruments;*

*.2 assessment, monitoring and review the current level of implementation of IMO instruments by States in their capacity as flag, port and coastal States and countries training and certifying officers and crews, with a view to identifying areas where States may have difficulties in fully implementing them;*

*.3 identification of the reasons for the difficulties identified in .2 above, taking into account any relevant information collected through, inter alia, the assessment of performance, the investigation of marine casualties and incidents and the in-depth analysis of port State control (PSC) activities, while paying particular attention to the perceived difficulties faced by developing countries;*

*.4 consideration of proposals to assist States in implementing and complying with IMO instruments. Such proposals could be implemented by States or by the Organization in a harmonized and co-ordinated manner and could include the development of any necessary amendments to relevant conventions and other mandatory and non‑mandatory instruments, as well as the preparation of new mandatory and non‑mandatory instruments, guidelines and recommendations, for consideration by the Committees, as appropriate;*

*.5 development and maintenance of a system for the analysis of investigations into marine casualties and incidents, with a view to putting in place an efficient and comprehensive knowledge-based mechanism to support the identification of trends and the IMO rule‑making process;*

*.6 review of IMO standards on maritime safety and security and the protection of the marine environment, with a view to maintaining updated and harmonized guidance on survey and certification-related requirements;*

*.7 development and maintenance of a framework to promote the global harmonization and co‑ordination of PSC activities; and*

*.8 consideration of and action on any recommendations or instructions from IMO bodies related to the work of the Sub-Committee.*" (MSC 80/20, annex)

Another way of raising standards is through port State control. The most important IMO conventions contain provisions for Governments to inspect foreign ships that visit their ports to ensure that they meet IMO standards. If they do not they can be detained until repairs are carried out.

Experience has shown that this works best if countries join together to form regional port State control organizations (PSC regimes).IMO has encouraged this process and memoranda of understanding (MoUs)/agreements have been signed covering Europe and the North Atlantic (Paris MoU); Asia and the Pacific (Tokyo MoU); Latin America (Acuerdo de Viña del Mar); Caribbean (Caribbean MoU); West and Central Africa (Abuja MoU); the Black Sea region (Black Sea MoU); the Mediterranean (Mediterranean MoU); the Indian Ocean (Indian Ocean MoU) and the Persian Gulf (Riyadh MoU).

IMO also has an extensive technical co-operation program which concentrates on improving the ability of developing countries to help themselves. It concentrates on developing human resources through maritime training and similar activities.

<u>IMO and the safety of navigation</u>

IMO has always paid great attention to the improvement of navigational safety.

Since 1959 a whole series of measures have been introduced, in the form of conventions, recommendations and other instruments. The best known and most important of these measures are conventions, three of which are particularly relevant to navigation. These are the **International Convention for the Safety of Life at Sea, 1974 (SOLAS)**; the Convention on the **International Regulations for Preventing Collisions at Sea, 1972 (COLREG)**; and the **International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW)**.

SOLAS covers various aspects of ship safety, including construction, fire protection, life-saving appliances, radiocommunications, safety of navigation, the carriage of cargoes and safety measures for high speed craft. Measures dealing with the safety of navigation appear in Chapter V. In December 2000, IMO adopted a revised version of chapter V, updating it and incorporating new requirements which entered into force in 2002.

Besides Conventions, IMO has also issued a series of resolutions and codes, including guidelines on navigation issues and performance standards for shipborne navigational and radiocommunications equipment. Some are simply recommendations - though such is their wide acceptance that they effectively mark international policy - while others are referred to by relevant Regulations of specific Conventions, thereby giving them the same weight as the Convention Regulations themselves.

Radiocommunications and Search and Rescue

Under the direct instruction of the Maritime Safety Committee (MSC) and as may be requested by the Marine Environment Protection Committee (MEPC), the Sub-Committee on **Radiocommunications and Search and Rescue (COMSAR)** considers matters related to the following subjects:

performance standards, maintenance requirements and relevant procedures for radiocommunication equipment and operational communications related to safety or maritime security, including the Global Maritime Distress and Safety System (GMDSS);

co-operation with the International Telecommunication Union (ITU) regarding maritime mobile radiocommunication matters;

the GMDSS Master Plan;

technical and operational measures and recommendations on the worldwide implementation of maritime search and rescue, including the maintanace of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual;

co-operation with the International Civil Aviation Organization (ICAO) regarding joint aeronautical and maritime search and rescue issues; and

the Global SAR Plan.

Ship Design and Equipment
Sub-Committee on **Ship Design and Equipment**

1 Under the direct instructions of the Maritime Safety Committee and as may be requested by the Marine Environment Protection Committee, the Sub-Committee on Ship Design and Equipment (DE) will consider matters related to the following subjects, including the development of any necessary amendments to relevant conventions and other mandatory and non-mandatory instruments, as well as the preparation of new mandatory and non-mandatory instruments, guidelines and recommendations, for consideration by the Committees, as appropriate:

.1 design, construction, structure, equipment, machinery installations and electrical installations of all types of ships, vessels and craft covered by IMO instruments;

.2 life-saving equipment, appliances and arrangements; and

.3 survey and certification.

2 The conventions and other mandatory instruments referred to above include, as a minimum:

.1 1974 SOLAS Convention (chapters I, II-1, III, X, XI-1 and XII and other relevant chapters, as appropriate) and the 1988 Protocol relating thereto;

.2 MARPOL 73/78 (Annexes I and IV and other relevant annexes, as appropriate);

.3 International Life-Saving Appliance (LSA) Code;

.4 International Code of Safety for High-Speed Craft (HSC Code), 1994 and 2000;

.5 Guidelines on the enhanced programme of inspections during surveys of bulk carriers and oil tankers (resolution A.744(18)); and

.6 Condition Assessment Scheme (CAS).

3 The non-mandatory instruments, which the Sub-Committee may be called upon to review, include, as a minimum:

.1 Code of Safety for Dynamically Supported Craft (DSC Code);

.2 Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code);

.3 Code of Safe Practice for the Carriage of Cargoes and Persons by Offshore Supply Vessels (OSV Code);

.4 Code of Safety for Diving Systems;

.5 Code of Safety for Special Purpose Ships (SPS Code);

.6 Code on Alarms and Indicators;

.7 Code on Noise Level on Board Ships;

.8 Interim Guidelines for Wing-In-Ground (WIG) Craft;

.9 Standards for Ship Manoeuvrability;

.10 Guidelines for the Design, Construction and Operation of Passenger Submersible Craft; and

.11 Guidelines for Ships Operating in Arctic Ice-Covered Waters.

Stability and Subdivision

IMO has long developed intact stability criteria for various types of ships, culminating in the completion of the **Code on Intact Stability for All Types of Ships** Covered by IMO Instruments **(IS Code)** in **1993** (resolution A.749(18)) and later amendments thereto (resolution MSC.75(69)). The IS Code included fundamental principles such as general precautions against capsizing (criteria regarding metacentric height (GM) and righting lever (GZ)); weather criterion (severe wind and rolling criterion); effect of free surfaces and icing; and watertight integrity. The IS Code also addressed related operational aspects like information for the master, including stability and operating booklets and operational procedures in heavy weather.

In 2008, the Maritime Safety Committee, at its eighty-fifth session, adopted the International Code on Intact Stability, 2008 (2008 IS Code), following extensive considerations by the SLF Sub-Committee and taking into account technical developments, to update the 1993 Intact Stability Code. MSC 85 also adopted amendments to the SOLAS Convention and to the 1988 Load Lines Protocol to make the 2008 IS Code mandatory, which entered into force on 1 July 2010. The 2008 IS Code provides, in a single document, both mandatory requirements and recommended provisions relating to intact stability that will significantly influence the design and the overall safety of ships.

