

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH)

INTRODUCTION TO MARITIME LAW FOR PORT OFFICIALS

**COMPILED BY THE
LEGAL COMMITTEE OF IAPH**



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I PREFACE

It was during the 2005 Shanghai Conference of the International Association of Ports and Harbors (IAPH) that IAPH's Legal Database of Maritime Conventions Relevant for Ports was presented officially. The Legal Database originated from cooperation between Bruno Vergobbi and Jacques Braems, both then working for the Port of Dunkerque, and the Port of Rotterdam. The draft model for the database was discussed during the 2004 Charleston Mid-Term Conference which model was prepared by Ms. Anna Caroline Rioux.

It had to be decided whether the Legal Database should be available in the public domain of www.iaphworldports.org or in the membership area of the website only. After some debate preference was given to the latter because the Legal Database was a positive example of added value for the members of IAPH.

Gradually it appeared that, in addition to the summing up of the conventions, a wider format would be useful. Therefore it was decided that a more general introduction to various subjects of maritime law should be prepared under the auspices of the Legal Committee of IAPH. This resulted in the *Introduction to Maritime Law for Port Officials* which was designed to provide the reader with an introduction to this complex and specialized area of law.

The structure of the first volume was prepared in cooperation with Prof. Frank Smeele of Erasmus University Rotterdam who laid the ground work with chapters on How Ships Are Regulated, Limitation of Liability for Damage Resulting from Ship-Related Accidents and Overview of Maritime Conventions Relevant to Ports. Chapters on more specialised subjects were provided by The International Tribunal on the Law of the Sea, Prof. Gertjan van der Ziel (United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea 2009 (the Rotterdam Rules)) and by Dr. Anthony P. Morrison (the chapter on Places of Refuge for Ships in Distress, Particularly Sensitive Sea Area, and the advice on SOLAS).

Gradually it became clear to the Legal Committee of IAPH that the manual could become an avenue for introducing to port officials new and evolving areas of maritime law. Accordingly a study on Port Regulations (by Prof. Eric van Hooydonk of Portius) and chapters on the Ballast Water Convention and on The Law of Salvage (Dr. Anthony P. Morrison) have been added to the manual. The most recent addition is the chapter on Port Related Insurance which has been prepared by Marcus John of TT Mutual.

It always felt as a privilege to guide the maintaining and further expanding of the *Introduction to Maritime Law for Port Officials* being a useful and relevant tool for those engaged in the important work of ports and harbors.

The law and the international conventions are up to date as at 1 January 2020.

Frans van Zoelen

Chair Legal Committee of IAPH

II INTRODUCTION

Port Authorities from all over the world may encounter various problems in their daily work involving ships that intend to visit their port, ships that are currently in their port and ships that have visited their port in the past.

Although these issues may vary considerably by their nature, there are two aspects which almost all seem to have in common. First, there is almost always an international legal connotation, because the ship, its ownership or crew are foreign. Second there is often also a (complex) legal side to these problems, which must be taken into account and which sets limits to what can be achieved in and by law.

It is hardly surprising that these aspects of internationality and legal complexity present additional complications to Port Authorities who may or may not be qualified lawyers and who may or may not possess the specialised knowledge and experience needed in this area of the law.

This Manual is intended for Port Authority Officials in particular as an orientation. The perspective chosen and the topics selected reflect what is or may be relevant to them and their work. The main aim is to provide the reader with, as the title indicates, an introduction into this rather complex and specialised area of the law. The introduction hopes to give an overview of relevant sources of international maritime law and to provide easy access to these legal sources in combination with the regularly updated legal database on the IAPH-website. Attention also is paid to various subjects which were found relevant for ports and harbors.

It should be noted however that this introduction sticks to the basics and does not go into any subject with great detail. It is not intended to provide legal advice and should not be used as such. Further study into these problems may therefore be required and this handbook cannot take away the need to take legal advice from legal professionals if a serious issue surrounding a ship arises which cannot be resolved in a more amicable way.

III HOW SHIPS ARE REGULATED

1. General

The basic framework for International Maritime Law is given by the 1982 United Nations Convention on the Law of the Sea (UNCLOS).¹ UNCLOS provides the system and structure, the conceptual definitions and distinctions as well the more general principles that apply to the law of the sea. Although UNCLOS is essentially a Treaty between sovereign states that have become a party to it, its basic concepts, rules and principles also exert a strong influence upon the domestic laws of the various member states.

Besides UNCLOS, there are many more international legal instruments which apply to ships and which may be of relevance to Port Authority and Port State officials. Typically these other international legal instruments are of a more specialised nature than UNCLOS and have a more limited application. These other legal instruments may roughly be divided between Public law and Private law Conventions.

Public law generally deals with the internal organization of the state and mechanisms designed for the separation of powers within the State. Furthermore, public law also deals with the legal relations between the State and the private persons (including legal entities such as incorporated business enterprises) subject to its jurisdiction. Ships and shipping as a business are no different in this respect, except that the public law regulations applicable to this sector often originate from international conventions of uniform law.

States tend to regulate the required standards for the safety and navigation of ships and for the behaviour of shipping companies by prescribing all sorts of (mandatory) rules, e.g. technical standards, crew qualifications, traffic rules etc. Through periodical inspections, further investigations, (administrative) detentions and (criminal) prosecutions States may seek to enforce upon ships and shipping companies compliance with the applicable rules.

Examples of Public law Conventions in relation to ships which have been included in this Handbook are the following:

- ◆ LOAD LINES 1966;
- ◆ TONNAGE 1969;
- ◆ COLREGS 1972;
- ◆ SOLAS 1974;
- ◆ MARPOL 73/78;

¹ For a brief description of UNCLOS, see below Chapter VI-1 and the IAPH legal database.

- ◆ STCW, 1978;
- ◆ BALLAST WATER 2004.

Private law generally deals with the legal relations between private persons, again including legal entities such as business enterprises and sometimes even (depending upon the legal system) the State and state bodies themselves. Private law is based upon the principle that within certain boundaries in a free society, a market economy and under the rule of law private individuals enjoy a measure of party autonomy and freedom of action to pursue their interests privately or in co-operation with others in a business venture.

However, where the exercise of this freedom of action by one private party leads to loss or damage being caused to another party, this may result in a civil liability. In that case the law imposes an obligation upon the guilty party to repair the loss or damage of the injured party. Whereas in Public law the relation between the State and its citizen is very much of a “top-down”-nature, in Private law it is presumed in principle that private parties are capable of looking after their own interests and must be treated as equals.

A special feature of maritime law is that over time various international Conventions have been adopted which limit the liability of the ship-owner and other parties involved in the operation of the ship. Examples of Public law Conventions in relation to ships which have been included in this Handbook are the following:

- ◆ LLMC 1976
- ◆ LLMC 1996;
- ◆ SALVAGE 1989;
- ◆ CLC 1992;
- ◆ IFC 1992;
- ◆ HNS 1996;
- ◆ BUNKERS 2001;
- ◆ WRECKS 2007.

2. Regulation of Ships

It is important to note that the various International Conventions mentioned above do not apply automatically or by their own force. In principle it is up to the national states, which are sovereign in international law, to ratify international conventions and to give force of law to these within their jurisdiction and/or to incorporate them into their domestic legislation.

Because states tend to have different interests, policies and priorities in the ratification of international conventions, the number of ratifications and the speed in entry into force may vary

considerably from one convention to the next. This creates also an uneven pattern of ratifications between states which is compounded even further by the fact that over time many conventions have been modified by subsequent protocols which require ratification as well.

A further complicating factor is that international conventions tend to define for themselves when they formally and materially apply and what their preconditions are for entry into force. Usually a certain minimum number of ratifications is required for this. For this reason, some more recent International Conventions included in this Handbook have not yet entered into force, see e.g. HNS 1996.

It follows from the above that it can not (always) be taken for granted that an International Convention actually applies to ships or shipping companies, to the legal relations between States and private persons subject to their jurisdiction or to the legal relations between private persons. Often one of the first problems to be tackled by a maritime lawyer in legal practice is to determine which international conventions and what national law(s) are applicable.

In international law ships are regulated in two concurrent ways. First and foremost, a ship is regulated by the State of which it has the nationality and of which it flies the flag (Flag-State Control). At the same time however, ships are also subject to the legal regime(s) imposed by the State(s) in which their port(s) of call are situated (Port-State Control). Whereas the jurisdiction of Flag-States over their ships is of a general nature, the control exercised by Port-States tends to be limited to defined areas of the law.

3. Flag-State Control

Flag-State Control over ships is based upon UNCLOS which provides that States in their laws shall fix the conditions for granting their Nationality and the right to fly their flag and that States shall exercise their jurisdiction and control in administrative, technical and social matters over ships flying their flag.

The basic system of regulating ships works as follows. Firstly a ship must acquire an identity and a nationality. Like human beings, it is a universal custom that ships are given a unique name and have the nationality of a state, which is visualised by the flag flown by the ship.

Second, in order to obtain the nationality and the right to fly the flag, the ship must comply with the relevant requirements of the state in question. This normally implies that the ship must be entered in the ship register of that state. By registration the ship will also acquire a unique IMO Registration Number which will remain with the ship even if it is renamed or “flagged out” to another foreign ship’s register.

Third, a ship which has obtained the nationality and right to fly the flag of a State, becomes subject to the laws and supervision of the flag-state. Under UNCLOS flag-states are responsible for taking measures to ensure safety at sea in conformity with internationally accepted standards e.g. with regard to the seaworthiness of ships, the qualifications and training of crews and the implementation of measures to prevent collisions. The flag-state must also ensure that the ships are surveyed at periodical intervals by qualified ship surveyors and that investigations are made into (major) maritime casualties involving ships flying its flag.

As a result, the ship is required to comply with all shipping regulations adopted by the flag-state and is subject to periodical inspections. If the ship is found to be in order by the flag-state inspectors, this will normally be documented in certificates which must be renewed periodically. If the ship is found not to be in compliance with applicable regulations, then the flag-state will take administrative and enforcement sanctions to enforce compliance with the regulations. There are flag-states who have authorised inspectors from certain private Classification Societies to perform inspections on their behalf.

4. Port-State Control

Although the primary responsibility for regulating ships rests upon the flag-state, various international conventions including UNCLOS and MARPOL 73/78 also provide a legal basis for ship inspections by Coastal State and Port-State officials.

Under international law ships have the right of innocent passage through the territorial waters of a state. This precludes national states from imposing requirements or levying charges on foreign ships which effectively impair or deny this right of innocent passage or which are discriminatory against foreign ships.

However Coastal and Port States may make entry into its coastal waters or ports subject to certain conditions being met. Under international law the right to grant such entry is part of the sovereign powers of Coastal and Port States.

Furthermore, under MARPOL 73/78 port-state officials may inspect foreign ships calling at the port to verify whether a valid MARPOL certificate is on board. If there are clear grounds for believing that the ship's condition is not in conformity with the certificate, port-state officials may effect further inspections on board and even take measures (such as detention) to ensure that the ship poses no hazard to the marine environment.

From the 1970s onwards Port-States have become increasingly concerned with the danger posed by sub-standard ships to maritime safety and the marine environment. In response, port

states around the world have organized themselves in various regional settings each under a so-called “Memorandum of Understanding” (MoU).

A MoU is not a convention between two or more states, but rather a (not formally binding) gentlemen’s agreement between states aimed at harmonizing and co-ordinating their efforts at Port-State Control, such as with regard to applying uniform legal standards and inspection procedures to ships. The first of these MoU’s was the 1982 Paris MoU, which served also as a model for various subsequent MoU’s around the world (for an overview, see below Chapter VI).

IV LIMITATION OF LIABILITY FOR DAMAGE RESULTING FROM SHIP-RELATED ACCIDENTS

What is Limitation of Liability?

Limitation of liability is an exceptional form of protection granted by operation of law to the ship-owner, the salvor and a mixed group of other persons involved in the operation of the ship under various international conventions and/or national law. Limitation of liability is an exception to the general principle of private law that a party who is liable to compensate the damage of another party, must compensate the damage in full.

Relevant international conventions

There are roughly two kinds of limitation conventions, those of general applications and those applicable only to a specific kind of damage.

The general conventions include:

- 1976 Convention on the Limitation of Liability for Maritime Claims (LLMC 1976);¹
- 1996 Protocol to amend LLMC 1976 (LLMC 1996).²

The specific conventions are:

- 1969 Civil liability convention for oil pollution damage³ as amended by 1976 Protocol (CLC 1969);⁴
- 1992 Protocol to amend CLC 1969 (CLC 1992);⁵
- 1992 Protocol to amend 1971 International Fund Convention⁶ (FUND 1992);⁷
- 2003 Supplementary Fund Protocol to FUND 1992;⁸
- 1996 Liability convention for hazardous and noxious substances (HNS);⁹

¹ *Convention on limitation of liability for maritime claims*, London, 19.11.1976. LLMC 1976 entered into force on 1.12.1986 and has 54 contracting states, representing 55.63 % of world tonnage

² *Protocol of 1996 to amend the convention on limitation of liability for maritime claims*, 1976, London, 2.5.1996. LLMC 1996 entered into force on 13.5.2004 and has 52 contracting states representing 58.64% of world tonnage.

³ *Civil liability convention for oil pollution damage* Brussels, 29.11.1969. CLC 1969 entered into force on 19.6.1975 and has 34 contracting states representing 2.414% of world tonnage.

⁴ *Protocol to Civil liability convention for oil pollution damage* Brussels, 29.11.1969. Protocol entered into force on 8.04.81 and has 53 contracting states representing 61.19% of world tonnage.

⁵ *Protocol to Civil liability convention for oil pollution damage* London, 27.11.1992. CLC 1992 entered into force on 30.5.1996 and has 136 contracting states representing 97.43% of world tonnage.

⁶ *International convention on the establishment of an international fund for compensation for oil pollution damage*, London, 18.12.1971 (no longer in force from 24.5.2002)

⁷ *Protocol to International convention on the establishment of an international fund for compensation for oil pollution damage*, London, 27.11.1992. FUND 1992 entered into force on 30.5.1996 and has 114 contracting states representing 94.94% of world tonnage

⁸ *Protocol to the international convention on the establishment of an international fund for compensation for oil pollution damage*, London, 16.5.2003. The Supplementary Fund Protocol 2003 entered into force on 3.3.2005 and has 31 contracting states representing 17.40% of world tonnage.

⁹ *International convention on liability and compensation for damage in connection with the carriage of hazardous and noxious substances by sea*, London, 3.5.1996. Despite 14 ratifications of states representing 13.65% of world tonnage, HNS 1996 has not yet entered into force.

- 2001 Civil liability convention for bunker oil pollution damage (Bunker);¹⁰
- 2007 Wreck Removal Convention (WRC).¹¹

Rationale

The rationale of limitation of liability under the general and the specific limitation conventions is that the ship-owner must be protected against his exposure to extreme liability risks resulting from the operation of the ship, by allowing him to limit his liability to amounts to be calculated by reference to the tonnage of the ship. The specific limitation conventions have an additional rationale which is to ensure that a proper level of compensation is paid to the parties suffering a loss.

Beneficiaries of limitation or immunity

All limitation conventions have in common that besides the ship-owner, also (diverging) groups of other persons involved in the operation of the ship are protected. Two systems are in use. Under the general limitation conventions, the right to limitation of liability is extended to a wider group of persons¹², who are treated in the same way as the ship-owner. In contrast, under the specific limitation conventions all liability and the right to limit is channelled towards the ship-owner and a roughly similar group of persons around the ship-owner is granted immunity from liability.¹³ Below, these groups of persons either entitled to limitation of liability or immune from liability altogether, will be referred to jointly as beneficiaries of limitation or immunity.

Depending on the particular convention the group of beneficiaries of limitation or immunity may include one or more of the following parties:

- the ship-owner¹⁴,
- the salvor¹⁵,
- the operator¹⁶ of the ship,
- the charterer¹⁷ of the ship,
- the manager¹⁸ of the ship,
- their respective agents and servants¹⁹,
- the crew members²⁰ and
- the pilot or any other person, who without being a crew member, performs services for the ship.²¹

¹⁰ *International convention on civil liability for bunker oil pollution damage*, London, 23.3.2001. Bunkers 2001 entered into force on 21.11.2008 and has 83 contracting states representing 92.58% of world tonnage.

¹¹ *International convention on the removal of wrecks*, Nairobi 18.5.2007. WRC 2007 entered into force on 14.4.2015 and has 33 contracting states representing 63.94% of world tonnage.

¹² See art. 1 LLMC.

¹³ See art. III-4 (a) to (f) CLC 1992, art. 7-5 (a) to (f) HNS.

¹⁴ See art. 1-1 LLMC, art. V-1 CLC 1992, art. 9-1 HNS, art. 6 Bunker.

¹⁵ See art. 1-1 LLMC, art. III-4 (d) and (e) CLC, art. 7-5 (d) and (e) HNS, art. 6 Bunker.

¹⁶ See art. 1-2 LLMC, art. III-4 CLC 1992, art. 7-5 (c) HNS, art. 1-3 Bunker.

¹⁷ See art. 1-2 LLMC, art. III-4 (c) CLC 1992, art. 7-5 (c) HNS, art. 6 Bunker.

¹⁸ See art. 1-2 LLMC, art. III-4 (c) CLC 1992, art. 7-5 (c) HNS, art. 1-3 Bunker.

¹⁹ See art. 1-4 and 9-2 LLMC, art. III-4 (a) and (f) CLC 1992, art. 7-5 (a) and (f) HNS, art. 6 Bunker.

²⁰ See art. 1-4 LLMC, art. III-4 (a) CLC 1992, art. 7-5 (a) HNS, art. 6 Bunker.

²¹ See art. 1-4 LLMC, art. III-4 (b) CLC 1992, art. 7-5 (b) HNS, art. 6 Bunker.

Furthermore, if the applicable law allows an action *in rem* against the ship or a direct action (see also below) against the liability underwriters of the ship-owner, then the ship²², respectively the liability underwriters²³ are entitled to invoke limitation of liability as well.

Loss of the right to limit

It is a general principle common to the general and special limitation conventions that the beneficiaries of limitation or immunity lose this protection if it is proven that the damage “resulted from his personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.”²⁴ Under older limitation conventions the right to limit of the ship-owner was understood to be a limit to his vicarious liability as employer for the acts and faults of his servants, not a right to limit for his own faults. Consequently there was no right to limit if “the occurrence giving rise to the claim resulted from the actual fault or privity of the owner”.²⁵ This resulted in many cases in which the right to limit was successfully contested under the 1957 Convention.²⁶ The modern approach, which was first introduced with CLC 1969 and LLMC 1976, aimed to make the limits of liability virtually “unbreakable”.²⁷

Claims subject to limitation

As a general rule, limitation of liability is possible only in relation to liability claims in respect of loss or damage occurring on board or in direct connection with the operation of the ship or with salvage operations.²⁸ The legal basis for the claim whether in contract, tort or otherwise, is generally not relevant²⁹ as long as it is a *civil* liability. Claims based on public law, e.g. a fine based on criminal or administrative law or a tax liability are not subject to limitation of liability under the general or special limitation conventions.

A claim subject to limitation must either fall within the catalogue of claims to which the general conventions apply³⁰ or under the material scope of application of one of the specific conventions.³¹ Whether the claim is brought directly by the injured party itself or indirectly by another party who has compensated this loss and has become subrogated in the claim or who

²² See art. 1-5 LLMC, art. 6 Bunker.

²³ See art. 1-6 LLMC, art. V-11 and art. VII-8 CLC 1992, art. 9-11 and art. 12-8 HNS, art. 6 and art. 7-10 Bunker.

²⁴ See art. 4 LLMC, art. V-2 CLC and art. 9-2 HNS.

²⁵ See art. 1-1 and art. 6-3 1957 Convention, and art. 2 1924 Convention.

²⁶ See e.g. *The Lady Gwendolen* [1965] 1 *Lloyd's Rep.* 335, 335 (CA); *The Marion* [1984] 2 *Lloyd's Rep.* 1.

²⁷ See: F. Berlingieri (ed.), *The Travaux Préparatoires of the LLMC Convention, 1976 and of the Protocol of 1996*, Antwerp, CMI, 2000, p. 123, No. [8].

²⁸ See art. 2-1 LLMC, art. 1-6 CLC 1992, art. 1-6 HNS and art. 1-9 Bunker.

²⁹ See art. 2-1 LLMC “whatever the basis of liability may be”.

³⁰ Pursuant to art. 2-1 LLMC the following claims are subject to limitation: claims in respect of (a) loss of life or personal injury or loss of or damage to property and consequential loss resulting therefrom, (b) loss resulting from delay in the carriage of cargo, passengers or their luggage, (c) other loss resulting from infringements of rights other than contractual rights, (d) and (e) wreck and cargo removal, (f) preventive and loss mitigation measures.

³¹ See art. 1-6 CLC 1992, art. 1-6 HNS and art. 1-9 Bunker.

seeks recourse or indemnification is irrelevant.³² Finally, it needs to be verified whether the particular claim has not been excluded from limitation. This may have been done directly in the relevant limitation convention itself³³ or indirectly by the contracting state if it made a reservation to that effect when it ratified the convention.³⁴

Claim categories and limitation funds

The next step is to determine the applicable limits of liability. This is necessary because modern limitation conventions differentiate the compensation level of claims based on the nature of the damage. Different limitation funds apply to different categories of claims. This differentiation prevents that e.g. personal injury claims must compete with claims for compensation of property damage in the division of the fund. It also allows higher limits to be set for personal injury claims or oil pollution damage as a matter of public policy.