Safety regulations for different types of ships

While there are no universally applicable definitions of ship types, specific descriptions and names are used within IMO treaties and conventions. The following is a non-exhaustive list ship types defined in various IMO instruments:

A passenger ship is a ship which carries more than twelve passengers. (SOLAS I/2)

A fishing vessel is a vessel used for catching fish, whales, seals, walrus or other living resources of the sea. (SOLAS I/2)

Fishing vessel means any vessel used commercially for catching fish, whales, seals, walrus or other living resources of the sea. (SFV 1993 article 2)

A nuclear ship is a ship provided with a nuclear power plant. (SOLAS I/2)

Bulk carrier means a ship which is constructed generally with single deck, top-side tanks and hopper side tanks in cargo spaces, and is intended primarily to carry dry cargo in bulk, and includes such types as ore carriers and combination carriers. (SOLAS IX/1.6)

Bulk carrier means a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers and combination carriers. (SOLAS XII/1.1)

Oil tanker means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers, any "NLS tanker" as defined in Annex II of the present Convention and any gas carrier as defined in regulation 3.20 of chapter II-1 of SOLAS 74 (as amended), when carrying a cargo or part cargo of oil in bulk. (MARPOL Annex I reg. 1.5)

General cargo ship: A ship with a multi-deck or single-deck hull designed primarily for the carriage of general cargo. (MEPC.1/Circ.681 Annex)

High-speed craft is a craft capable of a maximum speed, in metres per second (m/s), equal to or exceeding 3.7 times the one-sixth power of the volume of displacement corresponding to the design waterline ($m^3$), excluding craft the hull of which is supported completely clear above the water surface in non-displacement mode by aerodynamic forces generated by ground effect. (SOLAS X/1.2, HSC Code 2000 para 1.4.30)

Mobile offshore drilling unit (MODU) means a vessel capable of engaging in drilling operations for the exploration for or exploitation of resources beneath the sea-bed such as liquid or gaseous hydrocarbons, sulphur or salt. (SOLAS IX/1, MODU Code 2009 para 1.3.40)

Special purpose ship (SPS) means a mechanically self-propelled ship which by reason of its function carries on board more than 12 special personnel. (SPS Code para 1.3.12)

Other Safety Topics

The safety of life at sea has been a matter of concern to IMO since its inception, and in this time many regulations and conventions have been adopted to improve operational safety conditions.

One way of ensuring that action is taken before a disaster occurs is the use a process known as formal safety assessment.

This has been described as "a rational and systematic process for assessing the risks associated with shipping activity and for evaluating the costs and benefits of IMO's options for reducing these risks."

Passenger ships - usually defined as a ship carrying more than 12 passengers - on international voyages must comply with all relevant IMO regulations, including those in the SOLAS and Load Lines Conventions.

Passenger ships in operation today are subject to a vast array of regulations and standards covering every aspect of ship construction and operation. A number of incidents over the years have led to improvements in safety requirements, including those relating to fire safety measures - such as escape routes and fire protections systems for the large atrium typical of cruise ships - and life-saving appliances and arrangements.

Regulations governing the carriage of chemicals by ship are contained in the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of Marine Pollution from Ships, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

The regulations cover chemicals carried in bulk, on chemical tankers, and chemicals carried in packaged form.

Pilots with local knowledge have been employed on board ships for centuries to guide vessels into or out of port safely - or wherever navigation may be considered hazardous, particularly when a shipmaster is unfamiliar with the area.

In addition to local knowledge and expertise, pilots are able to provide effective communication with the shore and with tugs, often in the local language.

Qualified pilots are usually employed by the local port or maritime administration and provide their services to ships for a fee, calculated in relation to the ship's tonnage, draught or other criteria.

## Maritime Security and Piracy

The IMO has, as an integral part of its mandate, the duty to make travel and transport by sea as safe as possible.

A comprehensive mandatory security regime for international shipping entered into force on 1 July 2004 and included a number of amendments to the 1974 Safety of Life at Sea Convention (SOLAS), the most far-reaching of which enshrined the **International Ship and Port Facility Security Code (ISPS Code)**, which contains detailed security-related requirements for Governments, port authorities and shipping

companies in a mandatory section (Part A), together with a series of guidelines about how to meet these requirements in a second, non-mandatory section (Part B).

The purpose of these maritime security measures is to:

establish an international framework involving co-operation between Contracting Governments, Government agencies, local administrations and the shipping and port industries to detect/assess security threats and take preventive measures against security incidents affecting ships or port facilities used in international trade;

to establish the respective roles and responsibilities of all parties concerned, at the national and international level, for ensuring maritime security;

to ensure the early and efficient collation and exchange of security-related information;

to provide a methodology for security assessments so as to have in place plans and procedures to react to changing security levels; and

to ensure confidence that adequate and proportionate maritime security measures are in place.

The objectives are to be achieved by the designation of appropriate officers/personnel on each ship, in each port facility and in each shipping company to prepare and to put into effect the security plans.

IMO works with Member Governments and the maritime industry, to suppress piracy and armed robbery against ships and has demonstrated considerable success, particularly in the Asia Pacific Region. Most recently the Organization has focused efforts on working collaboratively to counter piracy in waters impacted by Somalia-based piracy.

To support the mandate the IMO has a small team of staff supported by specialist consultants who provide advice and guidance to Member States and the maritime industry.

IMO supports the Save Our Seafarers campaign

Maritime Security

Maritime Security Section provides advice and guidance to Member Governments on matters relating to:

the **International Convention for the Safety of Life at Sea (SOLAS), 1974**;

the **International Ship and Port Facility Security Code (ISPS Code)**;

the **Suppression of Unlawful Acts Against the Safety of Maritime Navigation 1988 (SUA Convention, including the 1988 and 2005 Protocols)**;

**Long-Range Identification and Tracking (LRIT) system**;

In 2011, the IMO published a Guide to Maritime Security and the ISPS Code to assist Member Governments with the implementation of the International Ship and Port Facility Security Code (ISPS Code).

In 2012, under the IMO's Global Maritime Security Integrated Technical Co-operation Programme (ITCP), Maritime Security Section (MSS) developed and implemented a comprehensive global technical cooperation programme in support of the Guide, which focuses on assisting States in the implementation, verification, compliance with, and enforcement of, the provisions of the IMO maritime security measures, including SOLAS chapter XI-2 and the ISPS Code, counter-piracy, SUA and LRIT.

MSS developed a complementary series of national and regional workshops, and last year (2012) successfully delivered 24 activities and eight sub-activities, making maritime security one of the largest capacity building programmes in the Organization.

Piracy and armed robbery against ships

Piracy is a worldwide issue, but the deteriorating security situation in the seas off Somalia, the Gulf of Aden and the wider Western Indian Ocean between 2005 and 2012 and in the increasing number of attacks in the Gulf of Guinea are a major problem.

The depth of concern for the problem internationally is amply demonstrated by the levels of co-operation and coordination among naval and other forces from several countries that have assembled in the west Indian Ocean region and the Gulf of Aden to escort ships carrying humanitarian aid to Somalia and to protect vulnerable shipping. Notwithstanding this unprecedented effort, the vast sea area in which the pirates now operate makes it difficult to patrol and monitor effectively, particularly with the limited resources available. More resources, in the form of naval vessels and aircraft, are needed and at every opportunity the IMO encourages Member Governments to make greater efforts to provide the additional naval, aerial surveillance and other resources needed through every means possible.

While there can be no doubt that the eventual solution lies in restoring effective governance in Somalia, the International Maritime Organization (IMO) has, in the meantime, taken a leadership role in coordinating efforts to alleviate the problem from the maritime perspective.

Facilitating discussions between industry, member states, security forces, and other UN agencies with an interest in piracy and other maritime-security issues is a key element of the work of the Organization, as is the development of both mandatory instruments and guidance. IMO works to effect solutions in consultation with representatives of Governments, through the London diplomatic community; with other UN organizations (the United Nations Office on Drugs and Crime (UNODC) and the World Food Programme); naval and military personnel; the shipping industry; seafarers and other concerned entities and individuals.

Defintion

The following definition of piracy is contained in article 101 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS):

"Piracy consists of any of the following acts:

(a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:

(i) on the high seas, against another ship or aircraft, or against persons or property on board such ship

or aircraft;

(ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;

(b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;

(c) any act inciting or of intentionally facilitating an act described in sub-paragraph (a) or (b)."

Initiatives to counter piracy and armed robbery at sea

IMO is implementing an anti-piracy project, a long-term project which began in 1998. Phase one consisted of a number of regional seminars and workshops attended by Government representatives from countries in piracy-infested areas of the world; while phase two consisted of a number of evaluation and assessment missions to different regions. IMO's aim has been to foster the development of regional agreements on implementation of counter piracy measures.

Regional cooperation among States has an important role to play in solving the problem of piracy and armed robbery against ships, as evidenced by the success of the regional anti-piracy operation in the Straits of Malacca and Singapore. The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against ships in Asia (RECAAP), which was concluded in November 2004 by 16 countries in Asia,

and includes the RECAAP Information Sharing Centre (ISC) for facilitating the sharing of piracy-related information, is a good example of successful regional cooperation which IMO seeks to replicate elsewhere.

IMO Guidance and reports

To assist in anti-piracy measures, IMO issues reports on piracy and armed robbery against ships submitted by Member Governments and international organizations. The reports, which include names and descriptions of ships attacked, position and time of attack, consequences to the crew, ship or cargo and actions taken by the crew and coastal authorities, are now circulated monthly, with annual summaries.

The IMO action plan places an emphasis on improving IMO guidelines to Administrations and seafarers and promoting compliance with recommended preventive, evasive and defensive measures. The IMO's Maritime Safety Committee (MSC) continues to stress the importance of self-protection as a deterrent to successful piracy attacks.

The MSC adopted a resolution in May 2011 on the Implementation of Best Management Practice guidance, which recognizes the urgent need for merchant shipping to take every possible measure to protect itself from pirate attack and that effective self-protection is the best defense. The resolution strongly urges all those concerned to take action to ensure that, as a minimum, ships' masters receive updated information before and during sailing through the defined High Risk Area ships register with the Maritime Security Centre Horn of Africa (MSCHOA) and report to United Kingdom Maritime Trade Operations (UKMTO) Dubai, and that ships effectively implement all recommended preventive, evasive and defensive measures.

The MSC also agreed Guidelines to assist in the investigation of the crimes of piracy and armed robbery against ships, which are intended to be used in conjunction with the existing IMO-developed Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery against Ships, to assist investigators to collect evidence in support of prosecutions.

Advice and Guidance to Governments, shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships

It is the responsibility of the coastal State/port State to develop action plans detailing how to prevent acts of piracy or armed robbery against ships.

To assist governments , shipowners and ship operators, shipmasters and crews in preventing of these acts the IMO have produced the following recommendations and guidance:

Recommendations to Governments for preventing and suppressing piracy and armed robbery against ships MSC.1/Circ.1333

Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships MSC.1/Circ.1334

Given the recognition of the growing use of privately contracted armed security personnel (PCASP), the MSC also approved recommendations and guidance on the use of PCASP on board ships in the High Risk Area. This guidance was further developed by the Facilitation Committee, and by a special MSC Intersessional Working Group, which produced a suite of guidance for flag States, for port and coastal States, and for ship-owners, ship operators, and shipmasters on the subject.

Assistance & Training

Under IMO's Global Maritime Security Integrated Technical Co-operation Programme (ITCP), we aim to assist member States in the implementation of IMO's maritime security measures which encompass the mandatory provisions set out in SOLAS chapter XI-2 and the ISPS Code, the Convention for the Suppression of Unlawful Acts against Safety of Maritime Navigation (SUA Convention) as well as the various guidance adopted by IMO's Maritime Safety Committee (MSC).

The technical co-operation activities offered to eligible countries vary from workshops and seminars on maritime security to port security needs assessment missions and train-the-trainer programmes.

## Marine Environment

In the overall context of sustainable development, shipping is a very powerful and positive force, making a major contribution to global trade and prosperity in a way that has only a relatively small negative impact on the global environment.

Shipping – which transports 90 per cent of global trade – is, statistically, the least environmentally damaging mode of transport, when its productive value is taken into consideration. The vast quantity of grain required to make the world’s daily bread, for example, could not be transported any other way than by ship. Moreover, set against land-based industry, shipping is a comparatively minor contributor, overall, to marine pollution from human activities.

IMO’s original mandate was principally concerned with maritime safety. However, as the custodian of the 1954 OILPOL Convention, the Organization, soon after it began functioning in 1959, assumed responsibility for pollution issues and subsequently has, over many years, adopted a wide range of measures to prevent and control pollution caused by ships and to mitigate the effects of any damage that may occur as a result of maritime operations and accidents.

These measures have been shown to be successful in reducing vessel-sourced pollution and illustrate the commitment of the Organization and the shipping industry

towards protecting the environment. Of the 51 treaty instruments IMO has adopted so far, 21 are directly environment-related or 23, if the environmental aspects of the Salvage and Wreck Removal Conventions are included.

The Marine Environment Protection Committee (MEPC) is IMO's senior technical body on marine pollution related matters. It is aided in its work by a number of IMO's Sub-Committees.

Pollution Prevention

In **1973**, IMO adopted the **International Convention for the Prevention of Pollution from Ships**, now known universally as MARPOL, which has been amended by the Protocols of 1978 and 1997 and kept updated with relevant amendments. The MARPOL Convention addresses pollution from ships by oil; by noxious liquid substances carried in bulk; harmful substances carried by sea in packaged form; sewage, garbage; and the prevention of air pollution from ships. MARPOL has greatly contributed to a significant decrease in pollution from international shipping and applies to 99% of the world's merchant tonnage.

Other treaties address anti-fouling systems used on ships, the transfer of alien species by ships' ballast water and the environmentally sound recycling of ships. Reductions of pollution generated by ships have been achieved by addressing technical, operational and human element issues and are all the more noteworthy when compared with the significant growth in the world's shipping industry – both in the size of the world fleet and the distances that it travels. IMO is continuously pursuing a pro-active approach to enhance implementation and enforcement, both by flag and port States, including a pro-active action plan to ensure that shore-based reception facilities for ship generated waste keep up with international regulatory requirements.

Pollution Preparedness and Response

Good prevention initiatives can go a long way to reducing the risk of pollution from ships. However, in spite of best efforts, spills will inevitably occur. When this happens, it is necessary to ensure that effective preparedness measures are in place that will ensure a timely and coordinated response to limit the adverse consequences of pollution incidents involving oil and hazardous and noxious substances (HNS).

**The International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC 90)** is the international instrument that provides a framework designed to facilitate international co-operation and mutual assistance in preparing for and responding to major oil pollution incidents and requires States to plan and prepare by developing national systems for pollution response in their respective countries, and by maintaining adequate capacity and resources to address oil pollution emergencies.

The Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) extends this regulatory framework to address pollution incidents involving hazardous and noxious substances, i.e. chemicals.

States which are party to the OPRC Convention and OPRC-HNS Protocol are required to establish a national system for responding to oil and HNS pollution incidents, including a designated national authority, a national operational contact point and a national contingency plan. This needs to be backstopped by a minimum level of response equipment, communications plans, regular training and exercises.

In addition to the requirement for implementing national response systems, the two instruments also promote cooperation amongst Parties through the establishment of bilateral and multilateral agreements to augment national-level response capacity, when needed. Most importantly, OPRC 90 and OPRC-HNS Protocol 2000 provide the mechanism for Parties to request assistance from any other state Party, when faced with a major pollution incident.

There are a number of key benefits for those States acceding to the instruments, notably:

· Access to an international platform for co-operation and mutual assistance in preparing for, and responding to, major HNS pollution incidents and a mechanism for establishing co-operative arrangements with other States Parties.

· A means for urgently accessing relevant technical assistance and response resources in the event of an HNS incident.

· A framework for the development of national and regional capacity to prepare for, and respond to, HNS incidents.

· Participation in a network for the exchange of new research and development information, best practices and practical experiences in HNS response.

Access to training and support for developing the essential preparedness and response structures and legislation, at national and regional levels, through IMO's Integrated Technical Co-operation Programme.

Ballast Water Management

Since the introduction of steel hulled vessels around 120 years ago, water has been used as ballast to stabilize vessels at sea. Ballast water is pumped-in to maintain safe operating conditions throughout a voyage. This practice reduces stress on the hull, provides transverse stability, improves propulsion and maneuverability, and compensates for weight lost due to fuel and water consumption.

While ballast water is essential for safe and efficient modern shipping operations, it may pose serious ecological, economic and health problems due to the multitude of marine species carried in ships' ballast water. These include bacteria, microbes, small invertebrates, eggs, cysts and larvae of various species. The transferred species may survive to establish a reproductive population in the host environment, becoming invasive, out-competing native species and multiplying into pest proportions.

Scientists first recognized the signs of an alien species introduction after a mass occurrence of the Asian phytoplankton algae Odontella (Biddulphia sinensis) in the North Sea in 1903. But it was not until the 1970s that the scientific community began reviewing the problem in detail. In the late 1980s, Canada and Australia were among countries experiencing particular problems with invasive species, and they brought their concerns to the attention of IMO's Marine Environment Protection Committee (MEPC).

The problem of invasive species in ships' ballast water is largely due to the expanded trade and traffic volume over the last few decades and since the volumes of seaborne trade continue to increase the problem may not yet have reached its peak. The effects in many areas of the world have been devastating. Quantitative data show the rate of bio-invasions is continuing to increase at an alarming rate and new areas are being invaded all the time.

The spread of invasive species is now recognized as one of the greatest threats to the ecological and the economic well being of the planet. These species are causing enormous damage to biodiversity and the valuable natural riches of the earth upon which we depend. Direct and indirect health effects are becoming increasingly serious and the damage to environment is often irreversible.

It should be noted, however, that there are hundreds of other serious invasions which have been or are in the process of being recorded around the world.