The **LLMC PERSONS FUND** relates to claims for loss of life and personal injury other than claims from passengers.³⁵ Based on a vessel with a gross tonnage³⁶ of e.g. 40,000 m.t., the amount of the persons fund is set at SDR³⁷ 11,491,000 under LLMC 1976 and SDR 30,400,000 under LLMC 1996.³⁸ If the persons fund is insufficient to meet the total quantum of verified claims made against it, the fund will be divided proportionally over each of the claims. The unpaid balance of each of the personal injury claims will then share rateably with the claims made against the General Liability Fund discussed below.³⁹

The **LLMC PASSENGER FUND** applies to claims for loss of life and personal injury from passengers⁴⁰ and is based on the passenger carrying capacity of the ship. The fund amount for a ship authorised to carry 1,000 passengers is SDR 25 million under LLMC 1976 and even SDR 175 million under LLMC 1996.⁴¹

³² See art. 2-2 LLMC.

³³ See art. 3 LLMC, art. XI CLC, art. 4-3 to 4-5, art. 5-1 to 5-5 HNS, art. 4 Bunker. The excluded claims under art. 3 LLMC relate to (a) salvage rewards, special compensation (art. 14 London Salvage Convention) and General Average contributions, (b) claims for oil pollution damage covered by CLC 1969 and amendments, (c) and (d) nuclear damage, (e) claims against the ship-owner or salvor from their servants if precluded by the law applicable to the employment contract. See also art. 15-5 LLMC excluding air-cushion vehicles and floating oil rigs from the application of LLMC.

³⁴ Pursuant to art. 15-2 and 15-3 LLMC contracting states may depart from LLMC in relation to ships intended for inland navigation, ships of less than 300 tons and purely national cases. Furthermore under art. 18 LLMC, a contracting state may upon ratification reserve the right to exclude claims for wreck and cargo removal costs (see art. 2-1 (d) and (e) LLMC). Art. 18 LLMC 1996 allows such reservation also for damage claims covered by HNS 1996 and amendments.

³⁵ See art. 2-1 (a) and art. 6-1 (a) LLMC.

³⁶ See art. 6-5 LLMC which refers for the calculation of the gross tonnage to the International Convention on Tonnage Measurement of Ships, 1969.

³⁷ The abbreviation "SDR" stands for "Special Drawing Right", the unit of account of the International Monetary Fund, see also art. 8 LLMC.

³⁸ See also art 7-1 CNLI

³⁹ See art. 6-2 LLMC.

⁴⁰ See art. 7-1 LLMC. Passenger is defined in art. 7-2 LLMC as a person carried in that ship (a) under a contract of passenger carriage or (b) who, with the carrier's consent, accompanies a vehicle or live animals covered by a contract for the carriage of goods.

⁴¹ The LLMC passenger limits may conflict with the limit of SDR 400,000 per passengers as contained in art. 7 the proposed EU Regulation on the liability of carriers of passengers by sea and inland waterways in the event of accidents, COM (2005) 592 final and 2005/0241 (COD) if it enters into force.

The **LLMC GENERAL LIABILITY FUND** applies to all claims subject to limitation other than personal injury claims.⁴² Based on a vessel with a gross tonnage of e.g. 40,000 m.t., the amount of the general liability fund is set at SDR 6,343,500 under LLMC 1976 and SDR 15.2 million under LLMC 1996. In principle all claims rank equally under the general liability fund, however LLMC allows contracting states to give priority in their national law to claims in relation to harbour works, basins and waterways and navigational aids.⁴³

WRECK AND CARGO REMOVAL CLAIMS. In principle the application of the LLMC General Liability Fund extends also to claims for wreck and cargo removal.⁴⁴ This fact is recognized by the 2007 Wreck Removal Convention, which in art. 10-2 WRC expressly states that the WRC shall not affect any right of the ship-owner to limit liability under any applicable national or international regime such as the LLMC. However, art. 18 LLMC allows contracting states to reserve the right to exclude claims for wreck and cargo removal from limitation under LLMC. Several European states such as Belgium, France, Germany, Japan, The Netherlands and the United Kingdom have made this reservation of art. 18 LLMC. In that case it is up to the contracting state to decide for itself whether to allow limitation of liability for such claims under a separate wreck and cargo removal fund⁴⁵ or not at all.⁴⁶

OIL POLLUTION DAMAGE NOT COVERED BY CLC. In principle the application of the LLMC General Liability Fund extends also to claims for oil pollution damage not covered by CLC such as bunker oil spills from non-tanker vessels.⁴⁷ Art. 6-1 Bunkers 2001 clarifies that that convention does not affect any right of the ship-owner to limit liability under any applicable national or international regime such as LLMC.

The LLMC SALVOR'S FUNDS. The abovementioned LLMC-limits apply in principle also to liability claims against a salvor operating from his own ship. However if the salvor operates from no ship at all or solely from the ship to be salvaged, then the applicable limits are based on a fictional ship with a gross tonnage of just 1,500 m.t.⁴⁸

⁴² See art. 6-1 (b) LLMC.

⁴³ See art. 6-3 LLMC.

⁴⁴ See art. 6-1 (b) and art. 2-1 (d) and (e) LLMC.

⁴⁵ This option was used by Germany, Belgium and The Netherlands which states allow under § 487 HGB (German Commercial Code), art. 18-1 Wrakkenwet (Belgian Wreckages Act), resp. art. 8:755-1 (c) BW (Dutch Civil Code) limitation for wreck and cargo removal claims under a separate fund. Based upon a vessel with a gross tonnage of 40,000 m.t. the amount of the wreck and cargo removal fund is SDR 15.2 million (Germany), € 8,767,500 (Belgium), SDR 6,414,500 (Netherlands).

⁴⁶ This option has been used by the United Kingdom and France which states do not allow limitation of liability for wreck and cargo removal claims.

⁴⁷ Claims for oil pollution damage resulting from a bunker oil spill from a non-tanker sea-going vessel are subject to limitation under art. 2-1 (a) or (c) LLMC and are not excluded in art. 3 (b) LLMC which excludes only claims for oil pollution damage covered by CLC are excluded from the scope of application of the LLMC. As follows from art. I-5 CLC 1992 only oil pollution damage as a result of bunker fuel escaping from tanker vessels is covered by CLC and not bunker fuel escaping from other vessels.

⁴⁸ See art. 6-4 LLMC. As a result the persons fund is then set at SDR 833,000 (LLMC 1976) and SDR 2 million (LLMC 1996) whereas the salvor's general liability fund amounts to SDR 595,000 (LLMC 1976) and SDR 1 million (LLMC 1996).

The **OIL POLLUTION FUNDS**. For oil pollution damage caused within the jurisdiction⁴⁹ of contracting States a three tier limitation and compensation system has developed. CLC 1992 applies to the first tier, Fund 1992 to the second tier and the Supplementary Fund Protocol 2003 to the third tier of compensation. Whereas the CLC Fund is paid for by the ship-owner, the IFC Fund and the Supplementary Fund are paid for by the oil industry on the basis of contributions levied by the IOPC Fund.⁵⁰

- The **CLC FUND**. The first tier of compensation is to be provided by the ship-owner who can limit his liability by creating a limitation fund based on the gross tonnage of the ship, which cannot exceed SDR 89.7 million.⁵¹
- THE **FUND 1992**. In cases where a claimant has been unable to obtain compensation of oil pollution damage because the ship-owner is not liable under CLC for the oil pollution damage, or because the ship-owner is financially incapable to meet his obligations or because the total damage amount of all claimants exceeds the level of compensation provided by the first tier⁵², the International Oil Pollution Convention (IOPC) Fund will⁵³ pay compensation up to an overall level of SDR 203 million.⁵⁴
- The **SUPPLEMENTARY FUND**. In cases where a claimant has been unable to obtain full and adequate compensation of oil pollution damage because the total amount of this damage exceeds the applicable limits under the CLC and IFC Funds, then the Supplementary Fund will provide additional compensation. However this additional compensation is limited so that the total sum payable in respect of any one incident under CLC, IFC and Supplementary Fund may not exceed SDR 750 million.⁵⁵

The **HNS FUNDS**. Although HNS 1996 may well be superseded by a Protocol to amend it before ever entering into force⁵⁶, a brief look at the HNS-regime is included in this overview of the various limitation regimes in relation to different kinds of claims. HNS provides a two tier

⁴⁹ Under art. II CLC 1992, this convention applies to pollution damage caused (a) in the territory, including the territorial sea or (b) in the exclusive economic zone of a contracting state, and further to preventive measures wherever taken to prevent such damage.

⁵⁰ See art. 10-1 IFC 1992 and art. 10-1 Supplementary Fund Protocol 2003 which impose a duty to contribute to the IFC and Supplementary funds on any person who within a calendar year has received over 150,000 m.t. of oil in ports or terminal installations on the territory of a contracting state.

⁵¹ See art. V-1 CLC 1992 as amended by the Legal Committee of the United Nations International Maritime Organization (IMO) in its first resolution dated 18 October 2000. Based on a ship with a gross tonnage of 40,000 m.t., the applicable limit is SDR 26,595,000.

⁵² See art. 4-1 IFC 1992

⁵³ The only exceptions to the obligation of the IOPC Fund to compensate oil pollution damage covered by the CLC 1992 and IFC 1992 are given in art. 4-2 and 4-3 IFC 1992.

⁵⁴ See art. 4-4 (a) and (b) IFC 1992 as amended by the Legal Committee of IMO in its second resolution of 18 October 2000.

⁵⁵ See art. 4-2 Supplementary Fund Protocol to IFC 1992.

⁵⁶ At the 95th session of the IMO Legal Committee early April 2009 a draft proposal to amend HNS 1996 was adopted. If in June 2009 the IMO Council approves, a diplomatic conference could be convened to consider the protocol in 2010.

compensation and limitation system for damage⁵⁷ caused by hazardous and noxious substances (hereafter HND damage)⁵⁸ within the jurisdiction⁵⁹ of contracting States.

- The first tier of compensation for HNS damage is to be provided by the ship-owner who can limit his liability by creating a limitation fund based on the gross tonnage of the ship, which cannot exceed SDR 100 million.⁶⁰
- In cases where a claimant has been unable to obtain compensation of HNS damage because the ship-owner is not liable, or because the ship-owner is financially incapable to meet his obligations or because the total damage amount of all claimants exceeds the level of compensation provided by the first tier⁶¹, the Hazardous and Noxious Substances (HNS) Fund in London will pay⁶² compensation of HNS damage up to an overall level of SDR 250 million (second tier).⁶³

Procedural complications

Whenever the ship-owner or any other beneficiary of limitation seeks to invoke his right to limitation of liability against claims from his creditors, this is likely to give rise to many complications of a procedural nature. To the extent that procedural matters are not regulated in the uniform limitation conventions, it is a general principle that procedural matters are to be decided by the law of the courts seized of the case (the *lex fori*).⁶⁴

One reason for these procedural complications is that limitation of liability may be a key issue in at least three kinds of proceedings taking place simultaneously or in succession of each other. Firstly, court or arbitral proceedings to the merits of the claim (main proceedings) are often inevitable if liability is not admitted or if the claim amount is in dispute. Secondly, court proceedings with regard to the constitution and division of the limitation fund (limitation proceedings) are often needed and thirdly, summary relief proceedings before a court where conservatory and enforcement measures against the ship or other assets were taken, in order to obtain security for a claim subject to limitation (provisional proceedings). Normally, ship's arrests are lifted voluntarily after alternative security was provided by the P&I Club of the ship, but even then an issue may still arise about the return of guarantees after the limitation fund has been constituted.

⁵⁷ In art. 1-6 HNS "damage" is defined as (a) loss of life and personal injury, (b) loss of or damage to property, (c) loss or damage by contamination of the environment (but limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken) and (d) costs of preventive measures or further loss or damage caused by preventive measures. Pursuant to art. 11 HNS claims for death and personal injury have priority over other claims.

⁵⁸ See art. 1-6 and 1-5 HNS.

⁵⁹ Under art. 3 HNS, this convention applies to damage caused by hazardous and noxious substances (a) in the territory, including the territorial sea of a contracting state or (b) in the exclusive economic zone of a contracting state, (c) carried on board of a ship registered in or flying the flag of a contracting state and (d) to preventive measures wherever taken, to prevent or minimize such damage.

⁶⁰ See art. 9-1 HNS. Based on a ship of 40,000 m.t., the applicable limit would be SDR 67 million.

⁶¹ See art. 14-1 and 14-2 HNS.

⁶² The only exceptions to the obligation of the HNS Fund to compensate HNS damage are given in art. 14-3 and 14-4 HNS 1996.

⁶³ See art. 14-5 HNS 1996.

⁶⁴ See art. 14 LLMC.

Jurisdiction

There is no unity of approach between general and specific limitation conventions in relation to jurisdiction with regard to the main proceedings or the limitation proceedings. The general limitation conventions such as LLMC leave the issue of jurisdiction unregulated and leave it therefore to the domestic jurisdiction rules of the court seized⁶⁵ to determine whether it will accept or decline jurisdiction with regard to the proceedings to the merits of a claim or to limitation proceedings.

However the specific limitation conventions do provide jurisdiction grounds, both for the main proceedings to the merits of the claim and for the limitation proceedings. Under the exclusive jurisdiction grounds of CLC 1992, HNS and Bunkers actions for compensation of the relevant kind of damage, may only be brought before the courts of the contracting state on whose territory this damage has occurred.⁶⁶ CLC 1992 and HNS further provide that the ship-owner may constitute a limitation fund with the court or other competent authority of any one of the contracting states where an action for compensation of damages was brought.⁶⁷ If no action is brought, HNS even allows the limitation fund to be constituted in anyone state where an action can be brought.⁶⁸

Invoking the right to limit

Neither is there a unity of approach between the general and specific limitation conventions in relation to the question whether or not the constitution of a limitation fund is a condition precedent to the right to invoke limitation of liability. Art. 10-1 LLMC⁶⁹ states quite categorically that “limitation may be invoked notwithstanding that a limitation fund as mentioned in Article 11 has not been constituted”, whereas art. V-3 CLC 1992 and art. 9-1 HNS provide that the ship-owner who wishes to avail himself of the benefit of limitation must constitute a fund. In the same vein, the second sentence of art. 10-1 LLMC permits a contracting state to provide in its national law that a beneficiary of limitation may only invoke the right to limit liability if a limitation fund has been constituted.⁷⁰

⁶⁵ Under the Brussels- I Regulation 44/2001 art. 7 provides a jurisdiction ground for limitation proceedings: “Where by virtue of this Regulation a court of a Member State has jurisdiction in actions relating to liability from the use or operation of a ship, that court, or any other court substituted for this purpose by the internal law of that Member State, shall also have jurisdiction over claims for limitation of such liability.” See also art. 6-bis Lugano Convention 1988.

⁶⁶ See art. 9-1 CLC, art. 38-1 and -2 HNS and art. 9-1 Bunker. See also art. 38-2 HNS which provides several alternative grounds of jurisdiction for HNS damage which occurs on the High Seas, outside the territory of any state.

⁶⁷ See art. V-3 CLC 1992 and art. 9-3 HNS.

⁶⁸ See art. 9-3 HNS.

⁶⁹ See art 10-1 LLMC

⁷⁰ As follows from the answers received to the CMI-Questionnaire, this option has been used by Germany, Mexico, The Netherlands, Slovenia and Venezuela, whereas Australia, Belgium, Chile, Denmark, France, Greece, Ireland, New Zealand, Norway and Sweden a fund allow limitation of liability to be invoked even if no limitation fund has been constituted yet, see: F. Berlingieri and G. Timagenis, ‘Analysis of the Responses to the Questionnaire’, *CMI Yearbook* 2005-2006, p. 304-305.

Limitation proceedings

Although it is possible in limitation cases that there is only one creditor and one debtor, it is more common that there are claims from several parties or even from a multitude of parties arising out of the maritime casualty. Under the specific conventions, these claims must all be directed against the ship-owner, whereas under the general limitation conventions, it may well be that the claim is directed (also) against e.g. the ship's managers, a charterer or even a crew member.

Either way it is a general principle of limitation law that the limitation amount applies to the "aggregate of all claims which arise on any distinct occasion"⁷¹, that once a limitation fund is constituted creditors must direct their claims against the fund and are barred from exercising any rights against other assets of beneficiaries of limitation⁷² and that the fund is to be divided proportionally over the established claims against it.⁷³

It follows that a situation may easily arise where claims from various creditors compete with each other for their or a higher share in the limitation fund. The situation is similar to other court proceedings where a fund whether in money⁷⁴ or in assets⁷⁵, is to be divided over various interested parties or creditors and it seems that many legal systems have modelled their limitation proceedings more or less on their insolvency proceedings or their fund division proceedings.⁷⁶ This implies also that a mechanism for the verification and assessment of claims made against the fund is required.

Arrest immunity

It is a general principle of limitation law that once a limitation fund has been constituted, all creditors with claims subject to limitation, must refrain from securing or enforcing these claims through attachment of any other assets of the beneficiaries of limitation (arrest immunity). Instead these claims must be enforced against the limitation fund.⁷⁷ However, the effectiveness of this principle of arrest immunity under the limitation conventions has always remained somewhat limited because only courts in contracting states to the relevant convention were bound by it.

⁷¹ Art. 9-1 LLMC. See also: art. V-1 CLC 1992, art. 9-1 HNS. A limitation fund constituted by one of the beneficiaries of limitation is to be deemed constituted by all beneficiaries. See art. 11-3 LLMC.

⁷² See: art. 13-1 LLMC, art. VI-1 CLC 1992, art. 10-1 HNS.

⁷³ See art. 12-1 LLMC. See also art. V-4 CLC, art. 9-4 HNS. A few exceptions are made to the general principle of proportional division of the limitation fund over the established claims, see art 11 HNS which allows claims for death and personal injury to take priority over other claims. See also art. 6-3 LLMC which allows states to give priority in their national law to claims in respect of damage to harbour works, basins and waterways and aids to navigation.

⁷⁴ E.g. the sale proceeds of the forced sale.

⁷⁵ E.g. an insolvent's estate.

⁷⁶ For an overview of how various maritime countries have structured their procedural law, see F. Berlingieri and G. Timagenis, 'Analysis of the Responses to the Questionnaire', *CMI Yearbook 2005-2006*, p. 304 ff. and F. Berlingieri and G. Timagenis, 'Digest of the Responses received from Argentina, Australia, Belgium, Chile, China, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Mexico, Netherlands, New Zealand, Norway, Slovenia, Sweden, Venezuela', *CMI Yearbook 2005-2006*, p. 313 ff.

⁷⁷ See art. 13-1 LLMC, art. VI CLC 1992, art. 10 HNS.

Furthermore, particularly in art. 13-2 LLMC, the way that the rules on arrest immunity, lifting of arrests and return of security already given were formulated, was insufficiently imperative and left far too many discretionary powers to the courts asked to give effect to them. In contrast, the rules in art. VI CLC 1992 and art. 10 HNS are of a much better drafting quality because of their imperative nature.

In recent years however, important developments have taken place in European case law, which make clear that the Brussels I Regulation 44/2001 and the Lugano Convention 1988⁷⁸ can be made useful to give greater effect and wider recognition to limitation funds constituted with courts in Europe. The implication of the decision *Maersk Olie & Gas*⁷⁹ of the European Court of Justice is that a limitation fund constituted with a court in a EU member state must in principle be recognized in all other EU member states without further ado, even if that state is not a member to the same limitation convention as the state of the court where the limitation fund was created.

⁷⁸ Convention on jurisdiction and the enforcement of judgments in civil and commercial matters, Lugano 16.9.1988.

⁷⁹ *Maersk Olie & Gas v. Firma M. de Haan and W. de Boer; The Cornelis Simon* ECJ 14.10.2004 (C-39/02), [2005] 1 *Lloyd's Rep.* 210.

V OVERVIEW OF MARITIME CONVENTIONS RELEVANT TO PORTS

EXPLANATORY NOTE ON LEGAL TERMS USED IN THE TREATY-MAKING PROCESS

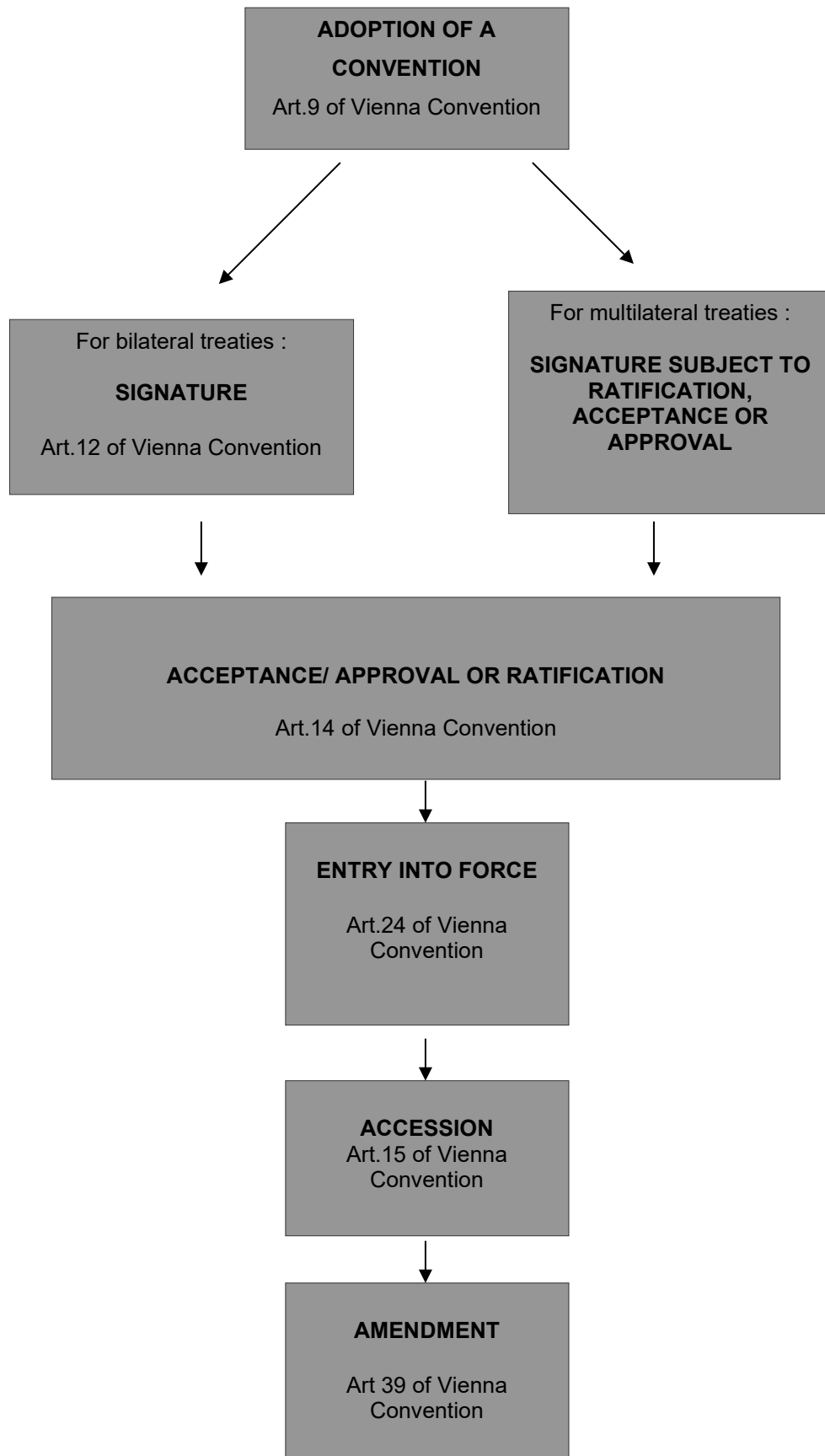
All international maritime conventions follow the same treaty-making process. Legal terms used in this chapter denote various stages in the status of participation to international agreements. These legal-technical terms are based on the Law of treaties contained in [the 1969 Vienna Convention on the Law of Treaties](#). In order to provide easier reference for readers, some basic explanations of terms used in this context are provided below.

After the successful negotiations of a treaty, there are often several stages required before the treaty enters into force:

- **Adoption:** is the formal act by which the form and content of a proposed treaty text are established. As a general rule, the adoption of the text of a treaty takes place through the expression of the consent of the states participating in the treaty-making process. As a rule, however, adoption does not yet mean a consent of a state to be bound by a treaty ([art 9 of Vienna Convention](#)).
- **Signature:** the terms signature, ratification, acceptance, approval or accession refer to some of the methods by which a State can express its consent to be bound by a treaty. So, the signature may sometimes be definitive, meaning that it establishes the consent of the state to be bound by the treaty. This is usual the case in most bilateral treaties. For multilateral treaties, however, the signature is as a rule not definitive, meaning that the treaty is subject to ratification, acceptance, or approval in order to enter into force. Although in those cases the signature does not establish the consent to be bound, it is a means of authentication and expresses the willingness of the signatory state to continue the treaty-making process (i.e. to proceed to ratification, acceptance, or approval). It also creates an obligation to refrain, in good faith, from acts that would defeat the object and the purpose of the treaty ([art 18 \(a\) Vienna Convention](#)).
- **Ratification:** defines an international act whereby a state indicates its consent to be bound to a treaty if the parties intended to show their consent by such an act. In the case of multilateral treaties the usual procedure is for the state to notify the depositary of its ratification; the depositary keeps all parties informed of the situation regarding ratifications. The institution of ratification grants states the necessary time-frame to seek the required approval for the treaty on the domestic level and to enact the necessary legislation to give domestic effect to that treaty ([art 14 Vienna Convention](#)).

- **Acceptance or approval:** has the same legal effect as ratification and consequently expresses the consent of a state to be bound by a treaty. In the practice of certain states, acceptance and approval have been used instead of ratification when, at a national level, constitutional law does not require the treaty to be ratified by the head of state (art 14 Vienna Convention).
- **Entry into force:** of an international treaty does not necessarily coincide with ratification of the treaty (acceptance, approval) by individual states. It is common for multilateral treaties to provide for a fixed number of states to express their consent for entry into force. Some treaties provide for additional conditions to be satisfied, e.g. by specifying that a certain category of states must be among the consenters. The treaty may also provide for an additional time period to elapse after the required number of countries have expressed their consent or the conditions have been satisfied. A treaty enters into force for those states which gave the required consent. A treaty may also provide that, upon certain conditions having been met, it shall come into force provisionally (art 24 Vienna Convention).
- **Accession:** is the act whereby a state accepts the offer or the opportunity to become a party to a treaty already negotiated and signed by other states. It has the same legal effect as ratification. Accession usually occurs after the treaty has entered into force. The conditions under which accession may occur and the procedure involved depend on the provisions of the treaty; a treaty might provide for the accession of all other states or for a limited and defined number of states (art 15 of Vienna Convention).
- **Amendment:** Nevertheless, technology and techniques in the shipping industry change very rapidly. So, conventions need to be kept up to date. For example, the International Convention for the Safety of Life at Sea (SOLAS) was amended 30 times until now. The amendments for the first conventions came into force only after a percentage of Contracting States, usually two-third, had accepted them. This percentage requirement in practice led to long delays in bringing amendments into force. To remedy this situation a new amendment procedure was devised in the International Maritime Organization (IMO): 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 third 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 amendments are received from a specified number of Parties.

In order to have a comprehensive view of the treaty-making process, an explanatory picture is drawn up below:



1. UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (UNCLOS), Montego Bay, Jamaica 1982

Entry into force: 16 November 1994

Number of ratifications: 168 ratifications.

Subject Matter:

UNCLOS is a public law convention with a very wide material scope of application. Unclos provides the general and universal conceptual framework for the international law of the sea and provides also the basic principles for this area of the law. UNCLOS provides basic definitions and distinctions, defines rights and obligations of states, and regulates the protection of the marine environment and the rational exploitation and management of marine and seabed resources. UNCLOS also contains a binding procedure for settlement of disputes between States.

Application

According to articles 1-2 and 305, UNCLOS applies to all states, association of states and territories and International Organizations who become Parties to this convention.

Basic Structure:

UNCLOS consists of a preamble, 17 parts, 320 articles and 9 annexes. The parts and annexes are divided into (sub)sections. Each (sub)section contains articles dealing with the subject matter.

Part I: Introduction

Part II: Territorial Sea and Contiguous Zone: This Part defines the legal nature and the geographical dimensions of the territorial Sea (Section 2) and the Contiguous Zone (Section 4), the measure of control of the Coastal State and defines the right of innocent passage of foreign ships (Section 3).

Part III: Straits used for International Navigation: This part is dedicated to the legal status of navigational straits and the right of foreign ships of transit passage.

Part IV: Archipelagic States: This part defines the legal implications arising from the special geographical nature of archipelagic states (articles 46 and 47) also in regard of the right of innocent passage (article 52).

Part V:	<u>Exclusive Economic Zone</u> : This Part defines the legal nature and the geographical dimensions of the Exclusive Economic Zone (Articles 56 and 57).
Part VI:	<u>Continental Shelf</u> : This part defines the Continental Shelf (articles 83) and deals with the rights of coastal states to explore and exploit its natural resources. In the <i>North Continental Sea Shelf</i> -cases (1969) the International Court of Justice (ICJ) held that in the agreement of delimitation an equitable solution had been achieved.
Part VII:	<u>High Seas</u> : The concept of the freedom of the High Seas is developed in this Part (article 87(1)). In principle only the flag state has jurisdiction over ships sailing on the High Seas (article 92), but there are several exceptions to this rule (article 100).
Part VIII:	<u>Regime of Islands</u> : This chapter, consisting of one article, defines the concept of an island.
Part IX:	<u>Enclosed or semi-enclosed Seas</u> : This part defines the concept of an enclosed or semi-enclosed sea (article 122) and imposes the obligation to co-operate on the states bordering such a sea (article 123)
Part X:	<u>Right of access of Land-locked States to and from Sea and Freedom of Transit</u> :
Part XI:	<u>The Area</u> : This part defines the concept of Area and regulates seabed mining. The provisions govern all activities connected with exploration and exploitation of mineral resources in the Area. The international Seabed Authority is the organization through which state parties organize and control activities in the Area, see Section 4.
Part XII:	<u>Protection and Preservation of the Marine Environment</u> :
Part XIII:	<u>Marine Scientific Research</u> :
Part XIV:	<u>Development and Transfer of Marine Technology</u> :
Part XV:	<u>Settlement of Disputes</u> : This part provides a mechanism for the peaceful settlement of disputes between states under UNCLOS.
Part XVI:	<u>General Provisions</u> : This part stresses the general requirement of good faith and peaceful use of the seas.
Part XVII:	<u>Final Provisions</u> :
Annex I:	Highly Migratory Species
Annex II:	Commission on the Limits of the Continental Shelf
Annex III:	Basic Conditions of Prospecting Exploration and Exploitation
Annex IV:	Statute of the Enterprise
Annex V:	Conciliation
Annex VI:	Statute of the International Tribunal for the Law of the Sea
Annex VII:	Arbitration
Annex VIII:	Special Arbitration

Unclos requires states to co-operate at regional level in areas such as navigation, protection and prevention of pollution of the marine environment, conduct of marine scientific research, development and transfer of marine technology as well as the suppression of illegal activities on the high seas. Unclos provides that such co-operation should be undertaken through international organizations, which finds its expression in a numerous provisions containing the general obligation to apply rules and standards by or through the 'competent international organisation'. Various articles of Unclos make reference to 'applicable international rules and standards'; 'internationally agreed rules, standards, and recommended practices and procedures'; etc. The specific provisions establish an obligation on States party to Unclos to apply international rules and standards (i.e. IMO Conventions).

Compatibility between UNCLOS and IMO Conventions is ensured by the inclusion in several IMO Conventions of provisions which indicates that these conventions should not be interpreted as prejudicing the codification and development of the law of the sea by UNCLOS (see art. 9-2 MARPOL 73/78, art. 5-4 STCW 1978 and art. 2-1 SAR).

Relevance to ports

Ports are defined in article 11 UNCLOS as 'outermost permanent harbour works'. UNCLOS recognises four main zones of varying jurisdiction: internal waters – bays, ports and similar enclosed areas of the sea; territorial waters – extending 12 miles to seaward of defined "baselines" along the shore; a contiguous zone – covering the territorial waters and a further 12 miles to seaward; and the exclusive economic zone – extending to 200 miles. The coastal state has jurisdiction over ships in the territorial sea (subject to innocent passage), and limited jurisdiction of ships in the EEZ: only with regard to prevention and preservation of marine environment. Furthermore, pursuant to Unclos and other Conventions (like MarPol 73/78) a port state has or may have jurisdiction over ships with foreign flags who voluntarily call at the port for offences committed in territorial waters or even the High Seas.

Literature/Articles

- R.R. Churchill/A.V. Lowe, *'The Law of the Sea'*
- E.D. Brown, *'The International Law of the Sea vol. I/II'*
- Division for the Ocean Affair and the Law of the Sea, 'The United Nations Convention on the Law of the Sea (a historical perspective)'
- Mr. Agustin Blanco-Bazán, 'IMO interface with the Law of the Sea Convention', January 2000
- IMO LEG/MISC.5, 'Implications of the United Nations Convention on the Law of the Sea for the International Maritime Organization'

- UN Publications: Law of the Sea Bulletin No. 31, UN New York 1996

Jurisprudence

- ICJ 20 February 1969: North Sea Continental Shelf cases
- ICJ 6 December 2001: Territorial and Maritime Dispute (Nicaragua v. Colombia)
- ICJ 16 September 2004: Dispute of Delimitation (Romania v. Ukraine)
- ICJ 17 May 1991: Passage through the Great Belt (Finland v. Denmark)

2. INTERNATIONAL CONVENTION ON LOAD LINES 1966 AS MODIFIED BY THE 1988 PROTOCOL, London 1966, 1988

Entry into force:

Load Lines 1966: 21 July 1968,
1988 Protocol: 3 February 2000

Number of Ratifications:

Load Lines 1966: 163 states, representing 99.03% of the world's
shipping tonnage.
1988 Protocol: 118 states, representing 98.00% of the world's
shipping tonnage.

Subject matter:

Load Lines is a public law convention which in the interest of safe-guarding life and property at sea provides uniform principles and rules with respect to the limits to which ships on international voyages may be loaded. The Convention sets out rules for the calculation of load lines, establishes detailed regulations on the assignment of freeboard and takes into account the potential hazards present in different geographical zones and seasons. The Convention requires that an International Load Line Certificate is present on board of all ships to which the Convention applies.

The Load Lines Convention was amended by the 1988 Load Lines Protocol. The Protocol changed some of the regulations in the Annexes to the Load Lines Convention and introduced a tacit amendment procedure.

Application:

Pursuant to article 4 the Convention applies to registered ships of state parties, ships which are registered in territories to which the present Convention is extended under Article 32 and unregistered ships flying the flag of a State party, provided that these ships engaged on international voyages.

Art. 5 provides that the Convention does not apply to:

- ships of war,
- new ships of less than 24 metres (79 feet) in length,
- existing ships of less than 150 tons gross,
- pleasure yachts not engaged in trade, and

- fishing vessels.

Under the conditions stated in art. 6 the Flag State may exempt ships from the application of the Load Lines Convention.

Basic structure:

The Load Line Convention consists of a preamble, 34 articles and three annexes. The articles set out obligations and provisions with respect to the control, form, duration and acceptance of the Load Line certificate. The issuance of certificates is determined in articles 16 and 17.

The main purpose of the annexes is to provide detailed regulations on the assignment of freeboard, its effects on stability, and most importantly, the safe transportation of guests and crew.

- Annex I is divided into 4 chapters which are subdivided into regulations for determining load lines.
- Annex II determines the zones, areas and seasonal periods.
- Annex III sets out the form of the required certificates.

Relevance to Ports:

Pursuant to article 21 of the Convention ships may be subjected to control by the port state authorities, which will verify if there is a valid International Load Line Certificate present on board. Furthermore, Flag State officers are responsible for survey, inspection and marking of ships. Through periodical surveys carried out at intervals, the Flag State shall ensure that the structure, equipment, arrangements, material and scantlings will fully comply with the requirements of the Load Line Convention.

3. INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENTS OF SHIPS, London 1969

Entry into force: 18 July 1982

Number of ratifications: 158 ratifications, representing 98.94% of the world's shipping tonnage.

Subject matter:

The Tonnage Convention is directed at states and provides uniform rules and principles for the determination of the tonnage of ships. The convention gives rules and formulas for the calculation of the tonnage of ships. It distinguishes between the gross and net tonnage and defines both terms.

The Convention imposes the requirement that an International Tonnage Certificate must be present on board of all ships to which the Tonnage Convention applies. The annex to the Convention provides an approved form of the Tonnage Certificate.

Application:

The Convention applies to all existing and future ships registered in states party.

Excluded subjects:

Pursuant to article 4 the convention does not apply:

- Warships; and
- Ships of less than 24 metres (79 feet) in length.

Article 4-2 limits the geographical scope of the convention for ships solely navigating in specific areas.

Basic structure:

The Convention consists of a preamble, 22 articles and two annexes. Most articles contain provisions with respect to the inspection, cancelling, acceptance and issue of the International Tonnage Certificate. The issue of the Certificate by the flag state is regulated in articles 7 and 8. Annex 1 is divided into 7 regulations and 2 appendixes. The annex establishes regulations for determining gross and net tonnage of ships. Annex 2 provides an approved standard form of the International Tonnage Certificate.

Relevance to ports:

Article 12 of the Tonnage Convention provides a legal basis for the port authorities of states party to inspect ships flying the flag of a state party with the purpose of verifying that the ship holds a valid International Tonnage Certificate.

4. INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA (COLREGS), London 1972

Entry into Force: 15 July 1977

Number of Ratifications: 160 states, representing 99.03% of the world's shipping tonnage.

Subject matter:

ColRegs is also known as 'International Navigation Rules' or 'Rules of the Road'. ColRegs sets out traffic rules, requirements and guidelines for ships to prevent collisions at sea. ColRegs aims to maintain a high level of safety standards at sea. The rules include requirements for such matters as navigation lights, speed, sound signals and traffic separation schemes. ColRegs is a public law convention.

Application:

The Rules apply to all vessels on the high seas and all waters connected with the high seas navigable by seagoing vessels.

Basic Structure:

ColRegs consists of a preamble, 38 rules and 4 Annexes. The rules are divided over five parts which are sometimes divided further into sections. Part A provides general provisions and consists of 3 rules. Rule 2 covers the responsibility of the owner, master or crew to comply with ColRegs rules. Rule 3 gives a list of general definitions of terms used in the Convention.

Part B deals with steering and sailing. This part is divided into 3 sections. The first section governs the conduct of vessels in conditions of visibility. In this section rule 5 requires every vessel to maintain a proper look-out by sight and hearing. Rule 6 requires that every vessel shall proceed at a safe speed. The second section governs the conduct of vessels in sight of other vessels. The third section deals with the conduct of vessels in restricted visibility.

Part C deals with lights and shapes. Rule 21 gives a list of definitions of terms used in this part. Rule 22 deals with the visibility of lights indicating that lights should be visible at minimum ranges. Part D deals with sound and light signals. This part includes requirements for such matters as warning signals, signals to attract attention, distress signals and sound signals in

restricted visibility. Part E contains exemptions from compliance with the requirements of the rules. ColRegs contains four Annexes. Annex I regulates the positioning and technical details of lights and shapes. Annex II contains requirements of additional signals for fishing vessels. Both Annexes were amended in 1987. Annex III covers technical details of sound signal appliances. Annex IV determines the rules of stress signals.

Relevance for Ports:

ColRegs provides uniform traffic rules for maritime safety. The flag state must ensure that their ships will fully comply with the requirements of the ColRegs and with other international safety standards. Many states have incorporated the ColRegs rules also into their domestic legislation in order to facilitate the safety of maritime traffic through uniform standards and traffic rules both at the High Seas and in territorial and inland waters.

5. INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA (SOLAS), London 1974

Entry into Force:

SOLAS 1974:	25 May 1980
1978 Protocol:	1 May 1981
1988 Protocol:	3 February 2000
2002 Amendments:	1 July 2004

Number of Ratifications:

SOLAS 1974:	165 states, representing 99.04% of the world's shipping tonnage.
1978 Protocol:	121 states, representing 97.90% of the world's shipping tonnage.
1988 Protocol:	121 states, representing 97.90% of the world's shipping tonnage.

Subject Matter:

The International Convention for the Safety of Life at Sea (SOLAS) is a public law convention directed to states promoting the safety of life at seas through specifying uniform minimum standards for the construction, equipment and operation of ships. The Convention covers the different aspects of maritime safety such as fire protection, safety of navigation, life-saving appliances etc.

The first version of the SOLAS Convention was adopted at a conference held in London in 1914, in reaction to the Titanic disaster. Since then there have been four subsequent SOLAS Conventions, which all have covered many aspects of safety at sea: the second was adopted in 1929 and entered into force in 1933; the third was adopted in 1948 and entered into force in 1952; the fourth was adopted (under the auspices of IMO) in 1960 and entered into force in 1965. The 1960 SOLAS Conference extended many safety measures which had once applied only to passenger ships also to cargo ships, such as measures dealing with fire protection and emergency power and lighting.

Application:

SOLAS applies in principle to all ships entitled to fly the flag of states of contracting governments which ships are engaged in international shipping and trade.

Excluded subjects:

Regulation 3 provides that:

- Ships of war and troopships,
- Cargo ships of less than 500 tons gross tonnage,
- Ships not propelled by mechanical means,
- Wooden ships of primitive build,
- Pleasure yachts not engaged in trade and
- Fishing vessels

are excluded from the scope of application of the SOLAS Convention.

Basic Structure:

The SOLAS Convention consists of a preamble, 13 articles setting out general principles, an Annex divided into 12 chapters (the last 4 chapters were added to the Annex by the May 1994 and December 2002 amendments) and an Appendix dealing with the form of safety certificates for cargo and passenger ships. Several chapters of the Annex are divided into parts which sometimes are subdivided further into sections. The SOLAS 'safety' regulations cover:

- Chapter I: General Obligations
- Chapter II:
 1. Subdivision and stability, machinery and electrical installations
 2. Fire protection, fire detection and fire extinction
- Chapter III: Life- Saving appliances.
- Chapter IV: Radiotelegraphy and radiotelephony
- Chapter V: Safety of navigation
- Chapter VI: Carriage of grain
- Chapter VII: Carriage of dangerous goods
- Chapter VIII: Nuclear ships

Chapters added by the May 1994 amendment:

- Chapter IX: Management for the safe operation by ships
- Chapter X: Safety measures for high-speed craft
- Chapter XI: Special measures to enhance maritime safety

Chapter added by the December 2002 amendment:

- Chapter XII: Additional safety measures for bulk carriers

The 2002 Amendments to SOLAS also brought adoption of the International Code for the Security of Ships and of Port Facilities (ISPS-Code) in Chapter XI. All chapters were further amended by subsequent protocols of SOLAS.

Protocols:

After a series of accidents involving oil tankers in 1976-77, IMO convened an international conference on tanker safety and pollution prevention. This conference adopted measures affecting tanker design and operation which were incorporated in the 1973 Convention for the Prevention of Pollution from Ships (1978 MARPOL Protocol). The conference also adopted a number of important modifications to SOLAS, which were incorporated in the 1978 Protocol to SOLAS 1974. The Protocol made important changes and improvements to the chapters I, II and V.

Relevance to ports:

SOLAS calls on states party to ensure that the ships under their flag comply with its codes and requirements and prescribes a number of certificates to prove compliance. SOLAS provides a legal basis for port state control by states party if there are clear grounds for believing that the ship and its equipment do not substantially comply with SOLAS-requirements, see chapter 1 regulation 19. Port State Control inspections are in principle limited to checking certificates and documents. If certificates are found invalid or if there are clear grounds for believing that the condition of the ship or of its equipment, or its crew, does not substantially meet the SOLAS requirements, a more detailed inspection may be carried out. A port state officer may take steps to ensure that the ship does not sail until it can do so without endangering passengers, the crew or the ship itself.