Global response

Preventing the transfer of invasive species and coordinating a timely and effective response to invasions will require cooperation and collaboration among governments, economic sectors, non-governmental organizations and international treaty organizations and the UN Convention on the Law of the Sea provides the global framework by requiring States to work together "to prevent, reduce and control human caused pollution of the marine environment, including the intentional or accidental introduction of harmful or alien species to a particular part of the marine environment."

IMO has been at the front of the international effort by taking the lead in addressing the transfer of aquatic invasive species (AIS) through shipping. In 1991 the MEPC adopted Guidelines for preventing the introduction of unwanted organisms and pathogens from ships' ballast water and sediment discharges (MEPC resolution

50(31)); while the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, recognized the issue as a major international concern.

In November 1993, the IMO Assembly adopted resolution A.774(18) based on the 1991 Guidelines requesting the MEPC and the MSC to keep the Guidelines under review with a view to developing internationally applicable, legally-binding provisions. While continuing its work towards the development of an international treaty, the Organization adopted, in November 1997, resolution A.868(20) - Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens inviting its Member States to use these new guidelines when addressing the issue of IAS.

After more than 14 years of complex negotiations between IMO Member States, the **International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention)** was adopted by consensus at a Diplomatic Conference held at IMO Headquarters in London on 13 February **2004**. In his opening address to the Conference the Secretary-General of IMO stated that the new Convention will represent a significant step towards protecting the marine environment for this and future generations. "Our duty to our children and their children cannot be over-stated. I am sure we would all wish them to inherit a world with clean, productive, safe and secure seas – and the outcome of this Conference, by staving of an increasingly serious threat, will be essential to ensuring this is so".

The Convention will require all ships to implement a Ballast Water and Sediments Management Plan. All ships will have to carry a Ballast Water Record Book and will be required to carry out ballast water management procedures to a given standard. Parties to the Convention are given the option to take additional measures which are subject to criteria set out in the Convention and to IMO guidelines.

Several articles and regulations of the BWM Convention refer to guidelines to be developed by the Organization and Conference resolution 1 invites IMO to develop these guidelines as a matter of urgency and adopt them as soon as practicable and, in any case, before the entry into force of the Convention, with a view to facilitate global and uniform implementation of the instrument.

The MEPC, at its fifty-first session in April 2004, approved a programme for the development of guidelines and procedures for uniform implementation of the BWM Convention, listed in Conference resolution 1 including additional guidance required but not listed in the resolution. The programme was further expanded at the fifty-third session of the MEPC in July 2005 to develop and adopt 14 sets of Guidelines, the last one being adopted by resolution MEPC.173(58) in October 2008. The Guidelines and other relevant guidance documents can be found here.

Approval of ballast water management systems

During the Convention development process, considerable efforts were made to formulate appropriate standards for ballast water management. They are the ballast water exchange standard and the ballast water performance standard. Ships performing ballast water exchange shall do so with an efficiency of 95 per cent volumetric exchange of ballast water and ships using a ballast water management system (BWMS) shall meet a performance standard based on agreed numbers of organisms per unit of volume.

Regulation D-3 of the BWM Convention requires that ballast water management systems used to comply with the Convention must be approved by the Administration taking into account the Guidelines for approval of ballast water management systems (G8).

Regulation D-3 also requires that ballast water management systems which make use of Active Substances to comply with the Convention shall be approved by IMO in accordance with the 'Procedure for approval of ballast water management systems that make use of Active Substances (G9)'. Procedure (G9) consists of a two-tier process – Basic and Final Approval - to ensure that the ballast water management system does not pose unreasonable risk to the environment, human health, property or resources.

A technical group of experts has been established under the auspices of GESAMP to review the proposals submitted for approval of ballast water management systems that make use of Active Substances. The GESAMP Ballast Water Working Group (GESAMP-BWWG) reports to the Organization on whether such a proposal presents unreasonable risks in accordance with the criteria specified in the Procedure for approval of ballast water management systems that make use of Active Substances. For more detailed information regarding the ballast water treatment technologies please click here.

Periodic reviews

The Convention requires a review to be undertaken no later than three years before the first effective date for compliance with the performance standard set out in regulation D-2 in order to determine whether appropriate technologies are available to achieve the standard.

The first review was conducted at MEPC 53 and the Ballast Water Review Group, established in accordance with the provisions of regulation D-5.2, concluded that the variety of systems being tested on board have the potential to meet the criteria of safety, environmental acceptability and practicability and that, it is reasonable to expect ballast water management technologies and type-approved systems will be available by October 2008.

The second review was conducted at MEPC 55 when the Committee noted that type approved ballast water management systems would probably be available for installation prior to the first application date of the BWM Convention. However, the

Committee remained concerned regarding the capability of all ships subject to regulation B-3.3 of the Convention to meet the D-2 standard in 2009 due to procedural and logistical problems.

Following an initiative of the Secretary-General of IMO to address this concern, the Assembly, at its 25th session, adopted resolution A.1005(25) on the Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004. The Assembly resolution calls on States, which have not yet done so, to ratify, accept, approve or accede to the Convention as soon as possible. In the meantime, the resolution recommends that ships built in 2009 to which regulation B-3.3 applies, should not be required to comply with regulation D-2 until their second annual survey, but no later than 31 December 2011. The Assembly resolution instructs MEPC to keep this provision under review, in particular, to review, not later than at its fifty-eighth session, the issue of a ship subject to regulation B-3.3 constructed in 2010 and the immediate availability of type-approved technology for such a ship to meet the D-2 standard. For the text of the resolution A.1005(25) please click here.

In the subsequent reviews MEPC 58 confirmed that ballast water treatment technologies were currently available and more technologies would be available in the near future and MEPC 59 concluded that there were sufficient type-approved ballast water treatment technologies available for ships, subject to regulation B-3.3, constructed in 2010 and agreed that no changes to Assembly resolution A.1005(25) were needed.

BWM Convention status

The Convention will enter into force 12 months after ratification by 30 States, representing 35 per cent of world merchant shipping tonnage. For the current ratification status please click here Status of Conventions.

The adoption of the last set of Guidelines for the uniform implementation of the BWM Convention and the approval and certification of modern ballast water treatment technologies have removed the last barriers to the ratification of instrument and significant number of countries have indicated their intention to accede to this Convention in the near future.

Anti-fouling systems

The **International Convention on the Control of Harmful Anti-fouling Systems on Ships**, which was adopted on 5 October **2001**, will prohibit the use of harmful organotins in anti-fouling paints used on ships and will establish a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems.. The convention entered into force on 17 September 2008.

Under the terms of the Convention, Parties to the Convention are required to prohibit and/or restrict the use of harmful anti-fouling systems on ships flying their flag, as well as ships not entitled to fly their flag but which operate under their authority and all ships that enter a port, shipyard or offshore terminal of a Party.

Annex I attached to the Convention states that by an effective date of 1 January 2003, all ships shall not apply or re-apply organotins compounds which act as biocides in anti-fouling systems, and by 1 January 2008 (effective date), ships either:

(a) shall not bear such compounds on their hulls or external parts or surfaces; or

(b) shall bear a coating that forms a barrier to such compounds leaching from the underlying non-compliant anti-fouling systems.

This applies to all ships (except fixed and floating platforms, floating storage units (FSUs), and floating production storage and off-loading units (FPSOs) that have been constructed prior to 1 January 2003 and that have not been in dry-dock on or after 1 January 2003.

Ships of above 400 gross tonnage and above engaged in international voyages (excluding fixed or floating platforms, FSUs and FPSOs) will be required to undergo an initial survey before the ship is put into service or before the International Anti-fouling System Certificate is issued for the first time; and a survey when the anti-fouling systems are changed or replaced.

Ships of 24 meters or more in length but less than 400 gross tonnage engaged in international voyages (excluding fixed or floating platforms, FSUs and FPSOs) will have to carry a Declaration on Anti-fouling Systems signed by the owner or authorized agent. The Declaration will have to be accompanied by appropriate documentation such as a paint receipt or contractor invoice.

Anti-fouling systems to be prohibited or controlled will be listed in an annex (Annex 1) to the Convention, which will be updated as and when necessary.

The Convention includes a clause in Article 12 which states that a ship shall be entitled to compensation if it is unduly detained or delayed while undergoing inspection for possible violations of the Convention.

The Convention provides for the establishment of a “technical group”, to include people with relevant expertise, to review proposals for other substances used in anti-fouling systems to be prohibited or restricted. Article 6 on Process for Proposing Amendments to controls on Anti-fouling systems sets out how the evaluation of an anti-fouling system should be carried out.