The ISPS-Code implemented by the 2002 Amendments to SOLAS contains a framework for international co-operation between contracting states in dealing with the threat posed to maritime security in the wake of the tragic events of 11 September 2001. The ISPS-Code provides a legal basis for preventive measures aimed at gathering of information for security purposes, for implementing security measures on board of ships and in port facilities and for controlling the compliance with the ISPS-Code by shipping companies.

6. CONVENTION ON LIMITATION OF LIABILITY FOR MARITIME CLAIMS (LLMC) AND THE 1996 PROTOCOLS TO MODIFY THE LLMC, London 1976 and 1996

Entry into force

LLMC:	1 December 1986
1996 Protocols:	13 May 2004

Number of ratifications:

LLMC:	55 states, representing 57.30% of the world's shipping tonnage
1996 Protocol:	59 states, representing 69.16% of the world's shipping tonnage

Subject Matter

LLMC deals with the right of the ship-owner (and a group of persons equated to him) and the salvor to limit their civil liability for certain maritime claims resulting from a casualty that was caused by the ship or which arose in direct connection with the operation of the ship, or resulting from salvage operations. The amounts to which liability can be limited may vary, depending on the nature of the claim. The calculation of the applicable limitation amount is based on the ship's tonnage and applies to the aggregate of all claims of that nature resulting from the casualty event. The main impact of the 1996 Protocol on the 1976 LLMC is a significant rise in the limitation amount levels. Once a limitation fund has been created, this will protect the ship-owner and the salvor against ship's arrests and other legal measures from their creditors in support of such maritime claims.

Excluded subjects:

Although otherwise falling within the concept of "maritime claims", the claims for salvage reward or contribution in general average, for damage resulting from oil pollution, for nuclear damage are excluded from limitation. Dependent on the applicable domestic law, also claims for compensation from employees of the ship-owner or salvor and claims for wreck and cargo removal may be excluded from limitation under LLMC. (See art. 3 and 18 LLMC).

Basic Structure:

The first chapter of LLMC deals with the right to limitation. The persons entitled to limitation of liability are defined in art. 1 LLMC. The categories of claims subject to limitation are defined in art. 2 LLMC. Conduct barring the right to limitation of liability is defined in Art. 4 LLMC.

The second chapter of LLMC deals with the limits of liability. LLMC distinguishes between three kinds of limits: 1) for death and personal injury claims in general, see art. 6-1 a) LLMC, 2) for death and personal injury claims of passengers, see art. 7 LLMC; and 3) for all other claims, see art. 6-1 b) LLMC.

The third chapter deals with limitation funds. The constitution and division of the fund is regulated in art. 11 and 12 LLMC respectively. The legal protection confined by the fund is governed by art. 13 LLMC. All procedural matters in relation to the limitation fund are governed by the law of the state, where the limitation fund is created (art. 14 LLMC). Finally, the formal scope of application of LLMC is defined in art. 15 LLMC.

Relevance to ports

The LLMC may apply to liability claims of port authorities against ship-owners and salvors for damage to e.g. harbour works resulting from a maritime casualty involving a ship. It will depend on the way each contracting state has ratified the LLMC, whether or not claims for wreck and cargo removal are subject to limitation of liability.

References to literature (in English)

Comité Maritime International, *The Travaux Préparatoires of the LLMC Convention, 1976 and of the Protocol of 1996*.

Patrick Griggs / Richard Williams / Jeremy Farr, *Limitation of Liability for Maritime Claims*, 4th edition, LLP, 2005.

Sarah. C. Derrington / James M. Turner, *The Law and Practice of Admiralty Matters*, Oxford, 2007.

References to selected Court decisions (if reported in English)

The Bowbelle, [1990] 3 All E R 476.

The Happy Fellow, [1997] 1 Lloyd's Rep. 130

The Aegean Sea, [1998] 2 Lloyd's Rep. 39.

Bouygues Offshore S.A. v. Caspian Shipping Co., [1998] 2 Lloyd's Rep. 461.

The ICL Vikraman, [2004] 1 Lloyd's Rep. 21.

The CMA Djakarta, [2003] 2 Lloyd's Rep. 50.

The CMA Djakarta, [2004] 1 Lloyd's Rep. 460 (CA).

Maersk Olie & Gas A/S vs. Firma M. de Haan and W. de Boer, The Cornelis Simon, European Court of Justice (ECJ) 14 October 2004, [2005] 1 Lloyd's Rep. 210.

The Western Regent, [2005] EWHC 460 (Comm).

7. INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE 1978 PROTOCOL (MARPOL 73/78),

London, 2 November 1973 and 17 February 1978

Entry into force:

- Annex I and II: 2 October 1983
- Annex III: 1 July 1992
- Annex IV: 27 September 2003
- Annex V: 31 December 1988
- Annex VI: 19 May 2005

Number of Ratifications:

Annex I and II:	158 states, representing 99.01%,
Annex III:	149 states, representing 98.49%,
Annex IV:	144 states, representing 96.28%,
Annex V:	154 states, representing 98.64%, and
Annex VI:	96 states, representing 96.72% of the world's shipping tonnage.

Subject matter:

MARPOL 73/78 aims to prevent and minimize ship-source pollution of the marine environment, including dumping, oil and exhaust pollution. MARPOL 73/78 provides regulations and provisions to this effect and covers both accidental pollution and pollution from routine operations. The 1973 MARPOL Convention has not yet entered into force, however it was absorbed by and incorporated into the 1978 MARPOL Protocol, adopted at the Conference on Tanker Safety and Pollution Prevention.

Application:

MARPOL 73/78 applies to all ships flying the flag of a state party or which operate under the authority of a state party. MARPOL 73/78 has frequently been updated by amendments and Annexes through the years.

Excluded subjects:

Pursuant to article 3-3 MARPOL 73/78 does not apply to:

- warships;

- naval auxiliary; and
- ships only used for governmental non-commercial services.

Basic Structure:

MARPOL 73/78 consists of a Preamble, 20 Articles, 2 Protocols and 6 Annexes. The Articles contain uniform rules and provisions aimed at improving the prevention and control of maritime pollution of ships through inspection and control of specific certificates on board of ships.

Reports of an incident shall be made in accordance with the provisions of Protocol I to MARPOL 73/78 (article 8). The two Protocols to MARPOL 73/78 are divided into articles as well. Protocol I contains provisions regarding reports on incidents involving harmful substances. Protocol II deals with settlement of disputes through arbitration. Pursuant to article 14, states party to MARPOL 73/78 may upon ratification may make reservations towards the Optional Annexes III-VI. Failing such reservations, MARPOL 73/78 states are bound to MARPOL 73/78 in its entirety. The annexes are divided into chapters which are further subdivided into regulations. Some of the annexes also contain appendices.

Annex I: Regulations for the Prevention of pollution by oil.

Annex II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk

Annex III: Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form

Annex IV: Prevention of Pollution by Sewage from Ships

Annex V: Prevention of Pollution by Garbage from Ships

Annex VI: Prevention of Air Pollution from Ships

Relevance to Ports:

Articles 5-2 and 6-2 of the MARPOL 73/78 provide a legal basis for the port authorities of states party to inspect ships flying the flag of a state party with the purpose of verifying that the ship holds a valid certificate and that the ship observes the provisions of MARPOL 73/78. Port state authorities are also allowed to inspect a ship if a request for an investigation is received from a state party together with sufficient evidence that the ship has discharged harmful substances. The legal basis for such an inspection is provided by article 6-5 MARPOL 73/78.

8. INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS (STCW), London 1978

Entry into force: 28 April 1984

Number of Ratifications: 165 states, representing 99.03% of the world's shipping tonnage

Subject matter:

STCW imposes minimum international standards relating to training, certification and watch-keeping for seafarers. The main objective is to promote the safety of life and property at sea and the protection of the marine environment. STCW determines minimum requirements and qualification standards for masters, officers and watch-keepers.

Excluded subjects:

STCW applies to seafarers serving on board sea-going ships, see article 3.

STCW does not apply to:

- war ships, naval authorities and other ships only used for non-commercial service
- fishing vessels
- pleasure yachts not engaged in trade
- wooden ships or primitive build

In addition, STCW applies to ships of non-contracting state parties visiting ports of contracting state parties.

Basic structure:

STCW consists of a preamble, 17 articles and an Annex. The Annex is divided into 6 chapters covering technical provisions. The chapters are subdivided further into regulations.

- **Chapter 1** consists of four regulations determining general provisions. Regulation 1 contains a list of definitions used in the Annex. Chapter 1 determines the requirements relating to the content of certificates and the form of endorsement of certificates which are required by STCW.

- **Chapter 2** consists of 8 regulations which regulate the basic principles for the master-deck department. Regulation 2 establishes mandatory minimum requirements for certification of masters and chief masters of ships.
- **Chapter 3** consists of 6 regulations determining mandatory minimum requirements and minimum knowledge required for engineer officers and chief engineer officers.
- **Chapter 4** consists of 3 regulations providing mandatory minimum requirements and minimum additional knowledge required for radio officers.
- **Chapter 5** consists of 3 regulations establishing requirements for liquefied gas tankers, oil tankers and chemical tankers. Regulation 1 provides mandatory minimum requirements for the training and qualification of masters, officers and ratings of oil tankers. The minimum requirements for the training and qualification of masters, officers and ratings of chemical tankers are established in regulation 2. Regulation 3 determines the requirements for liquefied gas tankers.
- **Chapter 6** consists of 1 regulation providing requirements for the proficiency in survival craft. Regulation 1 covers the minimum requirements and minimum knowledge required for the issue of certificates of proficiency in survival craft.

Relevance to ports:

Article 10 of STCW provides the legal basis for port state authorities to verify that all seafarers on board of the ship which are required to be certificated by the Convention are correctly certificated or hold an appropriate dispensation. Regulation I/4 regulates the control and inspection of vessels by authorized officers.

9. INTERNATIONAL CONVENTION ON SALVAGE,

London 1989

Entry into Force: 14 July 1996

Number of Ratifications: 73 states, representing 54.58% of the world's shipping tonnage.

Subject matter:

The Salvage Convention aims to provide adequate incentives to persons who undertake salvage operations to vessels in danger. The Salvage Convention only rewards salvage operations which have had a useful result. The salvage reward shall be fixed with the view of encouraging salvage operations. The Salvage Convention imposes a duty on the salvors, owners and masters of ships in danger to exercise due care to prevent or minimize damage to the environment. Another duty for the masters of ships is to render assistance to any person in danger of being lost at sea.

The person who is liable for the payment is obliged to provide satisfactory security for the claim at the request of the salvor.

Application:

The Salvage Convention applies to all judicial or arbitral proceedings relating to salvage operations and salvage rewards brought before courts or arbitrators in a State Party. The Convention shall not apply to warships or other non-commercial vessels owned or operated by a State Party.

Basic Structure:

The Salvage Convention consists of a preamble and 34 articles and is divided into five chapters. The first chapter provides general provisions and definitions. The second chapter deals with the performance of salvage operations and imposes duties of care upon the salvor, owner and master of a ship in danger in articles 8 and 10. Article 9 recognizes the right of coastal states to take measures to protect their coastline from pollution or the threat of pollution after a maritime casualty. Under Article 11 there is an obligation on states party to the Salvage Convention to take into consideration the need for co-operation between salvors, other interested parties and government officials when issuing rules or taking decisions in salvage matters, including the admission of ships in distress and provisions for salvors. The third chapter

deals with the rights of salvors. The conditions and criteria's for determining the salvage reward are stated in articles 12 and 13. Under article 14 Salvors who failed to earn a salvage reward under art. 13, but who have taken measures to prevent and minimize damage to the marine environment, are entitled to so-called special compensation. The fourth chapter deals with procedural matters, such as the right to security and the maritime lien over the salvaged property of the salvor, see article 21. Article 23 provides a time-bar of two years. The fifth chapter provides no material provisions.

Relevance to ports:

This Convention regulates salvage operations in relation to ships in danger. Although in articles 9 and 11 the basic principle of the sovereignty of national states is recognized, member states are bound to recognize the need for co-operation between salvors, interested states and government officials when acting salvage related matters.

Under the Salvage Convention it is not excluded that successful salvage operations performed by public services like e.g. the fire department, the navy etc. may earn a salvage reward. However, under article 5 this will depend ultimately upon the domestic (administrative) law of the relevant country whose public services performed the salvage, not the Salvage Convention.

10. INTERNATIONAL CONVENTION ON CIVIL LIABILITY FOR OIL POLLUTION DAMAGE AS MODIFIED BY THE 1992 PROTOCOL (CLC 1992), Brussels 1969, London 1992

Entry into force:

CLC 1969:	19 June 1975
Protocol 1976:	8 April 1981
Protocol 1992:	30 May 1996

Number of ratifications:

CLC 1969:	34 states, representing 2.86% of the world's shipping tonnage;
Protocol 1976:	53 states, representing 62.58% of the world's shipping tonnage; and
Protocol 1992:	140 states, representing 97.63% of the world's shipping tonnage.

Subject matter:

CLC deals with the civil liability of the ship-owner for oil pollution damage. CLC aims to provide adequate compensation to persons who suffer damage from oil pollution originating from oil tanker vessels. Although under CLC the ship-owner is entitled to limit his liability to an amount calculated by reference to the ship's tonnage, if the total oil pollution damage exceeds the ship-owner's limit of liability, the International Oil Pollution Fund (IOPF), based in London, will pay supplementary compensation to the levels prescribed in the International Fund Convention (IFC)

The original 1969-version of CLC has since been modified by three subsequent protocols. The first of these protocols was adopted in 1976, the second in 1984 and the third in 1992. The main aim of these Protocols was to raise the applicable limits of liability. The 1969-version of CLC is now in the process of being replaced by the 1992-version of CLC, known as the International Convention on Civil Liability for Oil Pollution Damage 1992 (CLC 1992) in which the modifications brought about by the 1992 Protocols have been consolidated.

Application:

CLC 1992 covers (oil) pollution damage caused by tanker vessels carrying oil in bulk as cargo. "Pollution damage" and "oil" are defined in CLC 1992. In order for CLC 1992 to apply, (oil) pollution damage must have occurred on the territory, in the territorial waters or in the Exclusive

Economic Zone of a state party. Excluded from the application of CLC 1992 are warships or ships only used on government non-commercial services.

Basic Structure:

CLC 1992 consists of a preamble, 21 articles and an annex. The annex to CLC 1992 contains a form for the prescribed insurance certificate. Article 1 CLC contains a list of definitions. Under art. III CLC the ship-owner is strictly liable for oil pollution damage, irrespective of fault, with only a few causes exempting him from liability. Under CLC all liability is channelled to the ship-owner, in principle to the exclusion of all other parties involved in the operation of the ship including the servants and agents of the ship-owner, who are immune from liability. The ship-owner may limit his liability by constituting a fund in accordance with CLC and is under a compulsory obligation to insure against his liability and to carry an insurance certificate on board of the vessel. Claimants may bring their claim for compensation of oil pollution damage directly against the liability underwriter of the ship-owner (article VII-8).

Relevance to ports

In case of oil pollution originating from an oil tanker, CLC and IFC provide the basic legal framework for liability matters, limitation and compensation of loss and damage.

11. INTERNATIONAL CONVENTION ON THE ESTABLISHMENT OF AN INTERNATIONAL FUND FOR COMPENSATION FOR OIL POLLUTION DAMAGE (FUND),

Brussels 1971

Entry into Force:

Fund 1971:	16 October 1978
1976 Protocol:	22 November 1994
1992 Protocol:	30 May 1996
2000 Protocol:	27 June 2001
2003 Protocol	3 March 2005

Number of ratifications:

FUND1971:	No longer in force since 24 May 2002.
1976 Protocol:	31 states representing 53.64% of the world's shipping tonnage.
1992 Protocol:	117 states representing 94.69% of the world's shipping tonnage.
2000 Protocol:	--
2003 Protocol:	32 states representing 17.07% of the world's shipping tonnage.

Subject matter:

Supplementary to CLC, the Fund Convention establishes a compensation regime for oil pollution damage. FUND provides additional compensation to victims of oil pollution damage if they do not obtain full compensation from the ship-owner or its underwriter under CLC. FUND forms a second tier of compensation. The aim of both regimes, CLC and FUND, is to ensure adequate compensation to those who suffer oil pollution damage.

FUND is financed by contributions from corporations in contracting states which have received more than 150,000 m.t. of oil in a calendar year. The compensation paid by FUND is limited to an amount of 16 million SDR. The International Oil Pollution Fund's organization consists of an Assembly, a Secretariat and an Executive Committee.

The 1971 Fund Convention has been the subject of several modifying protocols. The first protocol was adopted in 1976. A second one in 1984 never entered into force. A third protocol in 1992 was more successful and resulted in the emended 1992 Fund Convention which. The raised the limits of compensation payable by the Fund up to 153 million SDR. A fourth protocol containing several amendments was adopted in 2000. The major purpose of this protocol was to terminate the 1971 Fund Convention and to establish a process for winding up the fund by

providing that the 1971 convention would cease to be in force once membership fell below 25 members. This occurred on 24 May 2002 whereupon the convention ceased to be in force. Most recently in 2003 a fifth Protocol was adopted which establishes a supplementary Fund of compensation known as the third tier of compensation.

Application

The 1971 Fund Convention had only applied to oil pollution damage originating from oil tanker vessels which is caused in the territory or the territorial or inland waters of a contracting state. The 1992 Protocol has extended the geographical scope of the Fund Convention to pollution damage caused in the Exclusive Economic Zone of a Contracting state party as well.

Basic structure:

The 1992 Fund Convention consists of a preamble and 48 articles. The compensation regime is regulated in the articles 4 up to 9. Only if the injured party caused the pollution damage by his own intentional act, omission or negligence is the Fund not obliged to compensate the damage (Art. 4-3). Claims for compensation become time-barred after 3 years (Art. 6). The system of charging contribution to the Fund is regulated in the articles 10 up to 15. The internal organization of the Fund is regulated for the Assembly in articles 18 to 20, for the Executive Committee in articles 21 to 27 and for the Secretariat in articles 28 to 30.

Relevance to ports:

If oil pollution damage originating from oil tanker vessels occurs in port or in the territorial or inland waters of the state party to the CLC and Fund Convention, the Fund may provide compensation of the second tier of damage on top of the limitation fund to be provided by the ship-owner under CLC.

12. INTERNATIONAL CONVENTION ON LIABILITY AND COMPENSATION FOR DAMAGE IN CONNECTION WITH THE CARRIAGE OF HAZARDOUS AND NOXIOUS SUBSTANCES BY SEA (HNS), London 1996, Protocol 2010

Entry into force:

HNS Convention: The convention has not yet entered into force

2010 Protocol: The Protocol has not yet entered into force

Ratification:

HNS Convention: 14 states, representing 14.19% of the world's shipping tonnage.

2010 Protocol: 5 states, representing 3.56% of the world's shipping tonnage.

Subject matter:

HNS is a private law convention which provides uniform rules for an adequate and effective compensation of persons who suffer damage caused by accidents in connection with the carriage of hazardous and noxious substances by sea. HNS will establish a liability regime and a two-tier compensation system. Under HNS the ship-owner is liable for the loss or damage up to a certain amount, which is to be covered by compulsory insurance (1st tier).

In addition, a compensation fund (the HNS Fund) will provide supplementary compensation if the victims do not obtain full compensation of their damage from the ship-owner or his insurer (2nd tier). This Fund will establish a guaranteed level of compensation of up to 250 million SDR. The Fund is contributed to by companies and other entities receiving a certain minimum quantity of HNS relevant cargo per year. Under HNS, the ship-owner is strictly liable, regardless of fault, for any damage caused by the hazardous substances carried by his ship.

Application:

HNS covers the damage caused by hazardous and noxious substances within the territory or the territorial sea of a state party and to damage by contamination of the environment in the exclusive economic zone of a state party, see article 3. In addition, HNS applies to damage resulting from preventive measures wherever taken and to other damage than contamination damage caused on the High Seas by a hazardous and noxious substance carried on board of a ship registered in or entitled to fly the flag of a state party to HNS, see article 3-c.

HNS does not apply to:

- claims arising from a contract for the carriage of goods or persons,
- oil pollution damage as defined in the CLC as amended in 1992,

- damage caused by a radioactive material of class 7,
- warships, naval auxiliary, or ships only used for non-commercial service.

Basic Structure:

The HNS Convention consists of a preamble, 54 Articles divided over six Chapters, and two Annexes. The articles set out the rights and obligations for ship-owners. Chapter 1 contains general provisions, defining many of the terms used in HNS. Chapter 2 deals with liability. Under HNS the ship-owner is strictly liable, so the fact that damage has been caused by hazardous and noxious substances carried on board his ship is sufficient to establish his liability. The 1st tier of compensation is laid down in articles 7 and 9 of HNS. Article 9-2 provides the criterion for conduct barring the ship-owner from the right to limitation of liability. Article 12 provides the requirement of a compulsory insurance. Claims for compensation may be directed against the liability underwriter directly.

The 2nd tier of compensation is regulated in chapter 3 of HNS. Once the limit of the 1st tier of compensation is exhausted, and the damage exceeds the ship-owner's limit of liability, the HNS Fund will take over. This 2nd tier consists of one general account and three separate accounts for oil, liquefied natural gas (LNG) and liquefied petroleum gas (LPG), see article 16. The HNS Fund is governed through an Assembly, consisting of all states party to HNS (article 25). A time-bar of three years applies to recovery claims regarding compensation under HNS (article 37).

Relevance to Ports:

After its entry into force, HNS will be relevant for issues of (limitation of) liability and compensation whenever a port authority or the port community at large suffer damage because of hazardous and noxious substances escaping from a ship. In addition, the certificate of compulsory insurance may be subject of inspection by the port state authorities.

13. INTERNATIONAL CONVENTION ON CIVIL LIABILITY FOR BUNKER OIL POLLUTION DAMAGE, London 2001

Entry into force: 21 November 2008.

Ratifications: 95 states, representing 92.99% of the world's shipping tonnage.

Subject matter:

The Bunker Convention provides uniform rules with regard to the liability for and compensation of pollution damage resulting from the escape or discharge of bunker oil from ships. The Bunker Convention fills the gap left by other international conventions such as CLC and HNS which do not apply to bunker oil spills. The conference which adopted the Bunker Convention also adopted three additional resolutions, 1) on limitation of liability, 2) on promotion of technical co-operation and 3) on the protection of persons taking measures to prevent or minimize the effects of oil pollution.

Application:

The Bunker Convention covers liability and compensation for pollution damage resulting from the escape or discharge of bunker oil from ships and preventive measures taken to minimize such pollution damage, if the pollution damage occurs or the preventive measures were taken in the territorial waters or exclusive economic zone of a state party (Articles 1 (9) and 2).

Excluded subjects:

The Bunker Convention does not apply to pollution damage as defined by the CLC Convention (article 4 (1)). Furthermore the Bunker Convention does not apply to: warships, naval auxiliary or other ships used on governmental non-commercial service, unless the Flag-state of such a ship decides otherwise (Article 4).

Basic Structure:

The Convention consists of a Preamble, 19 Articles and an Annex which contains a certificate of insurance. Terms used in the Bunker Convention are defined in Article 1. Article 3 deals with the ship-owner's liability and affords the ship-owner in article 3(3) and (4) only restricted grounds of defence. Notable among these is that the ship-owner is not liable if the pollution damage was caused wholly by the negligence or other wrongful act of any public authority responsible for the maintenance of lights or other navigational aids in the exercise of that

function. The ship-owner's liability is however in principle limited, see Article 6. The ship-owner is under a compulsory obligation to insure his liability up to the limitation amount and to have an insurance certificate present on board of the ship (Article 7). Claimants have the option of bringing a direct action against the liability insurer under Article 7(10) Bunker Convention. Time bars of 3 and 6 years are given in Article 8, whereas exclusive jurisdiction is granted to the Courts of the states party where the damage occurred in Article 9. Article 10 deals with the recognition and enforcement of a judgment given by a court in a state party.

Relevance to ports:

The Bunker Convention when it enters into force will provide a conclusive liability and compensation scheme for pollution damage resulting from the escape or discharge of bunker oil from ships. For ports, where such pollution damage may easily occur, the Bunker Convention, through the compulsory insurance requirement and the obligation to carry an insurance certificate on board, offers easier ways to ports to obtain compensation of such pollution damage, even if the ship-owner's liability is subject to limitation.

14. INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIP'S BALLAST WATER AND SEDIMENTS, London 2004

Entry into force: 8 September 2017

Number of ratifications: 81 states, representing 80.76% of the world's shipping tonnage.

Subject matter:

The uncontrolled discharge of ballast water and sediments from ships has led to the transfer of harmful aquatic organisms and pathogens, causing injury or damage to the environment. The Ballast Water Convention contains measures to prevent the potentially devastating effects of the spread of harmful aquatic organisms carried by ships' ballast water. The convention is a public law convention aimed at the implementation by national states of certain rules for the control and management of ship's ballast water and sediments. The main objective is to prevent, minimize and ultimately eliminate the risk to the environment, human health, property and resources arising from the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments as well as to encourage developments in related knowledge and technology.

Application:

The convention applies to ships entitled to fly the flag of a contracting state or to ships operating under the authority of a contracting party. The convention will require ships to implement a ballast water and sediments management plan, carry a ballast water management record book and carry out ballast water management procedures to a specific standard. States party have authority to carry out a limited inspection of ships entering their ports for the purpose of determining whether the ship is in compliance with this convention.

The Ballast Water Convention does not prevent any state party – whether on its own accord or in a joint effort with other States – from taking more stringent measures for the prevention, reduction or elimination of the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments, consistent with international law.

Excluded subjects:

According to article 3-2 ships which are:

- not designed or constructed to carry ballast water,
 - only operate in waters under the jurisdiction of one party,
 - only operate in waters under the jurisdiction of one party and on the high seas,
 - only used on governmental non-commercial service,
 - containing permanent ballast water that is not subject for discharge,
- lie beyond the scope of the Ballast Water Convention.

Basic structure:

The Ballast Water Convention consists of a convention, regulations for the control and management of ships' ballast water and sediments and two appendixes. The convention contains a schedule and 22 articles. The schedule indicates the objectives of the convention. The 22 articles are aimed at the contracting states which undertake to give full and complete effect to the provisions of the convention, see article 2-1. The regulations for the control and management of ships' ballast water and sediment are divided into five sections: A-E.

Section A 'General Provisions' consist of five regulations: A1-A5. This section includes definitions, the scope of application and exemptions.

Section B 'Management and control requirements for ships' consist of six regulations: B1-B6. These regulations contain general obligations and requirements for the ballast water management on board of the ship. According to regulations B1 and B2 ships must have a Ballast Water Record Book and a Ballast Water Management Plan. The Ballast Water Management Plan is specific to each ship and includes a detailed description of the actions to be taken to implement the Ballast Water Management requirements. The specific requirements for the ballast water management are summed up in regulation B3. Regulation B4 deals with an general obligation for all ships to exchange their ballast water at least 200 nautical miles from the nearest land and in water at least 200 metres in depth.

Section C 'Special requirement in certain areas' consist of four regulations: C1-C4. This section deals with the right that parties may introduce additional measures to prevent, reduce or eliminate the transfer of harmful aquatic organisms.

Section D 'Standards for Ballast Water Management' consist of five regulations: D1-D5. The subject of this section is the ballast water exchange standard and the ballast water performance standard.

Section E 'Survey and certification requirements for Ballast Water Management' consist of five regulations: E1-E5.

Relevance for international ports

The Ballast Water Convention does not place a general obligation on ports to have adequate facilities available for the reception of sediments. However, if a state party designates a port for the cleaning or repair of the ballast tanks, then the port state undertakes to ensure that adequate facilities are available there.

Ports are involved in the implementation of the Ballast Water Management Plan (Section B, regulation 1-4). The Ballast Water Management Plan shall include the procedures for co-ordinating shipboard Ballast Water Management that involves discharge to the sea with the authorities of the State into whose waters such discharge will take place.

The Ballast Water Convention in article 9 provides a legal basis for ports authorities in states party to carry inspections of ships to which this convention applies in its port or offshore terminal. The inspection shall be limited to verifying if there is a valid certificate on board, the inspection of the ballast water tank record book or taking a sample of the ship's ballast water. If there is reason to believe that the ship is not in compliance with the convention, a more comprehensive inspection may be carried out.

Ballast Water References:

- GEF/UNDP/IMO Global Ballast Water Management Programme (GloBallast)
- Resolution MEPC 50(31): 'International guidelines for preventing the introduction of unwanted aquatic organisms and pathogens from ships' ballast water and sediment discharges', adopted on 4 July 1991
- IMO Assembly Resolution A.868(20): 'Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens', adopted on 27 November 1997.

15. INTERNATIONAL CONVENTION ON THE REMOVAL OF WRECKS, Nairobi 2007

Entry into force: 14 April 2015.

Ratification: 48 states, representing 73.25% of world's shipping tonnage.

Subject matter:

The Convention provides uniform international rules and procedures allowing states to ensure the prompt and effective removal of wrecks. The convention defines rights and obligations for the identification, reporting, locating and removal of wrecks which pose a hazard to navigation or the marine environment.

The scope of application of the convention is limited to hazardous wrecks within the 'convention area', i.e. the exclusive economic zone of a state party, a concept defined in Part V (articles 55 to 75 Unclos) as an area beyond the territorial sea, not extending more than 200 miles from the coast. The convention does not apply to wrecks in the territorial sea, but under article 3(2) of the Convention states can extend the application of the convention also to their territorial waters.

Excluded Subjects:

Pursuant to article 4 the convention does not apply to:

- measures taken under the International Convention relating to intervention on the High Seas in Cases of Oil Pollution Casualties (1969) or the relating Protocol of 1973; and
- warships, or state-owned or state-operated ships used only for Government non-commercial service, unless that state decides otherwise.

Basic Structure:

The convention consists of a preamble, 21 articles and an annex containing a form for a certificate of insurance. The articles set out the respective rights and obligations of states and ship-owners with respect to the removal of wrecks. A list of definitions is contained in article 1, "wreck" is defined in article 1 (4). Next such practical matters as: – reporting the wreck (article 5), – criteria for determining whether the wreck constitutes a hazard (article 6), and – the locating and marking of the wreck (articles 7 and 8) are dealt with.

Then the obligation of the ship-owner to remove a hazardous wreck (article 9), his liability towards the state for the costs of wreck removal (article 10), exceptions to this liability (article

11) and the compulsory liability insurance obligation of the ship-owner (article 12) follow. The right (if any) of the ship-owner to limit his liability under the 1976 London Limitation of Maritime Claims Convention is expressly preserved (article 10 (2)). A time-bar of three or six years applies to recovery claims regarding wreck removal (article 13).

Relevance to Ports

The convention provides uniform rules for prompt and effective removal of hazardous wrecks within the Exclusive Economic Zone. Under the convention the affected state is entitled to require the registered owner of the ship to remove the wreck. If the registered owner does not remove the wreck, the affected state may remove the wreck and will be able to recover the cost of the operation.

16. CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER

MATTER AT SEA, (London Convention) 1972 AND THE LONDON PROTOCOL, 1996

Entry into force:

London Convention 1972: 30 August 1975

1978 Amendments: Not yet in force

Protocol 1996: 24 March 2006

Amendments

The 1978 amendments - incineration

The 1978 amendments - disputes

The 1980 amendments - list of substances

The 1989 amendments - permits

The 1993 amendments - banning of dumping of low-level radioactive wastes; phasing out of dumping of industrial wastes; banning of incineration at sea of industrial wastes

1996 Protocol - revised convention, precautionary approach

1996 Protocol - permitted dumping

2006 amendments - CO2 sequestration

Ratifications:

1972 CONVENTION: 87 states representing 59.07% of the world's shipping tonnage..

1978 Amendments: 20 states representing 13.92% of the world's shipping tonnage.

1996 Protocol: 53 states representing 40.74% of the world's shipping tonnage.

Subject Matter

The Convention includes a general prohibition against dumping of any wastes or other matter at sea unless otherwise specified. Annex 1 (known as the black list or list of highly hazardous materials) is a list of materials that are completely prohibited from dumping at sea. Materials mentioned in Annex II (known as the grey list) may be dumped at sea under the issues of a permit granted specifically on applications made in advance. All items not listed in Annex I and II fall into a third category under which they need a prior general permit for disposal at sea. The Convention allows that Contracting Parties can take more stringent measures than those prohibited by the Convention. The Convention is universal and applies to both the territorial sea and the high sea. Sea as defined includes all marine waters other than internal waters of states. A party could apply the convention to dumping not only in its territorial seas but also in the exclusive Economic Zone. Dumping includes any deliberate disposal at sea of material and substances of any kind, form or description from vessels, aircraft, platforms or other man-made

structures. The Convention does not allow the disposal of wastes or other matter derived from normal operations of vessels, aircraft or platforms. It further excludes the placement of matter for a purpose other than mere disposal (examples: scientific research equipment or aquaculture equipment).

Application

Contracting Parties undertake to designate an authority to deal with permits, keep records, and monitor the condition of the sea.

Basic Structure

The London Convention consists of 22 Articles and three Annexes. It follows a "black list/grey list" approach to regulating ocean dumping; Annex I materials (black list) generally may not be ocean dumped (though for certain Annex I materials dumping may be permissible if present only as "trace contaminants" or "rapidly rendered harmless" and Annex II materials (grey list) require "special care". Annex III lays out general technical factors to be considered in establishing criteria for issuance of ocean dumping permits. Other articles are designed to promote regional co-operation, particularly in the fields of monitoring and scientific research

1996 Protocol

The intent of the 1996 Protocol is to replace the 1972 Convention. It represents a major change of approach to the question of how to regulate the use of the sea as a depository for waste materials. One of the most important innovations is to introduce (in Article 3) what is known as the "precautionary approach". This requires that "appropriate preventative measures are taken when there is reason to believe that wastes or other matter introduced into the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects. The article also states that "the polluter should, in principle, bear the cost of pollution" and it emphasizes that Contracting Parties should ensure that the Protocol should not simply result in pollution being transferred from one part of the environment to another. The 1972 Convention permits dumping to be carried out provided certain conditions are met. The severity of these conditions varies according to the danger to the environment presented by the materials themselves and there is a "black list" containing materials which may not be dumped at all. The 1996 Protocol is much more restrictive than the 1972 Convention but does allow for the ocean disposal of contaminated material as long as it is properly managed.

Permitted dumping

One of the principles of the London Convention is that whenever a contracting party proposed to dump wastes at sea, it must first issue a permit for such dumping. The Scientific Group of

the London Convention has created guidance for each class of waste materials to assist in the proper assessment of scientific and technical information to be considered by the responsible national authority prior to issuance of a permit for dumping. This waste assessment guidance, along with training materials for use of the guidance, is available to download on the IMO website. Included in this material are Specific Guidelines for the Assessment of Dredged Material.

Relevance to Ports

Ocean disposal of dredged material is regulated under the London Convention.

17. INTERNATIONAL CONVENTION FOR THE SAFE AND ENVIRONMENTALLY SOUND RECYCLING OF SHIPS,

Hong Kong 2009

Entry into force:

This convention is not yet into force. According to article 17 this convention shall 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 the requisite instrument of ratification, acceptance, approval or accession, Furthermore, the combined maximum annual ship recycling volume of those State during the preceding 10 years constitutes not less than 3 per cent of the gross tonnage of the combined merchant shipping of the same States.

Ratification: 15 states representing 30.21% of the world's shipping tonnage

Subject matter

In the recycling process of ships due to the hazardous materials used to build these ships damages and injuries are caused to the environment and to the workers dismantling the ships. The Ship Recycling Convention is a legally binding instrument which effectively tries to address the environmental, occupational health and safety related to ship recycling, taking into account the particular characteristics of maritime transport and the need to secure the smooth withdrawal of ships that have reached the end of their operating lives. To achieve this pre-set aim the convention obliges contracting states to give full and complete effect to the provisions of this convention, in order to minimize, prevent and eliminate accidents, injuries and other adverse effects on the human health and the environment.

Application:

The convention applies to ships entitled to fly the flag of a contracting state or ships that are operating under the authority of this contracting state. Besides the application to ships the convention also applies to ship recycling facilities operating under the jurisdiction of a contracting state.

Excluded subjects:

According to article 3 subsection 2 this convention doesn't apply to warships, naval auxiliary, or other ships owned or operated by a contracting state and used in a non-commercial way. Subsection 3 stipulates that this convention is not applicable to ships of less than 500 Gross

Tonnage or to ships that throughout their life only operate in the waters subject to the sovereignty or jurisdiction of the contracting state.

Basis Structure:

The Ship Recycling Convention consists of a convention, regulations for the safe and environmentally sound recycling of ships and seven appendixes. The convention consists of a preamble and 21 articles. In these articles the general definitions and obligations are stipulated, which are used and defined by the regulation. Examples of matters regulated in the convention are the application, the obligation to inspect ships regarding the certificates they are obliged to carry and the authorization of ship recycling facilities.

The regulations are the main instrument of the Ship Recycling Convention. In this part of the convention 25 regulations are to be found, divided over five chapters. Chapter 1 contains regulations which give general provisions, such as definitions that for the purpose of the regulations are used and the relationship with other standards, recommendations and guidelines. In the second Chapter regulations regarding the requirement of ships are to be found. In Part A of this Chapter design, construction, operation and ship maintenance regulations are stipulated. Part B gives regulations regarding the preparation of ships for ship recycling. In this part the ship recycling plan is considered, this is a plan developed by the ship recycling facility prior to any recycling of a ship. Regulations about the issuance of the required certificates, e.g. the International Certificate on Inventory of Hazardous Materials, and the surveys used to inspect the ships if they are carrying the obliged certificates and if they are carrying them lawfully, are to be found in Part C. Chapter 3 gives regulations to which give requirements to which ship recycling facilities must comply, otherwise they won't be authorized by their state to recycle ships. The last Chapter contains reporting requirements in regard with ship recycling to which the shipowner and the ship recycling facility must comply with. The seven appendixes contain a list of hazardous materials, a minimum of inventory of hazardous materials to be mentioned on the certificate and standard forms for the issuance of certificates, authorizations of ship recycling facilities and the process of ship recycling.

Relevance to Ports:

When this convention enters into force, the Ship Recycling Convention will be relevant to ports in a way that article 8, subsection 1, stipulates that ships who enter into ports of a contracting state, may be subject to inspections by officers duly authorized by that contracting state for the purpose of determining whether the ship is in compliance with this Convention. This inspection aims at verifying if the right certificates are on board of the ship; the International Certificate on Inventory of Hazardous Materials or an International Ready for Recycling Certificate. In addition, according to article 9, subsection 3, ships that are in violation of this convention may be warned, detained, excluded from ports, by the contracting state carrying out the inspection.

VI OVERVIEW OF INTERNATIONAL INSTRUMENTS ON PORT-STATE CONTROL

1. PARIS MEMORANDUM OF UNDERSTANDING (PARIS MoU) 1982;

Date of signature: 26 January 1982

Entry into force: 1 July 1982

Participating states: Belgium, Bulgaria, Canada, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovenia, Spain, Sweden, United Kingdom (27 states in total)

Subject matter: The Paris MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. The Paris MoU inspired and served as model for many other MoU's around the world.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.parismou.org

2.

LATIN AMERICAN AGREEMENT ON PORT STATE CONTROL OF VESSELS

(VINA DEL MAR MOU) 1992;

Date of signature/

Entry into force: 5 November 1992

Participating states: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Panama, Peru, Uruguay, Venezuela (15 states in all).

Subject matter: The Vina del Mar MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Vina del Mar MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.acuerdolatino.int.ar

3. **MEMORANDUM OF UNDERSTANDING
ON PORT STATE CONTROL IN THE ASIA-
PACIFIC REGION** (TOKYO MOU) 1993;

Date of signature/

Entry into force: 1 December 1993

Entry into force: 1 April 1994

Participating states: Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, Marshall Islands, New Zealand, Papua New Guinea, Peru, Philippines, Russian Federation, Singapore, Thailand, Vanuatu, Vietnam (20 states in all).

Subject matter: The Tokyo MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Tokyo MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.tokyo-mou.org

4. **MEMORANDUM OF UNDERSTANDING ON
PORT STATE CONTROL IN THE
CARIBBEAN REGION** (CARIBBEAN MOU) 1996;

Date of signature/

Entry into force: 9 February 1996

Participating states: Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curacao, France (Associate member), Grenada, Guyana, Jamaica, the Netherlands, St Kitts & Nevis, Suriname, Trinidad & Tobago (16 states in all).

Subject matter: The Caribbean MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Caribbean MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.caribbeanmou.org

**5. MEMORANDUM OF UNDERSTANDING
ON PORT STATE CONTROL IN THE
MEDITERRANEAN REGION** (MED MOU) 1997;

Date of signature/

Entry into force: 11 July 1997

Participating states: Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Tunisia, Turkey (10 states in all).

Subject matter: The Med MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Med MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.medmou.org

**6. MEMORANDUM OF UNDERSTANDING
ON PORT STATE CONTROL FOR THE
INDIAN OCEAN REGION (INDIAN OCEAN MOU)**

1998;

Date of signature/

Entry into force: 5 June 1998

Entry into force: 1 April 1999

Participating states: Australia, Bangladesh, Comoros, Eritrea, France, India, Iran, Kenya, Maldives, Mauritius, Mozambique, Myanmar, Oman, Seychelles, Sri Lanka, Sudan, South Africa, Tanzania and Yemen (19 states in all).

Subject matter: The Indian Ocean MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Indian Ocean MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.iomou.org

7.

MEMORANDUM OF UNDERSTANDING ON PORT STATE CONTROL IN THE WEST AND CENTRAL AFRICAN REGION

(WEST AND CENTRAL AFRICAN MOU) 1999;

Date of signature/

Entry into force: 22 October 1999

Participating states: Angola, Benin, Cameroon, Cape Verde, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Ghana, Guinea, Guinea Bissau, Liberia, Mauritania, Namibia, Nigeria, Senegal, Sierra Leone, South Africa, Sao Tome e Principe, The Gambia, Togo (22 states in all).

Subject matter:

The West and Central African MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the West and Central African MoU was inspired by and modeled on the Paris MoU.

Main Structure:

The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website:

www.abujamoupsc.org

8. **MEMORANDUM OF UNDERSTANDING
ON PORT STATE CONTROL IN THE
BLACK SEA REGION** (BLACK SEA MOU), 2000;

Date of signature: 7 April 2000

Participating states: Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine (6 states in all).

Subject matter: The Black Sea MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Black Sea MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.bsmou.org

9. **MEMORANDUM OF UNDERSTANDING ON
PORT STATE CONTROL IN THE
GULF REGION** (RIYADH MOU) 2004

Date of signature/

Entry into force: June 2004

Participating states: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE (6 states in all).

Subject matter: The Riyadh MoU is an arrangement under which the participating states co-ordinate and harmonize their efforts at eliminating sub-standard ships through exercising Port-State Control on board of ships calling at their ports. Like many others the Riyadh MoU was inspired by and modeled on the Paris MoU.

Main Structure: The applicable legal standards applied to the ships subjected to PSC are listed in Section 2 ('relevant instruments'). Ships on non-member states do not get a more favorable treatment. The Inspection Procedure is set out in section 3 and Annex 1.