Resolutions adopted by the Conference

The Conference adopted four resolutions:

Resolution 1 Early and effective application of the Convention – This resolution requests Member States to prepare to be bound by the Convention and urges relevant industries to refrain from marketing, sale and application of the substances controlled by Annex 1 of the Convention.

Resolution 2 Future work of the Organization pertaining to the Convention – The resolution invites IMO to develop guidelines for brief sampling of anti-fouling systems; guidelines for inspection of ships; and guidelines for surveys of ships. The guidelines are needed in order to ensure global and uniform application of the articles of the Convention which require sampling, inspection and surveys.

The following have been developed and adopted:

Guidelines for survey and certification of anti-fouling systems on ships - adopted by resolution MEPC.102(48);

Guidelines for brief sampling of anti-fouling systems on ships - adopted by resolution MEPC.104(49); and

Guidelines for inspection of anti-fouling systems on ships - adopted by resolution MEPC.105(49).

Resolution 3 Approval and Test Methodologies for Anti-Fouling Systems on Ships – This resolution invites States to approve, register or license anti-fouling systems applied in their territories. It also urges States to continue the work, in appropriate international fora, for the harmonization of test methods and performance standards for anti-fouling systems containing biocides.

Resolution 4 Promotion of Technical Co-operation – The resolution requests IMO Member States, in co-operation with IMO, other interested States, competent international or regional organizations and industry programmes, to promote and provide directly, or through IMO, support to States in particular developing States that request technical assistance for:

(a) the assessment of the implications of ratifying, accepting, approving, or acceding to and complying with the Convention;

(b) the development of national legislation to give effect to the Convention; and

(c) the introduction of other measures, including the training of personnel, for the effective implementation and enforcement of the Convention.

It also requests Member States, in co-operation with IMO, other interested States, competent international and regional organisation and industry programmes, to promote co‑operation for scientific and technical research on the effects of anti-fouling systems as well as monitoring these effects.

Recycling of ships

The development of the Hong Kong Convention

The Hong Kong **International Convention for the Safe and Environmentally Sound Recycling of Ships**, **2009 (the Hong Kong Convention)**, was adopted at a diplomatic conference held in Hong Kong, China, from 11 to 15 May 2009, which was attended by delegates from 63 countries.

The Convention is aimed at ensuring that ships, when being recycled after reaching the end of their operational lives, do not pose any unnecessary risks to human health, safety and to the environment.

Hong Kong Convention intends to address all the issues around ship recycling, including the fact that ships sold for scrapping may contain environmentally hazardous substances such as asbestos, heavy metals, hydrocarbons, ozone-depleting substances and others. It also addresses concerns raised about the working and environmental conditions at many of the world's ship recycling locations.

The text of the Hong Kong Convention was developed over three and a half years, with input from IMO Member States and relevant non-governmental organizations, and in co-operation with the International Labour Organization and the Parties to the Basel Convention.

Regulations in the new Convention cover: the design, construction, operation and preparation of ships so as to facilitate safe and environmentally sound recycling without compromising the safety and operational efficiency of ships; the operation of ship recycling facilities in a safe and environmentally sound manner; and the establishment of an appropriate enforcement mechanism for ship recycling, incorporating certification and reporting requirements.

Upon entry into force of the Hong Kong Convention, ships to be sent for recycling will be required to carry an inventory of hazardous materials, which will be specific to each ship. An appendix to the Convention provides a list of hazardous materials the installation or use of which is prohibited or restricted in shipyards, ship repair yards, and ships of Parties to the Convention. Ships will be required to have an initial survey to verify the inventory of hazardous materials, additional surveys during the life of the ship, and a final survey prior to recycling.

Ship recycling yards will be required to provide a "Ship Recycling Plan", specifying the manner in which each ship will be recycled, depending on its particulars and its inventory. Parties will be required to take effective measures to ensure that ship recycling facilities under their jurisdiction comply with the Convention.

The following guidelines have been developed and adopted to assist States in the early implementation of the Convention’s technical standards:

- 2011 Guidelines for the Development of the Inventory of Hazardous Materials, adopted by resolution MEPC.197(62);

- 2011 Guidelines for the Development of the Ship Recycling Plan, adopted by resolution MEPC.196(62);

- 2012 Guidelines for Safe and Environmentally Sound Ship Recycling, adopted by resolution MEPC.210(63); and

- 2012 Guidelines for the Authorization of Ship Recycling Facilities, adopted by resolution MEPC.211(63).

Also two further guidelines have been developed and adopted to assist States in the implementation of the Convention after it enters into force:

- 2012 Guidelines for the survey and certification of ships under the Hong Kong Convention, adopted by resolution MEPC.222(64); and

- 2012 Guidelines for the inspection of ships under the Hong Kong Convention, adopted by resolution MEPC.223(64).

Entry into force criteria

The Convention is open for accession by any State. It will enter into force

24 months after the date on which 15 States, representing 40 per cent of world merchant shipping by gross tonnage, have either signed it without reservation as to ratification, acceptance or approval or have deposited instruments of ratification, acceptance, approval or accession with the Secretary-General. Furthermore, the combined maximum annual ship recycling volume of those States must, during the preceding 10 years, constitute not less than 3 per cent of their combined merchant shipping tonnage. For more detailed information please refer to resolution MEPC.178(59) on the calculation of the recycling capacity for meeting the entry-into-force conditions of the Hong Kong Convention and document MEPC 64/INF.2 on the same topic.

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter

The "**Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972**", the "**London Convention**" for short, is one of the first global conventions to protect the marine environment from human activities and has been in force since 1975. Its objective is to promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter. Currently, 87 States are Parties to this Convention.

In 1996, the "London Protocol" was agreed to further modernize the Convention and, eventually, replace it. Under the Protocol all dumping is prohibited, except for possibly acceptable wastes on the so-called "reverse list". The Protocol entered into force on 24 March 2006 and there are currently 44 Parties to the Protocol.

Please click on the left for links to related issues. Pages include general information for the public and for States interested in becoming Parties to the London Protocol 1996.

Information about the Convention and the Protocol can also be viewed in a Brochure (available in English only for the moment) that contains details on what the London Convention is, what has been achieved, the potential benefits and cost of membership, a shortlist of the current activities under the instruments and their relationship with other international agreements. This brochure is developed for outreach activities to promote membership to the London Protocol.

The Office for the London Convention/Protocol and Ocean Affairs works closely with a number of International Organizations and Industry Associations, these are set out under the "Links and References" link to the left.

Please note that all official documents for meetings under the Convention and Protocol or intercessional meetings of working groups under the instruments can only be accessed by authorized administrations and accredited international organizations. Please navigate to: www.docs.imo.org where you will be required to self-register and login. Then proceed to the London Convention and Protocol section.

What are the Purpose and the Objectives of the London Convention and Protocol?

The objective of the London Convention and Protocol is to promote the effective control of all sources of marine pollution. Contracting Parties shall take effective measures to prevent pollution of the marine environment caused by dumping at sea (see articles I and II of the Convention and article 2 of the Protocol).

The purpose of the London Convention is to control all sources of marine pollution and prevent pollution of the sea through regulation of dumping into the sea of waste materials. A so-called "black- and grey-list" approach is applied for wastes, which can be considered for disposal at sea according to the hazard they present to the environment. For the blacklist items dumping is prohibited. Dumping of the grey-listed materials requires a special permit from a designated national authority under strict control and provided certain conditions are met. All other materials or substances can be dumped after a general permit has been issued.

The purpose of the Protocol is similar to that of the Convention, but the Protocol is more restrictive: application of a "precautionary approach" is included as a general obligation; a "reverse list" approach is adopted, which implies that all dumping is prohibited unless explicitly permitted; incineration of wastes at sea is prohibited; export of wastes for the purpose of dumping or incineration at sea is prohibited.

Extended compliance procedures and technical assistance provisions have been included, while a so-called transitional period allows new Contracting Parties to phase in compliance with the Protocol over a period of five years, provided certain conditions are met.

## Legal Matters

IMO is primarily concerned with the safety of shipping and the prevention of marine pollution, but the Organization has also introduced regulations covering liability and compensation for damage, such as pollution, caused by ships.

The Torrey Canyon disaster of 1967, which led to an intensification of IMO's technical work in preventing pollution, was also the catalyst for work on liability and compensation. An ad hoc Legal Committee was established to deal with the legal issues raised by the world's first major tanker disaster and the Committee soon became a permanent subsidiary organ of the IMO Council, meeting twice a year to deal with any legal issues raised at IMO.

The United Nations Convention on the Law of the Sea covers some issues not regulated under IMO treaty instruments - for example, the jurisdictional power of the coastal State.