Website: www.riyadhmou.org

VII VARIOUS SUBJECTS

1. PLACES OF REFUGE FOR SHIPS IN DISTRESS

1. Access to Ports Under International Law

Under multilateral conventions, there is no evidence of a general right to access ports. While some bilateral treaties do specifically grant access to the ships of the other party, such access is specific to those ships and the right is not a general one. In any event these too can be conditioned. Since the advent of larger and larger oil tankers in the late 1950s, environmental concerns have taken on a significance that overshadows any possible right of access. Security and safety concerns brought about in the early 21st Century have increased the bases of refusal of entry of ships into port to the extent that it can no longer be argued that there is a general right of access. Whatever basis there may be in bilateral treaties, there is no general obligation to grant access to ports and the position is that States can refuse entry to ships on a number of grounds thereby refuting any presumption that ports are open to all ships.

In relation to ships in distress, while there is no specific right under any multilateral treaty compelling a coastal State to grant access to ships in distress, there exists, under customary international law, an obligation on a coastal State to grant access to ships in distress, although the extent of the custom has changed over time. While not without doubt,¹ the extent of the obligation under customary international law appears to be one of humanitarian assistance only and that, outside the requirement to protect human life, a request by a ship in distress for access to a port or a place of refuge is to be treated in the same way as any general request for access.

2. International Response to the Problem of Places of Refuge

The International Maritime Organisation (IMO) has recognised the problem and has acted on it. It has also been examined and commented on by other international non – government organisations such as the Comité Maritime International (CMI), IAPH and other industry groups all of whom have contributed to the activities and actions of the IMO.

2.1 Actions of the IMO

¹ In particular, see the arguments in Eric van Hooydonk, *Places of Refuge – International Law and the CMI Draft Convention* (Lloyds List, 2010).

The main response of the IMO to the problem of places of refuge has been the issue in 2003 of *Guidelines on Places of Refuge for Ships in Need of Assistance (IMO Guidelines)* to be used by all parties when the need for a place of refuge arises.

The *IMO Guidelines* were drafted by the Navigation Sub Committee of IMO. Work commenced after the *Castor* incident in 2001 and, after extensive discussion and input by various committees of the IMO, particularly the Legal Committee, and other international organisations such as the CMI, IAPH and shipping industry bodies, the *IMO Guidelines* were adopted as Resolution A 949 (23) on 5 December 2003.² In view of the diametrically opposed interests of the ship and the coastal State, the *IMO Guidelines* had to be a delicate balance between these two sets of interests. In seeking to achieve this balance, the Resolution also recognises that masters and salvors often need guidance on what they must do when a ship is in distress just as the actions of the coastal State would be assisted by an established procedure. The actions of both ship and coastal State are vital to “enhance maritime safety and the protection of the marine environment”.³ In achieving a common beneficial outcome each incident was to be treated as an exercise of risk management weighing up the interests of all parties according to the risks relevant to the specific incident.

The whole tone of both the *IMO Guidelines* and the Resolution is conciliatory and non-peremptory. For example, paragraph 2 of the Resolution merely “invites Governments to take these Guidelines into account when determining and responding to requests for places of refuge from ships in need of assistance”. When coupled with the wording of Article 3.12 of the *IMO Guidelines*, that when a request for access is made “there is no obligation for the coastal State to grant it”, it is clear that the *IMO Guidelines* go to great lengths to avoid imposing any binding obligations on coastal States. However, to provide balance, the Article 3.12 continues “the coastal State should...give shelter whenever reasonably possible”. However, the contentious issues of liability and compensation were not dealt with. By not dealing with these issues, the drafters sought to achieve a workable document while reserving the right to readdress the issues once all the current conventions that dealt with liability and compensation were ratified and in operation.⁴ The Legal Committee of IMO has retained the issue of places of refuge as a high priority item in its work programme and has adopted a ‘wait and see’ attitude in relation to issues of liability and compensation.⁵

2.1.1 IMO Guidelines

² IMO Assembly, 23rd Session, Resolution A 949(23) *Guidelines on Places of Refuge for Ships in Need of Assistance* adopted on 5 December 2003, (*IMO Guidelines*); Rosalie Balkin, “The IMO Position with Respect to Places of Refuge” *CMI Yearbook 2005-2006* (Comite Maritime International, 2006) 154, 156.

³ Recitals in the Preamble to Resolution A 949 (23).

⁴ Rosalie Balkin, “The IMO Position with Respect to Places of Refuge” *CMI Yearbook 2005-2006* (Comite Maritime International, 2006) 154, 157.

⁵ Ibid 156.

The *IMO Guidelines* provide guidance on the reasons for them and their importance, what is expected of all parties where a place of refuge is requested, as well as a risk matrix to enable objective decisions to be made on such a request. The *IMO Guidelines* are structured as follows: general provisions including objectives, background and purpose of the *IMO Guidelines* together with definitions; guidelines for action required of masters and/or salvors of ships in need of refuge (Part 2); guidelines for actions expected of coastal States (Part 3); applicable international conventions (Appendix 1); and guidelines for the evaluation of risks associated with the provision of places of refuge (Appendix 2).

General Provisions

In addition to providing definitions, the general provisions of the *IMO Guidelines* provide a succinct statement of their purpose:

The purpose of the Guidelines is to provide Member Governments, shipmasters, companies...and salvors with a framework enabling them to respond effectively and in such a way that, in any given situation, the efforts of the shipmaster and shipping company concerned and the efforts of the government authorities involved are complementary. In particular, an attempt has been made to arrive at a common framework for assessing the situation of ships in need of assistance.⁶

In the introduction and background sections (paragraphs 1.1 – 1-11), the *IMO Guidelines* seek to provide a rationale for their use and to highlight the importance of taking a balanced view on the provision of a place of refuge.⁷ It presents the overriding question in paragraph 1.2:

1.2 What to do when a ship finds itself in serious difficulty or in need of assistance without, however, presenting a risk to the safety of persons involved. Should the ship be brought into shelter near the coast or into a port or, conversely, should it be taken out to sea?

The competing arguments of shipping interests and coastal State interests are briefly expounded with the conclusion in paragraph 1.7:

1.7 Therefore, granting access to a place of refuge could involve a political decision which can only be taken on a case by case basis with due consideration given to the balance between the advantage for the affected ship and the environment resulting from bringing the ship into a place of refuge and the risk to the environment resulting from that ship being near the coast.

⁶ *IMO Guidelines* Article 1.12.

⁷ Aleka Mandaraka-Sheppard, "Marine Safety (EU – IMO Legislation): Recent Developments" (2006) 12 *Journal of International Maritime Law* 262, 277.

The admission that a decision on the granting of access to places of refuge can be a political one is used in paragraph 1.10 as a basis for the need for the *IMO Guidelines* and the value in using them to justify any decision on access:

1.10 The use of places of refuge could encounter local opposition and involve political decisions. The coastal States should recognize that a properly argued technical case, based on a clear description of the state of the casualty, could be of great value in any negotiations which may take place.

The use of the risk management process in the *IMO Guidelines* would provide a rational and objective basis for the purposes of supporting a decision to either grant or refuse access both to the shipping interests and to satisfy local opposition.⁸ It could also provide a defence to the coastal State in any claim that may be made against its decision in legal proceedings.⁹

The *IMO Guidelines* do not apply to safety of human life at sea. Paragraph 1.1 of the *IMO Guidelines* makes a clear statement:

1.1 Where the safety of life is involved, the provisions of the SAR Convention should be followed. Where a ship is in need of assistance but safety of life is not involved, these guidelines should be followed.

Actions required by the master and/or salvors

The next part of the *IMO Guidelines* deals with the actions that masters and salvors should take when the ship gets into difficulties and needs assistance and before a request is made for a place of refuge.

The primary aim of these requirements is for the master or salvor to clearly establish the problems being experienced and report them to the coastal State to enable the coastal State to assess the risk and to establish whether or not the ship is a 'ship in need of assistance' within the meaning of the *IMO Guidelines* and, if so, what action, if any, may be required of the coastal State.¹⁰ The events that may cause problems to a ship include those listed in paragraph 1 of Appendix 2 to the *IMO Guidelines*, which include fire, explosion, grounding, collision and pollution among others. In addition to identifying the actual problems being experienced, the

⁸ Aldo Chircop, "The IMO Guidelines on Places of Refuge for Ships in Need of Assistance" in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 35, 44.

⁹ Such as under the "sic utere tuo" principle see Aldo Chircop, "The IMO Guidelines on Places of Refuge for Ships in Need of Assistance" in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 35, 38.

¹⁰ Aldo Chircop, "Living with Ships in Distress – A New IMO Decision-Making Framework for the Requesting and Granting of Refuge" (2004) 3 *World Maritime University Journal of Maritime Affairs* 31, 39.

master or salvor must then assess the likely consequences of such problems in the context of four hypothetical situations – if the ship remains where it is, if it continues on, if it enters a place of refuge or if it is taken out to sea.¹¹ Finally, the master or salvor must identify what assistance is required from the coastal State.¹² This assistance can include, but is not limited to, the emergency response actions set out in paragraph 3 of Appendix 2 to the *IMO Guidelines* – lightering, pollution combating, towage, stowage, salvage and storage.

Once all this information is ascertained, it is then transmitted to the coastal State through that State's Maritime Assistance Service (MAS),¹³ together with advice as to what actions the master or salvor intends to take within a stated period of time.¹⁴ While it is waiting for the response from the coastal State, the master or salvor should take all necessary action to deal with the situation including signing a towage or salvage agreement or for other services.¹⁵ However, in relation to such actions, paragraph 2.7 requires that such action be "subject, where necessary, to the coastal State's prior consent". No guidance is given as to when this necessity would arise or, in such instances, who would give the consent.¹⁶

Actions expected of coastal States

The *IMO Guidelines* then deal with the method of assessment to be employed by a coastal State when a ship requests a place of refuge.

First, coastal States are encouraged to develop a contingency plan for each possible places of refuge and to assess the appropriateness of each potential places of refuge by use of the factors listed in paragraph 2 of Appendix 2 to the *IMO Guidelines*. The analysis of potential places of refuge should be done so that in the event of a request for a place of refuge being granted, the coastal State is in a position to direct the ship to the most appropriate place of refuge.¹⁷

The factors which can be taken into account include environmental and social factors as well as the natural conditions of the potential place of refuge.¹⁸ The environmental and social factors address the safety of the crew and public safety on land as well as the possible effects of pollution on designated environmental areas, fisheries, mariculture and tourism and the

¹¹ *IMO Guidelines* Article 2.2.

¹² *Ibid* Article 2.3.

¹³ Each coastal State is obliged to set up an MAS under IMO Assembly, 23rd Session, Resolution A 950(23) *Maritime Assistance Services (MAS)* adopted on 5 December 2003 which was adopted at the same time as the *IMO Guidelines*.

¹⁴ *IMO Guidelines* Articles 2.4, 2.5.

¹⁵ *Ibid* Article 2.7.

¹⁶ Aldo Chircop, "Living with Ships in Distress – A New IMO Decision-Making Framework for the Requesting and Granting of Refuge" (2004) 3 *World Maritime University Journal of Maritime Affairs* 31, 39.

¹⁷ *IMO Guidelines* Article 3.4.

¹⁸ *IMO Guidelines* Annex 2 paragraph 2.1.

availability of facilities such as reception facilities and pollution combating equipment.¹⁹ The natural conditions include the prevailing weather and tides, the bathymetry, navigational characteristics and operational conditions, particularly where the potential place of refuge is a port.²⁰

In addition, an assessment should be made of the availability of suitable equipment, the availability of evacuation facilities and international cooperation and, above all, a competent MAS.²¹ In relation to the MAS, difficulties could occur in States where there are multiple jurisdictions and it is necessary for a central MAS be established in such instances to avoid any confusion or failure of communication.²²

Finally, the possible consequences of various possible actions on the safety of personnel and local populations and risks associated with pollution, fire and explosion on the potential place of refuge should be taken into account.²³ There is no requirement either under international law²⁴ or under the *IMO Guidelines* for the identified places of refuge to be published.²⁵ The prevailing view is that as each request for a place of refuge involves different considerations, a case-by-case treatment was preferable to a system of pre-designation.²⁶ When a request for a place of refuge is received by a coastal State, consideration must be given as to whether or not to grant the request. Paragraph 3.9 of the *IMO Guidelines* sets out case specific factors that should be taken into account when assessing the request. The factors used in relation to specific places of refuge, which should have been carried out by the coastal State beforehand, should also be used in the assessment.²⁷ While not designed to be exhaustive, the factors listed in paragraph 3.9 indicate the types of factors that would apply to most situations. These include the condition of the ship at the time of the request and its potential to change; the type and condition of cargo carried; whether or not the master and crew or salvors are still on board and, if so, their condition; whether a salvage agreement has been entered into; the distance to a potential place of refuge; whether the ship is insured and if so, the details of the insurance; the details of any financial security required; the requirements, if any, of the flag State.²⁸ Many cases will be similar, no two cases are identical and the assessment factors for each case vary.

¹⁹ *IMO Guidelines* Annex 2 paragraph 2.2.

²⁰ *IMO Guidelines* Annex 2 paragraph 2.3.

²¹ *IMO Guidelines* Article 3.3; Aldo Chircop, "Living with Ships in Distress – A New IMO Decision-Making Framework for the Requesting and Granting of Refuge" (2004) 3 *World Maritime University Journal of Maritime Affairs* 31, 40.

²² Aldo Chircop, "Living with Ships in Distress – A New IMO Decision-Making Framework for the Requesting and Granting of Refuge" (2004) 3 *World Maritime University Journal of Maritime Affairs* 31, 40.

²³ *IMO Guidelines* Annex 2 paragraph 2.4.

²⁴ Richard Shaw, "Designation of Places of Refuge and Mechanism of Decision Making" *CMI Yearbook 2003* (Comite Maritime International, 2003) 446, 446.

²⁵ MSC, 77th Session, *Report of the Maritime Safety Committee on its Seventy-seventh Session* MSC 77/26 dated 10 June 2003, paragraph 8.10.4.

²⁶ *Ibid*; Legal Committee, 84th Session, *Report of the Legal Committee on the Work of its Eighty-Fourth Session* LEG 84/14 dated 7 May 2002, paragraph 90.

²⁷ *IMO Guidelines* Article 3.9.

²⁸ *IMO Guidelines* Article 3.9.

Where possible, to assist in assessing the risks, paragraph 3.10 recommends that an inspection team be put on board. The analysis of the risks is to include an assessment of the competing risks of leaving the ship at sea or bringing it into a place of refuge by reference to the risks to the crew and salvors on board, the risks to the persons at or near the place of refuge, the risks of pollution, the risks of disruption should the place of refuge be a port and the consequences of refusing a place of refuge. Finally due consideration should be given to the preservation of the ship and cargo.

Once all the assessments and analyses have been performed, the coastal State must then make a decision on whether or not to grant a request for access. Paragraph 3.13 gives the options available to coastal States: allow or refuse access, subject to any conditions.²⁹

In making its decision, guidance is given to the coastal State in paragraph 3.12 which provides clearly that there is no obligation to grant refuge but that after that the various factors be assessed in a balanced manner the coastal State should “give shelter whenever reasonably possible”.³⁰ As to conditions of access, paragraph 3.14 provides that where the place of refuge is a port, a security guarantee for all expenses incurred by the port in permitting the ship into port must³¹ be given. An indicative list of such expenses is given and includes pilotage, towage, mooring operations and safety measures, as well as port dues and “miscellaneous expenses, etc”.³²

While the current regime of compensation, as set out in Appendix 1 of the *IMO Guidelines*, does cover liabilities for damage by ships in need of assistance and does provide compensation for such damage, it also permits shipowners (and hence their insurers) to limit their liability in most instances.³³ In major oil spills, such as the *Prestige*, there is a clear risk that the expenses involved in cleaning up the spill could exceed the limitation fund.³⁴ In this case, the coastal State would be liable to cover the remaining expenses. This problem is compounded by the fact that guarantees covering unlimited liability could not be given by shipowners because they may be unable to obtain insurance cover to back these guarantees.³⁵

The International Union of Marine Insurers (IUMI) in its submission to MSC during the negotiations commented that such guarantees would not be provided by the London market.³⁶

²⁹ *IMO Guidelines* Article 3.13.

³⁰ *IMO Guidelines* Article 3.12.

³¹ This appears to be the only obligation, as opposed to recommendation, in the *IMO Guidelines*.

³² *IMO Guidelines* Article 3.14.

³³ Erik van Hooydonk, “The Obligation to Offer a Place of Refuge to a Ship In Distress” *CMI Yearbook 2003 Part II* (Comite Maritime International, 2003) 403, 438.

³⁴ The ultimate costs are estimated to exceed 2 billion Euros which are in excess of the limitation amounts under the limitation conventions. As at 9 September 2009, the claims made to the IOPC Fund amounted to over 1.5 billion euros. The combined CLC and Fund limits amounted to 171,520,703 euros < www.iopcfund-docs.org/ds/pdf/IOPC-OCT09-3-5pdf>.

³⁵ MSC, 77th Session, *Places of Refuge – Submitted by the International Union of Marine Insurance (IUMI)* MSC 77/8/2 dated 14 February 2003, paragraph 12.

³⁶ *Ibid.*

Subsequently the International Group of P and I Clubs did provide a draft Standard Letter of Guarantee as part of the ongoing work of the Legal Committee into liability and compensation, but this too is limited to a specified amount.³⁷ Unless the issue of unlimited guarantees is dealt with within the overall question of liability and compensation, the risk is that coastal States will refuse access to ships in need of assistance until an unlimited guarantee is given.³⁸ As this currently is not available in the insurance markets, this may impact on the effectiveness of the *IMO Guidelines* as a tool for dealing with the problem.

The final point on the decision making process under the *IMO Guidelines* is who makes the actual decisions to grant or refuse access. The *IMO Guidelines* make no reference to this point stating only that it is for the coastal State to make the decision. The *IMO Guidelines* concede that such decisions can be political decisions. Since there is no obligation for a coastal State to grant access there is a risk that the decision could ultimately be based on factors other than those in the *IMO Guidelines* and a ship could still be refused access even if it satisfied all the risk factors. To address this risk, some coastal States have established a body independent of Government with the mandate to make decisions on access to places of refuge. In the United Kingdom, the Secretary of State's Representative (SOSREP) has been established to perform this role and in Australia the Maritime Emergency Response Commander (MERCOCOM) plays a similar role. In the European Union, in the final form of the Erika III package there is a requirement that the SOSREP system be replicated within every Member State of the European Union.³⁹

2.1.2 Assessment of the IMO Guidelines

Benefits

- (a) The major practical benefit of the *IMO Guidelines* is that they provide a set of risk factors that should be used by all parties in reaching a decision when a request for a place of refuge is made. All parties know what is expected of them and can prepare for them. Coastal States in particular can employ the *IMO Guidelines* to make contingency plans for the reception of ships in need of assistance if this is the decision that is made. Furthermore, coastal States can make objective assessments of potential places of refuge so that in the event of consent being granted, the ship can be immediately directed to the appropriate place whether it be a port or other place.
- (b) The *IMO Guidelines* provide the coastal State with the ability to make a decision on an objective basis. This enables the decision maker to provide clear justification for the

³⁷ Legal Committee 89th Session *Places of Refuge – Provision of financial security to authorities in relation to vessels granted a place of refuge* - Submitted by the International Group of P and I Clubs (International Group) LEG 89/7/1 dated 24 September 2004.

³⁸ "Cynical or Stupid?" *Fairplay* May 15, 2003, 4.

³⁹ Directive 2009/17/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system Official Journal of the European Union L131/101 dated 28 May 2009, Article 20.

decision either in the domestic political and economic context or in a court should the decision be challenged.

- (c) Salvors are in a better, though not entirely satisfactory, position under the *IMO Guidelines* as they have clearer procedures to follow.⁴⁰
- (d) While the *IMO Guidelines* clearly state that there is no obligation on a coastal State to grant access, shipping interests are benefitted under the *IMO Guidelines* by the fact that an assessment should be made and that this assessment should include expert analysis by an inspection team.
- (e) If properly used, the *IMO Guidelines* should prevent automatic refusals of access without proper consideration of the relevant factors that have occurred in the past. This will not prevent extraneous factors, such as political pressures, being used to refuse access where the objective analysis indicates otherwise, but it would make the justification of such actions more difficult.

Disadvantages

- (a) The main drawback of the *IMO Guidelines* is that they are non-binding and so not legally enforceable.
- (b) There is no obligation on the coastal State to grant access to a place of refuge.
- (c) It follows from the voluntary nature of the *IMO Guidelines* that proper implementation of them will depend entirely on the goodwill of the coastal State. There is nothing to prevent coastal States refusing access even where the analysis under the *IMO Guidelines* indicates access should be granted.
- (d) The *IMO Guidelines* do nothing to prevent political and other extraneous influences being brought to bear on the decision maker. No direction is given as to who should make the decision. Unless the decision is made by an independent person or body, there is a risk of political pressure being applied.
- (e) The *IMO Guidelines* make no reference to the obligations of the flag State. There are a number of the responsibilities imposed on flag States by *LOSC* including the investigative role, the obligations to protect the crew and, potentially a liability for damage by the ship.
- (f) There is a need for the *IMO Guidelines* to deal with issues of liability and compensation. Failure to address the issues of liability and compensation could have the effect of some coastal States refusing to adopt and apply the *IMO Guidelines*.

While the *IMO Guidelines* are acknowledged by most interests as a good first step, there is divergence of opinion within the shipping industry as to their adequacy as a final document. The failure to deal with issues of liability and compensation runs the risk of severely hampering acceptance of the *IMO Guidelines* by coastal States and increases the likelihood that incidents

⁴⁰ Under *LOF 2000*, a salvor must “use best endeavours to save the property” and the question is whether a refusal of refuge discharges any further action under the contract for a salvor who has used best endeavours.

like the *Castor* and *Prestige* will reoccur due to risk based decisions being overruled on political or other extraneous grounds.

The IMO has now effectively stopped work on the problem, preferring to adopt a 'wait and see' attitude while encouraging member States to ratify existing conventions. In this the IMO is supported in part by the IAPH and the P&I Clubs. However, as has been pointed out by the IAPH, even if all the existing conventions are ratified, there will still be major gaps particularly in relation to liability for cargoes not covered by the conventions and limitation of liability, both of which could lead to shortfalls in compensation to coastal States affected by the result of decisions on places of refuge.

2.2 Actions of CMI

CMI, supported by IUMI and the ISU, has taken the matter one step further by drafting an instrument under which attempts to redress the balance by removing the possibility of objectively made decisions being overruled on other grounds. To make the draft instrument palatable to coastal States, the draft instrument attempts to address issues of liability and compensation. CMI candidly accepts that such an instrument may be unacceptable to coastal States as being a major infringement on sovereignty. Nevertheless, the draft instrument does provide a model in the event that a convention is needed should another *Prestige* incident occur.

CMI concluded at its 2004 Conference that there was no one convention that currently dealt with places of refuge and those that did, particularly the compensation and limitation conventions, contained exclusions and limitation provisions that could ultimately leave coastal States exposed to liability. This would be so even should all the existing unratified conventions be put in force. Furthermore, the absence of a right to access a place of refuge and the trend to introduce prohibitive financial conditions on ships that are permitted access indicated that the current *IMO Guidelines* were not sufficient.⁴¹

One of three recommendations made at the 2004 Conference was that a separate convention be drawn up to deal with places of refuge.⁴² A final draft of the instrument was presented to the CMI Conference in October 2008.⁴³ It was not accepted unanimously and the level of acceptance reflected the existing coastal State/shipping interest divide. It was not supported by the IAPH or the P&I Clubs. On the other hand the instrument was supported by International Salvage Union (ISU) and International Union of Marine Insurers (IUMI). There was also a mixed reception from member delegations. These varied from outright rejection by some delegations to limited acceptance by others. Ultimately a resolution in support of the draft instrument was

⁴¹ Stuart Hetherington, "Report of the International Sub-Committee on Places of Refuge" *CMI Yearbook 2004* (Comite Maritime International, 2004) 380.

⁴² Ibid 393.

⁴³ Attached as Annex 1 to Legal Committee 95th Session *Places of Refuge – Submitted by the Comite Maritime International* LEG 95/9 dated 23 January 2009 ("*CMI Draft Instrument*").

passed by 16 votes to 10 with 2 abstentions.⁴⁴ This draft was adopted by the Conference and was submitted to the Legal Committee

2.2.1 CMI Draft Instrument

After stating the objectives of the instrument in the Preamble, the document proceeds to enumerate the following specific provisions: definitions (Article 1); object and purpose (Article 2); legal obligation to grant access to a place of refuge (Article 3); immunity from liability where access is granted reasonably (Article 4); liability to another State, a third party, the ship owner or salvor where refusal of access is unreasonable (Article 5); reasonable conduct (Article 6); guarantees (Article 7); plans to accommodate ships seeking assistance (Article 8); identification of competent authority (Article 9).

Preamble

The object, purpose and reasons for a new instrument are addressed in the Preamble.⁴⁵ The recitals acknowledge that the right of access to a ship in need of assistance under international law has been questioned⁴⁶ and that the existing international conventions do not adequately deal with the questions of liability and compensation in the event that a ship requiring a place of refuge causes damage, whether or not the request is granted.⁴⁷

The instrument is designed to complement the procedure in the *IMO Guidelines* but also to seek to deal with their perceived shortcomings⁴⁸ and stresses the need for a framework of legal obligations in addition to the *IMO Guidelines*⁴⁹ which takes into account the interests of all concerned parties.⁵⁰ It is also acknowledged that the provision of a place of refuge minimises the hazards to human life, navigation, ships cargoes and the environment while also increasing the efficiency of salvage operations.

The overall aim of the instrument is summed up in the final recital –

INTENDING that this Instrument shall govern the actions of States, competent authorities, shipowners, salvors and others involved, where a ship seeks assistance; encourage adherence to international Conventions relating to the preservation of human life, property and the environment, and balance those interests in a fair and reasonable way; and shall be construed accordingly.⁵¹

Object and Purpose

⁴⁴ Stuart Hetherington, "Introduction" *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 162.

⁴⁵ *CMI Draft Instrument* Preamble.

⁴⁶ *CMI Draft Instrument* Recital 3.

⁴⁷ *CMI Draft Instrument* Recital 4.

⁴⁸ *CMI Draft Instrument* Recital 5.

⁴⁹ *CMI Draft Instrument* Recital 6.

⁵⁰ *CMI Draft Instrument* Recital 2.

⁵¹ *CMI Draft Instrument* Recital 7.

Article 2 of the draft Instrument reinforces the wording in the Recitals and states:

The object and purpose of this Instrument is to establish:

- (a) a legal framework for the efficient management of situations involving ships in need of assistance requiring a place of refuge and
- (b) the responsibilities and obligations concerning the granting or refusing of access to a place of refuge.⁵²

Legal obligation to grant access to a place of refuge

Article 3 is the main operative provision and the one that could prove most controversial.⁵³ Under Article 3(a) any competent authority (which includes a State) is required to grant access to a ship in need of assistance when it is requested unless it can, on reasonable grounds, refuse.

The significance of this provision is that this would be the first time an international convention dealt with the granting of access to a place of refuge in any substantial way. However, the right of access granted under Article 3(a) is not absolute and coastal States do retain a right to refuse access in certain circumstances. The obligation to grant access is rebuttable, if the grounds set out in Articles 3(b) or (c) are met. After considerable debate, the CMI was unable to reach agreement on the grounds available to competent authorities to refuse access, so it provided three options for Articles 3(b) and 3(c).⁵⁴ The common factor in the three options is that access can be denied if, after an assessment, there are reasonable grounds for finding that the condition of the ship or its cargo is such that it would pose a greater risk to grant access than to deny it. This is the sole basis in Option 1. Option 2 expands slightly on this by stating that the grounds for denying access must be reasonable and must “have regard to” the condition of the ship and/or cargo. This is wider in that the condition of the ship is only one of the grounds for potential denial of entry, all of which must be reasonable. Option 3 is the same in wording, but not form, as Option 1.

The major difference between the three options is the relationship between the provision of security and the denying of access. Under Option 1, the mere absence of an insurance certificate, guarantee or financial security is not grounds for refusal of access. Under Option 2, the existence or availability of security is a factor when assessing whether access is to be denied and is not a reason for not performing the assessment. Further the absence of security by itself cannot be used as a reason for refusing access or delaying a decision. Under Option 3, the failure to provide security for an amount that reasonably reflects the potential liability, as determined in the assessment, is a ground for refusal by itself. If a request for access to a place of refuge is refused, the competent authority must use “best endeavours” to identify an

⁵² CMI Draft Instrument Article 2.

⁵³ Frans van Zoelen, “An Instrument on Places of Refuge from a Ports’ Perspective” *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 181, 187.

⁵⁴ Stuart Hetherington, “Introduction” *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 159-160.

alternative course of action that is practical or lower risk than permitting access. The only guidance on the scope of this requirement is that it is based on the US Coast Guard approach.

Finally in relation to the obligations in this article, the obligation to grant access does not preclude a claim for salvage which a competent authority could make.

Guarantees

The effect of the requirement to provide security is closely tied to Article 7 which deals with requirements for guarantees. This also created a great deal of debate and again three options were provided to cover the variance of opinion.

Under Option 1, the ship requesting a place of refuge must provide evidence of insurance, a letter of guarantee from the International Group of P&I Clubs or other security from up to the applicable limit of liability under the *Convention on Limitation of Liability for Maritime Claims 1976 (LLMC)*.⁵⁵ Option 2 includes the wording of Option 1 but adds a provision that where *LLMC* does not apply, that the amount should be sufficient to cover anticipated liabilities. Option 3 contains no reference to limitation under *LLMC* but simply requires a guarantee covering the anticipated liabilities. In all three options, there is a provision that nothing in the instrument precludes competent authorities from requiring guarantees provided for in any other Conventions.

The right to limit liability and the consequent right to limit guarantees to this amount is a point of contention with the port interests. The IAPH argues that ports should be permitted to require that ships requesting access waive the global right to limit under *LLMC* and for any security to be open-ended in relation to amount.⁵⁶ The difficulty and cost of obtaining unlimited guarantees from P&I Clubs or other financial institutions could clearly disadvantage ships in need of assistance.⁵⁷

Immunity from Liability for Granting Access and Liability for Refusing Access

Under Article 4, if a competent authority assesses the request for a place of refuge and concludes that access under Article 3 can be granted and that assessment was made reasonably then the competent authority has immunity from liability for any damage that ensues. Under Article 5, where a competent authority assesses the request and refuses access it will

⁵⁵ *Convention of 19 November 1976 on Limitation of Liability for Maritime Claims*, opened for signature 19 November 1976, 1456 UNTS 221 (entered into force 1 December 1986) as amended by *Protocol of 2 May 1996 to amend the Convention on Limitation of Liability for Maritime Claims*, opened for signature 2 May 1996, RMC I.2.340 II.2.340 (entered into force 13 May 2004).

⁵⁶ Frans van Zoelen, "An Instrument on Places of Refuge from a Ports' Perspective" *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 181, 188.

⁵⁷ Stuart Hetherington, "Civil liability and monetary incentives or accepting ships in distress" in *CMI Yearbook 2003: Vancouver I: Documents for the Conference*. (Comite Maritime International, 2003) 457, 463.

have no liability if the competent authority can establish that the decision was made on reasonable grounds.

The consequences of a refusal of access are dealt with in Article 5 in a different way to the consequences of a grant of access. Under Article 5 it is the competent authority which must establish the reasonableness of the decision to apply the application of the exceptions to the duty and refuse access.

Reasonable conduct

In Articles 3, 4 and 5 there are references to reasonableness. What is meant by this term is critical to application of the whole Instrument. Article 6 attempts to provide some guidance. However, the actual wording of Article 6 provides scant assistance save that it emphasises that the test is objective and refers back to the definition of “assessment” in Article 1. This in turn imports the *IMO Guidelines* and other regional agreements or standards in determining what reasonable conduct is for the purposes of the competent authority making decisions on a request for a place of refuge.⁵⁸

Plans to accommodate ships seeking assistance

Under Article 8, coastal States are to draw up plans to accommodate ships in need of assistance to which access has been granted under Article 3. This reflects what currently exists in the *IMO Guidelines*.⁵⁹ Also, the requirement for provision of adequate means and facilities for assistance, salvage and pollution response currently exists in the *International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC Convention)*⁶⁰ but is identified by the ISU as being a major problem with the current arrangement.⁶¹ It should be noted that the article does not require the publication of the places of refuge, contrary to the position adopted by the European Union.

Identification of competent authority

Under Article 9, States must identify the competent authority. Although the word “identification” is used it appears that the intention is that the States designate a competent authority that can make decisions on admission of a ship to a place of refuge and the identification of an appropriate place of refuge for that particular ship. This corresponds to the SOSREP system in the United Kingdom and the requirement for the identification of authorities responsible for designating places of refuge

⁵⁸ Richard Shaw, “CMI Working Group”, “CMI Working Group on Places of Refuge” in *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 208, 209.

⁵⁹ Richard Shaw, “CMI Working Group on Places of Refuge” in *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 208, 210.

⁶⁰ *International Convention on Oil Pollution Preparedness, Response and Cooperation*, opened for signature 30 November 1990, 30 ILM 733 (entered into force 13 May 1995).

⁶¹ Archie Bishop, “Places of Refuge” *CMI Yearbook 2009 Part II* (Comite Maritime International, 2009) 201, 203.

under the Erika III package of the European Union.⁶²

2.2.2 Assessment of the CMI Draft Instrument

Benefits

- (1) the major benefit of the draft Instrument, should it be converted to a Convention, is that it is binding and enforceable as compared to the *IMO Guidelines* which are neither binding nor enforceable.
- (2) for the first time, there is a clear obligation on coastal States to grant a place of refuge to a ship in need of assistance.
- (3) by including in the definitions reference to the use of the *IMO Guidelines*, the *IMO Guidelines* are given a greater significance.
- (4) coastal States are, to a limited degree, protected against liability in situations where access is either granted or refused but only to the extent that the decisions are made reasonably.
- (5) the requirement for coastal States to identify a competent authority with the powers to assess the request for access and to allocate the ship to a specific place of refuge would help to remove the risk of political interference and would also ensure that the person appointed to be the competent authority has the requisite skills and knowledge to make proper decisions.

Disadvantages

- (1) the draft Instrument significantly affects the balance between shipping interests and coastal State interests. The obligation to grant access to a place of refuge, while it could be a clear advantage to shipping interests undermines state sovereignty and gives very little to the coastal State in return.
- (2) as liability for damage flowing from decisions on access are subject to a test of reasonableness, no legal certainty is given to coastal States granting access as to liability for damage flowing from that decision. The “immunity” granted under Article 4 is not absolute and still relies on an assessment of the reasonableness of the action to permit access.
- (3) the draft Instrument does not deal with such issues of liability and compensation as pure economic loss and environmental damage so that the current lack of consistency of approach is not remedied. The restrictions placed on the competent authority to refuse access accentuate the potential risk that coastal States will be left with damage for which the shipowner is not liable. Issues of liability which might have helped to convince coastal States to accept the duty to grant access are

⁶² Directive 2009/17/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system Official Journal of the European Union [2009] L131/101.

either inadequate or absent. Just as important as clarification of liability of the various parties are the questions of limitation of that liability and the content of guarantees. These issues will need to be addressed if there is any chance of acceptance by coastal States on whom successful implementation of the Instrument depends.

- (4) the guarantees that competent authorities are able to require shipowners to provide are, in two of the three options in Article 7, limited to liability calculated in accordance with *LLMC*, although they can still require guarantees under other liability conventions.

The CMI draft Instrument attempts to provide certainty into the rights and obligations of all parties and in doing so significantly alters the current balance between these interests. However, in attempting to provide greater certainty the draft sows further confusion. The duty to permit access is not absolute, which the shipping interests would require, but qualified by the need to perform assessments on the potential to affect coastal State interests. As such the draft goes little further than the current application of the *IMO Guidelines*. Similarly, the benefits that would accrue to a coastal State for the surrender of sovereignty are insufficiently dealt with.

3. Other Steps Required to Address the Problem

The answer to the places of refuge problem depends heavily on coastal States being willing to grant access to ships in need of assistance and they must have confidence that their interests will not be unreasonably put at risk by granting a place of refuge to such a ship. Equally, a shipowner, master or salvor must be confident that when a place of refuge is needed such a request will receive prompt and proper attention. Both of the solutions presently proposed, namely, the current *IMO Guidelines* and a discrete new convention on places of refuge could potentially provide an appropriate answer to the places of refuge problem. In the case of the *IMO Guidelines*, they have already been put into practice in various States and the European Union in varying ways. Nevertheless, this acceptance is not universal. As to the CMI draft Instrument, this is yet to be accepted by the IMO as necessary let alone put into effect. The result is that, while both have potential to provide an answer, there is still great scope for either or both solutions to fail to receive sufficient support from coastal States and the shipping industry. The reasons for this fall outside the actual wording and intent of the instruments themselves. Other factors can and do influence the willingness of coastal States to subject their waters, national territory, environment and populations to the risks associated with granting access to a place of refuge to a ship in need of assistance.

These factors include the need for the shipping industry to play a role in finding an answer to the problem by improving the standard of its ships and equipment used for the transportation of oil and other hazardous cargoes; the need for flag States to improve their regulatory role over ships flying their flags; the need for coastal States to improve their performance of port

State control; and the need for classification societies to improve their performance in providing surveys and other regulatory services. There is also a need for either or both the *IMO Guidelines* and international conventions dealing with compensation and liability for pollution damage to be amended to provide assurances to coastal States that any grant of access to a place of refuge will not result in the coastal State being financially disadvantaged through shipowners being able to either escape liability or limit any liability to a level that is not commensurate with the actual or potential damage to the coastal State or its interests.

Some of these issues are being addressed and progress is being made. However, the truth remains that under international law, coastal States are under no duty to allow ships to enter their internal waters and until such time as a coastal State can be satisfied that it is not being asked to compromise its sovereignty by accepting an unreasonable risk in granting places of refuge to ships there is a real risk that refusals will continue.

2. THE INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA (ITLOS)

The International Tribunal for the Law of the Sea is an independent judicial body established by the United Nations Convention on the Law of the Sea (“the Convention”) to adjudicate disputes arising out of the interpretation or application of the Convention. The seat of the Tribunal is in the Free and Hanseatic City of Hamburg (Germany).

1. Composition

The Tribunal is composed of 21 independent members, elected from among persons enjoying the highest reputation for fairness and integrity and of recognized competence in the field of the law of the sea. Members are elected for nine years and may be re-elected; the terms of office of one third of the members expire every three years.

The President of the Tribunal is elected by secret ballot by a majority of the members. He serves for a period of three years and may be re-elected. The President directs the work and supervises the administration of the Tribunal and represents the Tribunal in its relations with States and other entities. He presides at all meetings of the Tribunal. The Tribunal's current president (2017-2020) is Judge Jin-Hyun Paik.

2. Basic texts

The procedural rules and guidelines concerning the conduct of cases before the Tribunal are contained in the Convention, the Statute of the Tribunal, the Rules of the Tribunal, adopted on 28 October 1997, the Resolution on the Internal Judicial Practice of the Tribunal, adopted on 31 October 1997, and the Guidelines concerning the Preparation and Presentation of Cases before the Tribunal, adopted on 28 October 1997.

3. Dispute Settlement under the Convention

Part XV of the Convention lays down a comprehensive system for the settlement of disputes that might arise with respect to the interpretation and application of the Convention. It requires States Parties to settle such disputes by peaceful means. However, if parties to a dispute fail to reach a settlement by peaceful means of their own choice, they are obliged to resort to compulsory dispute settlement procedures entailing binding decisions, subject to the limitations and exceptions contained in the Convention.

The mechanism established by the Convention provides for four alternative means for the settlement of disputes: the International Tribunal for the Law of the Sea; the International Court

of Justice; an arbitral tribunal constituted in accordance with Annex VII to the Convention; and a special arbitral tribunal constituted in accordance with Annex VIII to the Convention.

A State Party is free to choose one or more of these means by a written declaration to be made under article 287 of the Convention and deposited with the Secretary-General of the United Nations. If the parties to a dispute have not accepted the same settlement procedure, the dispute may be submitted only to arbitration in accordance with Annex VII, unless the parties agree otherwise.

4. Access

The Tribunal is open to States Parties to the Convention. Currently, there are 157 States Parties.

In addition, the Tribunal is open to entities other than States Parties (such as international organizations and natural or legal persons) in any case expressly provided for in Part XI of the Convention or in any case submitted pursuant to any other agreement conferring jurisdiction on the Tribunal which is accepted by all the parties to that case (Convention, article 291; Statute, article 20, paragraph 2).

5. Proceedings

Proceedings before the Tribunal are instituted either by written application or by notification of a special agreement. They consist of two stages: written and oral.

Proceedings can be conducted either before the Tribunal in plenary or before chambers of the Tribunal.

Pursuant to the provisions of its Statute, the Tribunal has formed the following chambers: the Chamber of Summary Procedure; the Chamber for Fisheries Disputes; the Chamber for Marine Environment Disputes; and the Chamber for Maritime Delimitation Disputes.

At the request of the parties to a dispute, the Tribunal can also form a special chamber to deal with a particular dispute.

Disputes relating to activities in the International Seabed Area are submitted to the Seabed Disputes Chamber of the Tribunal, consisting of 11 judges. Any party to a dispute over which the Seabed Disputes Chamber has jurisdiction may request that chamber to form an *ad hoc* chamber composed of three members of the Seabed Disputes Chamber.

The official languages of the Tribunal are English and French.

6. Jurisdiction

The jurisdiction of the Tribunal comprises all disputes submitted to it in accordance with the Convention. It also extends to all matters specifically provided for in any other agreement which confers jurisdiction on the Tribunal.

Unless the parties agree otherwise, the jurisdiction of the Tribunal is mandatory in cases relating to the prompt release of vessels and crews under article 292 of the Convention and to provisional measures pending the constitution of an arbitral tribunal under article 290, paragraph 5, of the Convention.

The Seabed Disputes Chamber is competent to give advisory opinions on legal questions arising within the scope of the activities of the International Seabed Authority. The Tribunal may also give advisory opinions in certain cases under international agreements related to the purposes of the Convention.

7. Prompt release of vessels and crews

Whenever the authorities of a State Party have detained, under the allegation of certain offences relating to fisheries or pollution, a vessel flying the flag of another State Party, the vessel and its crew have to be released upon the posting of a reasonable bond or other financial security.

Where it is alleged that the detaining State has not complied with this obligation, the question of release from detention may be submitted to the Tribunal in accordance with article 292 of the Convention, if, within 10 days from the time of detention, the parties have not agreed to submit it to another court or tribunal. The application may be made by or on behalf of the flag State of the vessel.

Provided that the requirements for the release of a vessel or crew are met, the Tribunal will determine the appropriate amount of bond or other financial security upon the posting of which the vessel or crew has to be released. The Tribunal will also decide whether the bond or other financial security has to be posted with the detaining State or the Registrar of the Tribunal.

In prompt release proceedings, the Tribunal will deal only with the question of release, without prejudice to the merits of any case before the appropriate domestic forum against the vessel, the owner or its crew.

To date, the Tribunal has handled nine prompt release cases.

8. Provisional measures

If a dispute has been duly submitted to the Tribunal and if the Tribunal considers that *prima facie* it has jurisdiction under the Convention, it may prescribe any provisional measures which it considers appropriate under the circumstances to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment, pending the final decision (Convention, article 290, paragraph 1; Statute, article 25, paragraph 1).