### Liability and compensation

The main issues raised by the Torrey Canyon were: who is to be held responsible for damage caused by oil pollution, the basis for determining liability and the level of compensation for damage. There were already well-established procedures for settling claims resulting from, for example, a collision between two ships. Generally speaking, only they are to blame, and only the ships, cargo, and those on board are likely to suffer damage or injury. But a major pollution disaster, like the Torrey Canyon, involves third parties and the damage caused can be enormous. It is important to establish a system which enables liability to be determined and ensures that any compensation due is paid.

In 1969, a conference convened by IMO adopted a convention dealing with the civil liability of the ship or cargo owner for damage suffered as a result of a pollution casualty. The purpose of the International Convention on Civil Liability for Oil Pollution Damage was to ensure that adequate compensation was paid to victims and the liability was placed on the shipowner.

Some delegates to the 1969 Conference felt that the liability limits established were too low, and that the compensation made available in some cases, therefore, might prove to be inadequate. As a result, another conference was convened by IMO in 1971 which resulted in the adoption of a convention establishing the International Fund for

Compensation for Oil Pollution Damage. The Convention came into force in 1978 and the Fund has its headquarters in London. Unlike the Civil Liability Convention, which puts the onus on the shipowner, the Fund is made up of contributions from oil importers. The idea is that if an accident at sea results in pollution damage which exceeds the compensation available under the Civil Liability Convention, the Fund will be available to pay an additional amount, while the burden of compensation will be spread more evenly between shipowner and cargo interest.

The limits of liability in the two conventions were greatly increased through amendments adopted by a conference held in 1992, and again during the Legal Committee's 82nd session held from 16-20 October 2000.

In May 2003, a Diplomatic Conference adopted the 2003 Protocol on the Establishment of a Supplementary Fund for Oil Pollution Damage. The Protocol establishes an International Oil Pollution Compensation Supplementary Fund, the object of which is to provide an additional, third tier of compensation for oil pollution damage. Participation in the Supplementary Fund is optional and is open to all Contracting States to the 1992 Fund Convention. However, those States that do not join will continue to enjoy their present cover under the current CLC/Fund regime.

IMO's success in dealing with pollution compensation has encouraged Member States to refer a number of other legal matters to the Organization.

In 1971 IMO, in association with the International Atomic Energy Agency and the European Nuclear Energy Agency of the Organization for Economic Co-operation and Development, convened a conference which adopted the Convention relating to Civil Liability in the field of Maritime Carriage of Nuclear Material to regulate liability in respect of damage arising from the maritime carriage of nuclear substances.

In 1974, IMO turned its attention to the question of passengers and their luggage and adopted a convention which establishes a regime of liability for damage suffered by passengers carried on seagoing vessels. The Athens Convention relating to the Carriage of Passengers and their Luggage by Sea declares the carrier liable for damage or loss suffered by passengers if the incident is due to the fault or the neglect of the carrier. The limit of liability was set at 46,666 Special drawing Right (SDR) per carriage. In 1990 a Protocol was adopted to the Athens Convention raising the amount of compensation payable. For death or personal injury, for example, the limit was raised to 175,000 SDR. In October 2002 a Diplomatic Conference adopted a 2002 Protocol which totally revised the 1974 Convention, adopting much increased levels of liability, revising the basis of liability and introducing compulsory insurance.

The general question of limitation of liability for maritime claims was dealt with in a convention adopted in 1957, before IMO first met. As time went by, however, it became clear that the limits of liability established were too low and, in 1976, IMO adopted a new convention which raised the limits, in some cases by 300%. The

Convention on Limitation of Liability for Maritime Claims specifies limits for two types of claim - those for loss of life or personal injury and property claims, such as damage to ships, property or harbor works. The compensation limits of this Convention were raised by means of a Protocol adopted in 1996.

In 1996, IMO adopted the HNS Convention, which is based on the highly successful model of the Civil Liability and Fund Conventions. As with the original oil pollution compensation regime, the HNS Convention will establish a two-tier system for compensation to be paid in the event of accidents at sea, in this case, involving hazardous and noxious substances, such as chemicals.

By 2009, the HNS Convention had still not entered into force, due to an insufficient number of ratifications. A second International Conference, held in April 2010, adopted a Protocol to the HNS Convention (2010 HNS Protocol), that was designed to address practical problems that had prevented many States from ratifying the original Convention.

In March 2001, IMO adopted a new International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001, which established a liability and compensation regime for spills of oil, when carried as fuel in ships' bunkers. Previous regimes covering oil spills did not include bunker oil spills from vessels other than tankers. The convention is modeled on the International Convention on Civil Liability for Oil Pollution Damage, 1969.

IMO's Legal Committee adopted a wreck removal convention (WRC) by a Diplomatic Conference held from 14 to 18 May 2007.

## Human Element

The safety and security of life at sea, protection of the marine environment and over 90% of the world's trade depends on the professionalism and competence of seafarers.

The IMO's International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 was the first internationally-agreed Convention to address the issue of minimum standards of competence for seafarers. In 1995 the STCW Convention was completely revised and updated to clarify the standards of competence required and provide effective mechanisms for enforcement of its provisions.

A comprehensive review of the STCW Convention and the STCW Code commenced in January 2006, and culminated in a Conference of Parties to the STCW Convention which was held in Manila, Philippines from 21 to 25 June 2010, that adopted a significant number of amendments to the STCW Convention and STCW Code. These amendments, now referred to as the Manila amendments, that will provide enhanced

standards of training for seafarers now and for years to come, entered into force on 1 January 2012.

In 1997, IMO adopted a resolution setting out its vision, principles and goals for the human element. The human element is a complex multi-dimensional issue that affects maritime safety, security and marine environmental protection involving the entire spectrum of human activities performed by ships' crews, shore based management, regulatory bodies and others. All need to co-operate to address human element issues effectively.

Since the 1980s IMO has increasingly addressed the people involved in shipping in its work. In 1989, IMO adopted Guidelines on management for the safe operation of ships and for pollution prevention - the forerunner of what became the International Safety Management (ISM) Code which was made mandatory through the International Convention for the Safety of Life at Sea, 1974 (SOLAS).

The ISM Code is intended to improve the safety of international shipping and to reduce pollution from ships by impacting on the way ships are managed and operated. The ISM Code establishes an international standard for the safe management and operation of ships and for the implementation of a safety management system (SMS).

Effective implementation of the ISM Code should lead to a move away from a culture of "unthinking" compliance with external rules towards a culture of "thinking" self-regulation of safety - the development of a 'safety culture'. The safety culture involves moving to a culture of self-regulation, with every individual - from the top to the bottom - feeling responsible for actions taken to improve safety and performance. Application of the ISM Code should support and encourage the development of a safety culture in shipping.

In 1995, the IMO Assembly, adopted the Guidelines on implementation of the International Safety Management (ISM) Code by Administrations by resolution A.788(19). These Guidelines were revised and adopted as resolution A.913(22) in 2001. The Guidelines were further revised and adopted as resolution A.1022(26) in 2009 and entered into force on 1 July 2010.

The safety and security of life at sea for fishing vessel personnel are also a matter of concern of IMO which recognizes the need for a response to the safety crisis of the fishing industry and has a number of instruments addressing the issue. One of those instruments are the International Convention for Fishing Vessel Personnel (STCW-F), which was adopted by IMO in 1995, and is expected to bring considerable benefits and advantages to the fishing industry and enhancing the standard of safety in the fishing vessel fleets.

The Convention will apply to crews of sea going vessels, generally of 24 meters in length and above. It was originally intended that requirements for crews on fisihing vessels should be developed as a protocol to the main STCW Convention, but after

careful consideration, it was agreed that it would be better to adopt a completely separate Convention. The Convention is the first attempt to make standards of safety for crews of fishing vessels mandatory internationally and is not yet in force.

Safety management

Development of the **ISM Code**

A number of very serious accidents which occurred during the late 1980's, were manifestly caused by human errors, with management faults also identified as contributing factors.

Lord Justice Sheen in his inquiry into the loss of the Herald of Free Enterprise famously described the management failures as "the disease of sloppiness".

At its 16th Assembly in October 1989, IMO adopted resolution A.647(16), Guidelines on Management for the Safe Operation of Ships and for Pollution Prevention.

The purpose of these Guidelines was to provide those responsible for the operation of ships with a framework for the proper development, implementation and assessment of safety and pollution prevention management in accordance with good practice.

The objective was to ensure safety, to prevent human injury or loss of life, and to avoid damage to the environment, in particular, the marine environment, and to property. The Guidelines were based on general principles and objectives so as to promote evolution of sound management and operating practices within the industry as a whole.

The Guidelines recognized the importance of the existing international instruments as the most important means of preventing maritime casualties and pollution of the sea and included sections on management and the importance of a safety and environmental policy.

After some experience in the use of the Guidelines, in 1993 IMO adopted the International Management Code for the Safe Operation of Ships and for Pollution Prevention (the ISM Code).

In 1998, the ISM Code became mandatory.

The Code establishes safety-management objectives and requires a safety management system (SMS) to be established by "the Company", which is defined as the shipowner or any person, such as the manager or bareboat charterer, who has assumed responsibility for operating the ship.

The Company is then required to establish and implement a policy for achieving these objectives. This includes providing the necessary resources and shore-based support.

Every company is expected "to designate a person or persons ashore having direct access to the highest level of management".

The procedures required by the Code should be documented and compiled in a Safety Management Manual, a copy of which should be kept on board.

Amendments to the ISM Code

The ISM Code was amended in December 2000 by resolution MSC.104(73), and these amendments entered into force on 1 July 2002. It was further amended in December 2004 by resolution MSC.179(79), and these amendments entered into force on 1 July 2006. It was further amended in May 2005 by resolution MSC.195(80), and these amendments entered into force on 1 January 2009. The ISM Code was also amended in December 2008 by resolution MSC.273(85). This resolution was adopted on 1 January 2010, and the amendments entered into force on 1 July 2010.

Development of the Guidelines on implementation of the ISM Code

Recalling resolution A.741(18) by which the Assembly adopted the International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code), IMO adopted on 23 November 1995 resolution A.788(19) on Guidelines on implementation of the International Safety Management (ISM) Code by Administrations.

Noting that the ISM Code was expected, under the provisions of chapter IX of the International Convention for the Safety of Life at Sea (SOLAS), 1974, to become mandatory for companies operating certain types of ships, as from 1 July 1998, and recognizing that an Administration, in establishing that safety standards are being maintained, has a responsibility to ensure that Documents of Compliance have been issued in accordance with the Guidelines, and that there may be a need for Administrations to enter into agreements in respect of issuance of certificates by other Administrations in compliance with chapter IX of the 1974 SOLAS Convention and in accordance with resolution A.741(18), IMO recognized further the need for uniform implementation of the ISM Code.

Having considered the recommendation made by the Maritime Safety Committee at its sixty-fifth session and the Marine Environment Protection Committee at its thirty-seventh session, the Assembly adopted the Guidelines on Implementation of the International Safety Management (ISM) Code by Administrations (resolution A.788(19)).

The resolution urged Governments, when implementing the ISM Code, to adhere to the Guidelines, in particular with regard to the validity of the Document of Compliance and the Safety Management Certificate required by the ISM Code; and also urged Governments to request the companies concerned to apply for certification under the ISM Code as soon as possible but not later than twelve months prior to the ISM Code becoming mandatory for ships belonging thereto; to inform the

Organization of any difficulties they have experienced in using these Guidelines, so that the Maritime Safety Committee and the Marine Environment Protection Committee could keep the annexed Guidelines under review and to amend them as necessary.

These Guidelines established basic principles for verifying that the Safety Management System (SMS) of a Company responsible for the operation of ships or the SMS for the ship or ships controlled by the company complies with the ISM Code; and for the issue and periodical verification of the DOC and SMC. These Guidelines are applicable to Administrations.

Amendments to Guidelines

The Guidelines on implementation of the International Safety Management (ISM) Code by Administrations, resolution A.788(19) were replaced with revised Guidelines, which were adopted by resolution A.913(22) in November 2001 which revoked resolution A.788(19). Further revision of these guidelines resulted in Guidelines on implementation of the International Safety Management (ISM) Code by Administrations adopted by resolution A.1022(26) in December 2001. This resolution revokes resolution A.913(22) with effect from 1 July 2010.

Training and Certification

The International Convention on **Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, as amended**, sets the standards of competence for seafarers internationally.

Amongst its provisions is a requirement for Parties to the Convention to communicate information to IMO on the measures adopted to implement the Convention nationally. That information is subject to scrutiny to ensure that the Convention is being given 'full and complete effect' and, if this is so, the Party features on the "List of confirmed STCW Parties" and "Information related to Reports of Independent Evaluation".

One key STCW Convention provision requires Parties to provide information to allow others to check the validity and authenticity of seafarers' certificates of competency. This is important as unqualified seafarers holding fraudulent certificates of competency are a clear danger to themselves, others on board and the marine environment.

In order to assist with uniform interpretation of the STCW Convention, IMO has agreed a number of clarifications of the Convention's provisions and has also developed further guidance to assist Parties to meet their Convention obligations.

For maritime training institutes worldwide, IMO has also developed a series of model courses which provide suggested syllabi, course timetables and learning objectives to

assist instructors develop training programmes to meet the STCW Convention standards for seafarers.

For those working in the fishing industry, IMO has developed a separate Convention. The International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F), 1995. This Convention sets the standards for certification of fishing vessel personnel on vessels of greater than 24 metres in length and more than 750kW engine power.

Guidance on the training requirements has been developed by IMO, in conjunction with FAO and ILO.

Information Resources on the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

## Facilitation

Traditionally, large numbers of documents are required by customs, immigration, health and other public authorities pertaining to a ship, its crew and passengers, baggage, cargo and mail. Unnecessary paperwork is a problem in most industries, but the potential for red tape is probably greater in shipping than in other industries, because of its international nature and the traditional acceptance of formalities and procedures.

The main objective of the IMO's Convention on **Facilitation of International Maritime Traffic (FAL Convention)**, adopted in **1965**, is to achieve the most efficient maritime transport as possible, looking for smooth transit in ports of ships, cargo and passengers. This efficiency has a clear impact in trade growth, and therefore, in the economy.

The FAL Convention contains "Standards" and "Recommended Practices" on formalities, documentary requirements and procedures which should be applied on arrival, stay and departure to the ship itself, and to its crew, passengers, baggage and cargo.

IMO's Facilitation Committee is working together with Member States to ensure that ships transit from port to port without unnecessary delays by simplifying and reducing paper work and formalities during their stay and departure on international voyages. IMO aims to involve all Member States and the shipping industry, as a whole, to improve and facilitate the smooth passage of ships.

Shipping transit can be easily disrupted by long delays due to security-related incidents (for example stowaways, illegal migrants on board the ship or drug trafficking). Other negative impacts that affect maritime transport include excessive documentation requested at ports of call, long customs procedures and lengthy inspections. Long delays mean extra work for the port and customs authorities, extra

costs for the ship owners and ship operators, pressure for the Masters and crew members who have to deliver the goods on time; cargo loss and even loss of business for ship owners.

The Organization has developed seven standardized forms covering arrival and departure of persons and goods, and is promoting the global use of electronic data interchange (EDI) between ships and ports.

## FAL CONVENTION

History:

The Convention was adopted by the International Conference on Facilitation of Maritime Travel and Transport on 9 April 1965. It entered into force on 5 March 1967. The number of Contracting Governments to the Convention is 115, the combined merchant fleets of which amount to approximately 90.77 % of the world's fleet by tonnage (according to the figures provided by IHS-Fairplay, effective as of 31 December 2010). There are 58 Member States of the IMO which had not yet acceded to the Convention.

Purpose of the Convention:

To facilitate maritime transport by reducing paper work, simplifying formalities, documentary requirements and procedures associated with the arrival, stay and departure of ships engaged on international voyages.

General Contents:

Definitions and general provisions;

Arrival, stay and departure of the ship;

Arrival and departure of persons;

Stowaways;

Arrival, stay and departure of cargo and other articles;

Public health and quarantine, including sanitary measures for animals and plants;

Miscellaneous provisions.

Annex to the Convention

It contains rules for simplifying formalities, documentary requirements and procedures on the arrival and departure of ships and, in particular.

It reduces to nine the number of declarations, which can be required by public authorities. Seven of them were approved by the IMO.

The Annex contains "Standards" and "Recommended Practices" on formalities, documentary requirements and procedures which should be applied on arrival, during their stay, and on departure to the ships, their crews, passengers, baggage and cargo

Appendices to the Convention

Appendix 1 IMO FAL Forms

Appendix 2 Format of a letter referenced to in Standard 3.3.3.1

Appendix 3 Format referred to Recommended Practice 4.6.2

The Manual

An Explanatory Manual to the Convention on Facilitation of International Maritime Traffic, can be found in document FAL.3/Circ.202.

The Manual contains guidance and interpretation of the provisions of the annex of the FAL Convention, assists in interpreting the legal text of the provisions and provides for a greater understanding of the Convention.

# CHAPTER 8: IMO AND THE WORLD.

## Technical Co-operation

IMO adopts international shipping regulations but it is the responsibility of Governments to implement those regulations. IMO has developed an Integrated Technical Co-operation Programme which is designed to assist Governments which lack the technical knowledge and resources that are needed to operate a shipping industry safely and efficiently.

Mission Statement of IMO's Integrated Technical Co-operation Programme

To help developing countries improve their ability to comply with international rules and standards relating to maritime safety and the prevention and control of maritime pollution, giving priority to technical assistance programmes that focus on human resources development and institutional capacity-building.

Support for the United Nations Millennium Declaration

The IMO Assembly at its 24th session in November-December 2005 adopted resolution A.986(24) on “The Importance and Funding of Technical Co-operation as a Means to Support the United Nations Millennium Declaration and Development Goals”. The emphasis for the technical co-operation activities is placed on meeting the special assistance needs of Africa.

The resolution notes that one of the effects of the Voluntary IMO Member State Audit Scheme will be an increase in demand for technical co operation, resulting from the specific needs of Member States that, either before or after a voluntary audit, may wish to apply for technical co-operation from IMO to improve their own performance.

The resolution also sets out funding arrangements for the Technical Co-operation Fund and reaffirms that technical co-operation is an essential part of the Organization's work to achieve the global ratification and implementation of IMO's instruments and to implement successfully the Voluntary Audit Scheme.

At its 25th session in November 2007, the Assembly, having considered the recommendations of the fifty‑sixth and fifty-seventh sessions of the Technical Co-operation Committee adopted resolution A.1006(25) on "The Linkage between the Integrated Technical Co-operation Programme and the Millennium Development Goals", this resolution, inter alia:

INVITED Member States and donor organizations to recognize the importance of building maritime capacity in achieving the MDGs and to ensure that consideration is given to the inclusion of the maritime sector in Official Development Assistance (ODA) programmes;

INVITED Member States to voluntarily utilize the Maritime Capacity Checklist, and the Maritime Capacity Analysis tool, to analyze and assess the levels of maritime capacity progress in developing maritime capacity over time;

REQUESTED the Technical Co-operation Committee to give high priority to those activities, which not only promote the early ratification and effective implementation of IMO instruments but also contribute to the attainment of the MDGs, taking into account the special needs of the LDCs and SIDS, and the particular maritime transport needs of Africa, and ensure that these needs are reflected in the ITCP; and

ENCOURAGED all IMO Member States and international organizations concerned to provide and, as the case may be, increase their financial and in-kind support for the delivery of the ITCP individually and through bilateral and multilateral development aid programmes.

Integrated Technical Co-operation Programme (ITCP)

Rationale and mandate for IMO's Integrated Technical Co-operation Programme

Maritime transport is essential to the world's economy as over 90% of the world's trade is carried by sea and it is, by far, the most cost-effective way to move en masse goods and raw materials around the world. IMO is the United Nations (UN) system's regulatory agency for the maritime sector and its global mandate is "safe, secure, environmentally sound, efficient and sustainable shipping through cooperation". IMO

pursues that mandate by adopting the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships, as well as through consideration of the related legal matters and effective implementation of IMO's instruments with a view to their universal and uniform application.

IMO's rules and standards are accepted by Governments and enforced by them in the exercise of flag, port and coastal State jurisdiction because they provide a single, universal framework governing maritime operations and ensure the efficient, safe and environmentally friendly carriage of global trade.

However, many developing countries cannot yet give full and complete effect to IMO's instruments. For this reason and, as mandated by the Convention that created IMO, the Organization has established an Integrated Technical Co-operation Programme (ITCP), with the sole purpose of assisting countries in building up their human and institutional capacities for uniform and effective compliance with the Organization's regulatory framework.

By fostering capacity-building in the maritime sector, the ITCP is crucial for assisting developing countries to implement IMO instruments for safer and more secure shipping, enhanced environmental protection and facilitation of international maritime traffic. The importance of the ITCP increases further with amendments to existing and the development of new instruments by IMO, in which the particular needs of, and impact on, Small Island Developing States (SIDS) and Least Developed Countries (LDCs) are taken into account.

The table below illustrates how the ITCP contributes to sustainable and socio-economic development.

| ROLE OF IMO'S TECHNICAL CO-OPERATION WORK IN PROMOTING SUSTAINABLE AND SOCIO-ECONOMIC DEVELOPMENT | |
|---|---|
| ACTION | IMPACT |
| IMPROVING THE SAFETY, SECURITY, ENVIRONMENTAL SOUNDNESS AND EFFICIENCY OF MARITIME ACTIVITIES | well-run merchant and fishing fleets<br>improved turnaround of vessels and port throughput<br>increased global trade<br>improved balance of payments<br>reduced number of lives and ships lost at sea |
| ENHANCING MARINE ENVIRONMENT PROTECTION | cleaner waters and coasts<br>increased tourism<br>greater access to protein through improved fish catches<br>integrated coastal zone management |
| PROMOTING SUSTAINABLE LIVELIHOODS AND POVERTY ERADICATION | employment for seafarers in the global shipping and fisheries industries<br>advancement of women in the maritime sector |

| | |
|---|---|
| | increased foreign exchange earnings<br>consequent beneficial impact at local level, especially in coastal/fishing communities |

Vision and Strategy of the ITCP

IMO's technical co-operation programme began in the 1960s. During the late 1990s, IMO's Technical Co-operation Committee (TCC) comprehensively reformed the technical co-operation work of the Organization in order to increase its effectiveness. The reform provided a policy framework for the preparation, design and implementation of the ITCP, covering the following key principles:

ownership of the programme development and implementation process rests with the recipient countries themselves;

IMO's regulatory priorities are systematically integrated into the programme-building process;

the ITCP promotes the development of human and institutional resources in the maritime sector, on a sustainable basis, including the advancement of women;

the ITCP promotes regional collaboration and technical co-operation among developing countries;

IMO builds partnerships with Governments, industry and international development aid agencies to ensure appropriate funding for the ITCP;

IMO also seeks to mobilize regional expertise and resources for its technical assistance activities;

the ITCP is coordinated with other development aid programmes in the maritime field in order to maximize the benefits of combined efforts and resources; and

IMO ensures, through monitoring systems and impact assessment exercises, that programme targets are met and that lessons learned are transferred back to the programme-building process.

The Organization's strategic plan for the six-year period 2012-2017 identifies strategic directions for enabling IMO to achieve its mission objectives in the years ahead. One of these strategic directions requests IMO to strengthen its capacity-building programmes with a focus on:

developing capacity-building partnerships with governments, organizations and industry;

ensuring the long-term sustainability of the ITCP;

contributing to the achievement of the Millennium Development Goals (MDGs);

meeting the needs of its developing Member States; and

improving the delivery, utilization and effectiveness of its technical co-operation programmes.

Sustainable Maritime Development

Following the 2005 World Summit which endorsed and re-affirmed the MDGs, the Organization has established a linkage between the ITCP and the MDGs. Through this linkage, the ITCP gives priority to those activities which not only promote early ratification and effective implementation of IMO instruments but also contribute to the attainment of the MDGs, taking into account the special needs of Least Developed Countries (LDCs) and the Small Island Developing States (SIDS), and the particular maritime transport needs of Africa.

As a result of Rio+20, the United Nations is taking an initiative to set Sustainable Development Goals (SDGs) which will eventually supersede and go beyond the MDGs. IMO will need to develop SDGs for shipping and maritime industries as IMO's contribution to the efforts of the United Nations, and will focus on the following seven pillars:

energy efficiency reducing CO2 emissions from ships;

new technology and innovation;

maritime education and training;

maritime security and anti-piracy actions;

maritime traffic management;

maritime infrastructure development; and

adoption and implementation of global standards by IMO.

To establish a sustainable maritime transportation sector, coordinated and integrated approach to maritime policy at both national and international levels are required. IMO's role, including its contribution in capacity-building, to move towards sustainable maritime development, needs to be explored.

# EPILOGUE & REFERENCES.

## Epilogue

Thanks to IMO's conventions, codes, regulations and guidelines and thanks to the acceptance of them from the governments, but also due to their cooperation and the local rules they provide shipping is becoming more and more safer not only for people but also for the environment and the investments. I would like to give my gratitude to my professor Ms. Tsakiri Afentoula for allowing me to pick this project, Ms. Papaleonida Paraskevi who helped my throughout the whole process, and finally to all of my professors and Captains who provided me with the adequate knowledge about maritime issues.

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