The Tribunal may also prescribe provisional measures in cases covered by article 290, paragraph 5, of the Convention. Under this provision, pending the constitution of an arbitral tribunal to which a dispute is being submitted and if, within two weeks from the date of a request for provisional measures, the parties do not agree to submit the request to another court or tribunal, the Tribunal may prescribe provisional measures if it considers that *prima facie* the arbitral tribunal to be constituted would have jurisdiction and that the urgency of the situation so requires.

The Tribunal has dealt with several cases relating to marine environment issues under article 290, paragraph 5, of the Convention. These cases addressed the environmental consequences of land reclamation, the impact of “experimental fishing programs” on the depletion of fish stocks and the danger of marine pollution emanating from a nuclear plant

Important texts/links

[Convention](#)

[Statute of the Tribunal](#)

[Rules of the Tribunal](#)

[Resolution on the Internal Judicial Practice of the Tribunal](#)

[Guidelines concerning the Preparation and Presentation of Cases before the Tribunal](#)

[Guide to proceedings before the Tribunal](#)

[List of Cases of the Tribunal](#)

[Guidelines concerning the posting of a bond or other financial security with the Registrar](#)

3. UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL CARRIAGE OF GOODS WHOLLY OR PARTLY BY SEA, Rotterdam 2009

Entry into force:

This convention is not yet into force. According to article 94 this convention shall enter into force on the first day of the month following the expiration of one year after the date of deposit of the twentieth instruments of ratification, acceptance, approval or accession.

Ratification:

At present five states have ratified this convention – Spain, Togo, Democratic Republic of Congo, Cameroon and Benin

Subject matter:

This convention provides for a set of uniform legally binding rules for the contract of carriage wholly or partly performed by sea, in order to promote legal certainty and to improve efficiency of international carriage of goods. This convention includes rules regarding the liability of the carrier and the limitation of that liability. In deviation of earlier sea carriage conventions the Rotterdam Rules are a 'unimodal plus' convention, where the earlier convention did only apply on the sea stage. The concept of 'unimodal plus' means that the convention also applies to that stages of the carriage, which precede or succeed the sea stage of the carriage. Besides this concept of 'unimodal plus', the convention deviates from earlier sea carriage convention with the use of electronic transport records.

Application:

Article 5 defines the general scope of application. According to article the convention does apply to contracts of carriage in which the place of receipt and the place of delivery are in different states, and the port of loading of a sea carriage and the port of discharge of the same sea carriage are in different states, if, according to the contract of carriage, any one of the following places is located in a contracting state: a) place of receipt; b) port of loading; c) place of delivery; or d) the port of discharge. It is noteworthy that this convention applies without regard to the nationality of the vessel, the carrier, the performing parties, the shipper, the consignee, or any other interested parties.

Excluded subjects:

Article 6 of the convention contains specific exclusions for both liner and non-liner transportation. In regard with liner transportation the convention doesn't apply on charterparties and other

contracts for the use of a ship or of any space thereon. In principle this convention doesn't apply to non-liner transportation, but when there is no charterparty or other contract for the use of a ship or of any space thereon and a transport document or electronic transport record is issued, then the convention applies on non-liner transportation.

Basic Structure:

The Rotterdam Rules consist of a convention, which includes a preamble and 96 articles divided over 18 chapters. The articles set out rules regarding the liability of the carrier, liability of the shipper, the use and issuance of electronic transport records and transport documents, liability of the maritime performing party, liability limits, delivery of the carried goods and the rights of control over the goods. Chapters 14 and 15 contain rules about the jurisdiction and arbitration. According to articles 74 and 78 of the Rotterdam Rules these chapters shall only bind contracting states that declare, in accordance with article 91, that they will be bound by them. Since the Rotterdam Rules are set of legally binding rules that will not only cover the sea carriage stage of the contract of carriage, but also carriage preceding or subsequent to this sea stage, the Rotterdam Rules include articles dealing with other pre-existing conventions that cover those parts of the carriage. These rules are to be found in articles 26 and 82 of the convention.

Relevance to Ports:

The Rotterdam Rules are a legally binding instrument that aims at giving uniform rules for the liability of the carrier and the shipper. In principle this convention has no relevance to ports, but under certain circumstances there is relevance to ports. When a port acts as a maritime performing party they may be held liable for occurred damages. Article 1, subsection 7 defines maritime performing party as a person who performs or undertakes to perform any of the carrier's obligations during the period between the arrival of the goods at the loading port and their departure at the port of discharge. When damage occurs to the goods between this period and the time when the goods are in the custody of the maritime performing party, the maritime performing party is subject to the obligations and liabilities of the carrier.

Literature/Articles:

- Michael F. Sturley, Tomotaka Fujita, Gertjan van der Ziel, *The Rotterdam Rules: The U.N. Convention On Contracts For The International Carriage Of Goods Wholly or Partly by Sea* (London: Sweet & Maxwell)
- Y. Baatz, 'The Rotterdam Rules: a practical annotation'
- A. Diamond, 'The Rotterdam Rules'
- D. Rhidian Thomas, 'New convention on the carriage of goods by sea – The Rotterdam Rules'

4. PARTICULARLY SENSITIVE SEA AREAS

1. What is a Particularly Sensitive Sea Area?

A Particularly Sensitive Sea Area (PSSA) is described by the International Maritime Organisation as-

“an area that needs special protection through action by the IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities”¹

The concept of the PSSA was first introduced by the IMO in 1991 when it produced the *Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (1991 Guidelines)*.² The *1991 Guidelines* marked the culmination of nearly 15 years discussions within the IMO, particularly in the Marine Environment Protection Committee (MEPC) and were designed to create a new relationship between shipping and other marine activities and the protection of fragile and endangered marine ecosystems.³ The *1991 Guidelines* were replaced by revised guidelines in 2005 (*Revised Guidelines*).⁴

PSSAs are designated by the IMO through a process set out in the *Revised Guidelines*. At the time of such designation specific associated protective measures (APMs) are applied to the PSSA to enable the objective of the PSSA to be achieved. APMs are specific measures that can be used to control the maritime activities in the Area, such as routeing measures, strict application of MARPOL discharge limits, equipment requirements for ships such as oil tankers, or installation of vessel traffic services (VTS). These APMs are specific to each PSSA and must be approved by the IMO to prevent, reduce or eliminate the threat or identified vulnerability in that PSSA.⁵

The use of PSSAs should be distinguished from the use of Special Areas under *MARPOL*. Special Areas are areas where for recognized technical reasons in relation to its oceanographical and ecological conditions and to the particular character of its traffic, the adoption of special mandatory methods for the prevention of sea pollution by oil, noxious liquid substances, or garbage, as applicable, is required. This distinction is made clear in the *Revised*

¹ IMO Assembly, 24th Session, Resolution A.982 (24) *Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas* adopted on 1 December 2005, Annex paragraph 1.2.

² IMO Assembly, 17th Session, Resolution A.720 (17) *Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas* adopted on 6 November 1991.

³ Helene Lefebvre-Chalain, “Fifteen Years of Particularly Sensitive Sea Areas: A Concept in Development” (2007) 13/1 *Ocean and Coastal Law Journal* 47, 47.

⁴ IMO Assembly, 24th Session, Resolution A.982(24) *Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas* adopted on 1 December 2005 (“*Revised Guidelines*”)

⁵ *Revised Guidelines* Part 6.

Guidelines which in addition to listing in the environmental hazards associated with shipping, not only pollution through accidental intentional or operational discharges but also “physical damage to marine habitat or organisms”⁶ which can be caused by physical impact including “the smothering of habitats, contamination by anti-fouling systems or other substances through groundings, and ship strikes of marine mammals”.⁷ The concept of the PSSA and the APMs that can be applied are wider than the designation of Special Areas under *MARPOL*.⁸ Whereas the designation of Special Areas under *MARPOL* can provide significant protection against pollution of various kinds from ships, APMs under a PSSA can also include not only a designation of an area as a Special Area but also can provide for the adoption of ships routing and reporting systems near or in the PSSA and the development of other measures for the protection of PSSAs from environmental damage by ships other than by pollution.⁹

There are currently 12 PSSAs details of which are set out in Table 1, together with the APMs relevant to each.

2. Legal basis for PSSA Concept

The first thing to note is that the concept of the PSSA itself does not exist in any international Convention.¹⁰ In this it differs from Special Areas which exist pursuant to the provisions of *MARPOL* and designation as such adds to the protection afforded under *MARPOL*. The designation of an area as a PSSA is different and has been described as “nothing more (and nothing less) than a qualification and a basis on which protective measures may be taken through IMO-measures”¹¹. In effect, the designation as a PSSA is only made effective by APMs that are themselves permitted under an international convention.

The ability to designate an area as a PSSA is contained in the provisions of the *Revised Guidelines* annexed to an IMO Resolution. In international law, this IMO Resolution and the *Revised Guidelines* annexed to it are not in themselves binding unless they are translated into an international convention or are binding under customary international law. Under customary international law, an IMO Resolution can become binding if it can be shown that it adopted and followed by sufficient number of States for it to be viewed as general practice.

Although it has been argued to the contrary,¹² the general view is that the designation of PSSAs per se has no binding effect in international law and that in areas outside coastal State control, any APMs attached to a PSSA do not apply unless they are by themselves permitted under

⁶ *Revised Guidelines* paragraph 2.1.3.

⁷ *Revised Guidelines* paragraph 2.2.

⁸ Helene Lefebvre- Chalain above n.3, 58.

⁹ *Revised Guidelines* Part 6.

¹⁰ Julian Roberts et al, “The Western European PSSA proposal: a ‘politically sensitive sea area’” (2005) 29 *Marine Policy*, 431, 432; Helene Lefebvre- Chalain above n.3, 60.

¹¹ Gerard Peet, “Particularly Sensitive Sea Areas – A Documentary History” (1994) 9/4 *The International Journal of Marine and Coastal Law*, 469, 469-470.

¹² In particular see Markus Detjen, “The Western European PSSA – Testing a unique international concept to protect imperilled marine ecosystems” (2006) 30 *Marine Policy*, 442, 446-448 and references therein.

international law.¹³ Although there is no single legal instrument that specifically addresses PSSAs as they have been formulated by the IMO, several international multilateral conventions address various aspects concerning the mandate for their designation, their impact on international navigation and marine environmental protection concerns. The main legal framework of PSSAs may be said to consist of:

- (1) *The United Nations Convention on the Law of the Sea, 1982 (LOSC)*;
- (2) *The Convention on the International Maritime Organization, 1948*, which empowers the IMO with a mandate for marine environment protection, which it has used to adopt guidelines; and
- (3) pertinent IMO conventions that authorize actions adopted as APMs in a PSSA, such as the *Convention on the Prevention of Pollution from Ships, 1973/78 (MARPOL 73/78)* and the *Convention on Safety of Life at Sea, 1974 (SOLAS)*.

Other international environmental law instruments provide general or specific rights and duties for all states that could be relevant. These include the *Convention on Biological Diversity, 1992*, *Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972*, and *Ramsar Convention on the Protection of Wetlands of International Importance, 1971*. World heritage sites or biosphere reserves may also occur in a marine setting.

Of greatest importance is the *LOSC* which identifies certain categories of areas which may need greater standards of environmental protection than normal.¹⁴ The *Revised Guidelines* can work together with the *LOSC* in that the power to create PSSAs may be derived from the general provisions found in the *LOSC* concerning the protection of the marine environment, in particular, Articles 192 and 194.¹⁵ Under Article 192 of *LOSC*, coastal States have a general “obligation to protect and preserve the marine environment”. Article 194 explains the measures that coastal States can use in order to prevent, reduce and control the pollution of marine environments. The overriding obligation in Article 194(5) is for coastal States to “take all necessary measures to protect and preserve rare or fragile ecosystems, as well as habitats of depleted, threatened or endangered species and other forms of life”.

The designation of a PSSA may also be considered to flow from Article 211 of *LOSC*.¹⁶ Article 211 generally requires States to establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels and promote the adoption of measures to prevent or minimise pollution in the marine environment. In particular Article 211(6) states:

¹³ Nihan Unlu, “Particularly Sensitive Sea Areas: Past, Present and Future” (2004) 3/2 *WMU Journal of Maritime Affairs*, 159, 161-2.

¹⁴ Olof Linden et al., *PSSA in the Baltic Sea: present situation and future possibilities*, World Maritime University, Malmö, 2006, 10-11.

¹⁵ Helene Lefebvre- Chalain above n.3, 60.

¹⁶ Ibid

Where the international rules and standards ... are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic, the coastal States ... may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for special areas.

Taken together it could be argued that *LOSC* does provide at least a partial legal basis for PSSAs. However, there are significant differences between the *LOSC* and the *Revised Guidelines*. First, other than the general duty in Article 192 of *LOSC*, the provisions of *LOSC* refer to pollution prevention. As indicated earlier, the aims of PSSAs go further than pollution protection and include such measures as management of maritime traffic and safety of navigation.¹⁷ Second, the provisions of *LOSC* relate only to waters in the EEZ, while in some cases of current and proposed PSSAs, areas outside the EEZ are included.¹⁸ Third, Article 211(6) only refers to “oceanographical and ecological conditions” and does not refer to other issues commonly included in PSSAs such as cultural, economic, scientific and educational criteria.¹⁹

The effect of PSSAs not being fully recognised under international law is that designation of PSSAs cannot per se provide comprehensive protection for actions taken by coastal States.²⁰ Therefore only by the adoption of specific APMs that are themselves properly founded in international law can protection be given to the environment in PSSAs.²¹

3. Process of Designating PSSAs

The *Revised Guidelines* set out the procedures and requirements for the designation of areas as PSSAs. The definition of PSSA in the *Revised Guidelines* requires four essential elements in order for the IMO to characterize an area a PSSA: (1) IMO competence to do so; (2) the ascertaining of the characteristics of the area(s) concerned; (3) an assessment of the impact by maritime transport activity; and (4) an understanding of the measures associated with the recognition of a PSSA. Within the framework of the *Revised Guidelines*, the IMO will have to achieve three objectives: (1) to inform nation states of the possible creation of PSSAs; (2) to ensure that there is a balance of all interests involved in the proposed PSSA; and (3) to

¹⁷ Nihan Unlu above n.13, 63

¹⁸ Helene Lefebvre-Chalain above n.3, 61.

¹⁹ Ibid; Nihan Unlu above n.13, 63

²⁰ Ibid

²¹ Julian Roberts et ors above n.10, 434.

establish criteria for evaluating the appropriateness of a state's request.²² The actual process of designating a PSSA is long and complicated.²³ At the start, the *Revised Guidelines* make it clear that only the IMO can designate PSSAs and APMs at the request of a member State or a number of member States with an interest in the area.²⁴ The application from the member State(s) must be made to the Marine Environmental Protection Committee of the IMO (MEPC) in accordance with part 7 of the *Revised Guidelines*. Part 7 requires, inter alia, that the Application set out the objectives of the proposed PSSA designation, the location and description of the area as well as the information required by the criteria set out in Parts 4 (ecological, socio-economic or scientific criteria) and 5 (vulnerability to impacts from international shipping) and must include details of the protective measures that will be associated with the area's status in accordance with Part 6.²⁵

3.1 Application

For any application to succeed it must satisfy the criteria in Part 4. In general terms, such criteria are only applicable with respect to protective measures to prevent damage or threat of damage from international shipping activities. The criteria can also relate to areas within and outside the limits of the territorial sea of the applicant State(s).²⁶ Specifically, the application must relate to areas which meet at least one of three categories of criteria: ecological criteria; social, cultural and economic criteria; and scientific and educational criteria.²⁷

First, there is the ecological criterion. Assessment of the incompatibility of conserving the area's ecosystem against uncontrolled maritime activity is made using such factors as uniqueness and rarity, importance as a habitat, dependence of flora and fauna on the surrounding ecosystem, representative character as a specific ecosystem, diversity, productivity, capacity as a spawning ground, lack of human degradation, integrity, fragility, and bio-geographic importance. Second, the socio-economic criterion assesses the fundamental use of maritime resources, the interest in tourism or leisure, and the dependence level of the local population on the marine environment. This is done by using factors of social or economic or human dependence, and cultural inheritance. Finally, an area may be designated using the scientific criterion, under which an area must demonstrate its importance for furthering research, monitoring studies, or education.²⁸

If the application meets at least one of the criteria listed in Part 4, it is necessary to show that the area is particularly vulnerable to international shipping activities. As mentioned earlier, in Part 2, the *Revised Guidelines* list a number of factors that can result from maritime transport:

²² *Revised Guidelines* paragraph 1.4

²³ Helene Lefebvre- Chalain above n.3, 52.

²⁴ *Revised Guidelines* paragraph 3.1

²⁵ *Revised Guidelines* paragraph 3.2, 7.1-7.5.1.

²⁶ *Revised Guidelines* paragraphs 4.1-4.3.

²⁷ *Revised Guidelines* paragraph 4.4

²⁸ *Revised Guidelines* paragraphs 4.4.4.1-4.4.17

operational discharges; accidental or intentional pollution; and physical damages caused to habitats or marine organisms.²⁹ Whether a zone is particularly vulnerable to international shipping activities is assessed by taking into account the area's characteristics in relation to sea traffic travelling through it. This is done by looking at such operational factors as types of ships, characteristics of the traffic (such as volume and concentration), and the harmful substances that are being transported. Natural factors, such as hydrographical, oceanographic, and meteorological conditions, are also taken into account.³⁰ In addition other useful information should be supplied including: evidence of the nature and extent of any damage that is being caused or might be caused by international shipping activity; history and consequences of any groundings, collisions and spills in the area; any potential consequences of the PSSA designation to areas outside the proposed PSSA; stresses from other environmental sources; any measures already in effect and their impact.³¹ If an application meets the requirements of both Parts 4 and 5, the IMO must then examine and assess, the APMs included in the application. APMs are a decisive part of any application for a PSSA and have to be approved separately after the area has been designated if not already approved. The APMs that can be used are limited by paragraph 6.1 to "actions that are to be, or have been, approved or adopted by IMO". The options include:

- (1) designation of an area as a Special Area under *MARPOL* in accordance with the processes set out in Assembly Resolution A.927 (22) or *MARPOL*;
- (2) adoption of ships' routeing and reporting systems in or near the area pursuant to SOLAS and the General Provisions on Ships' Routeing and the Guidelines and Criteria for Ship Reporting Systems;
- (3) development and adoption of other measures aimed at protecting specific sea areas against environmental damage from ships, provided that they have an identified legal basis;
- (4) possible listing on World Heritage List, declaration as a Biosphere reserve or inclusion of international, national or regional areas of national importance;
- (5) the inclusion of a buffer zone.³²

The information required to be included in the application concerning the proposed APMs is set out in Part 7 of the *Revised Guidelines*. These include:

- (1) listing the existing and proposed APMs and describing how they would protect the area and waters around it from threats posed by international maritime activities;

²⁹ *Revised Guidelines* paragraph 2.1

³⁰ *Revised Guidelines* paragraphs 5.1.1-5.1.7

³¹ *Revised Guidelines* paragraph 5.2

³² *Revised Guidelines* paragraphs 6.1.1- 6.1.3, 6.2, 6.3.

- (2) if the APM is new, the applicant must attach a copy of the proposal to the appropriate committee requesting the measure be made or, if it is not available under existing IMO instruments, what the legal basis of the measure is;
- (3) the application must identify the legal basis of the measure either under an existing IMO instrument, would be available if an IMO instrument is amended or a new IMO instrument is adopted; any measure not otherwise covered by existing or proposed measures that is proposed for adoption in the territorial sea or pursuant to Article 211(6) of LOSC;
- (4) the measures proposed should be specifically tailored for the area to prevent, reduce or eliminate the identified vulnerability of the area from international shipping activities and can include ship's routing measures, reporting requirements, discharge restrictions, operational criteria and prohibited activities;
- (5) the category or categories of ships proposed to be affected by the APMs should be clearly specified;
- (6) the possible impact on the safety and efficiency of navigation including information on the consistency with the legal instrument under which the APM is proposed, the implications for vessel safety and the impact on vessel operations, such as existing traffic patterns or usage of the proposed area.³³

In addition to the above requirements, the application must contain details of the steps the member State proposes to take to protect the area including details of all domestic law that can be used to enforce the APM. Finally in relation to a new APM, the member State must separately apply to the appropriate committee of the IMO for approval of that new measure.³⁴

3.2 Assessment of Application

Part 8 of the *Revised Guidelines* sets out the criteria against which the application and APMs are assessed and the procedure followed in considering the application.

Each application is considered on a case-by-case basis to determine if it fulfils all the requirements of Parts 4 and 5. Particular consideration is given to the following matters:

- (1) the full range of APMs available and whether they will prevent, reduce or eliminate the identified vulnerability of the area from international shipping activity;
- (2) whether such measures might result in the potential for significant adverse effects outside the area;

³³ *Revised Guidelines* paragraphs 7.5.2, 7.6

³⁴ *Revised Guidelines* paragraphs 7.7-7.10

- (3) the linkage between the recognised attributes, the identified vulnerability, the APMs and the overall size of the area including whether the size is commensurate with that necessary to address the identified need.³⁵

The MEPC is charged with assessing the application and can set up a technical group if needed. After ensuring all relevant issues in Parts 4 and 5 are covered by the application the MEPC can, if appropriate, issue an “in principle” approval pending approval of the APMs. No approval of the application can be given until approval is given to the APMs. The APMs are referred to the appropriate committee or subcommittee of IMO for consideration and report back to MEPC. For matters requiring the approval of the Maritime Safety Committee (MSC), the APM should be forwarded to the MSC for consideration and report back to MEPC. If the application is refused then the MEPC shall report the fact to the applicant with reasons or with a request for further information. If the application is approved, the MEPC may designate the area as a PSSA and provide a report. Once designation is granted the IMO must ensure that it is implemented as soon as possible but should take into account the technical and financial resources of the applicant.³⁶ After designation, additional APMs can be approved as required.

3.3 Actions After Designation

Once designated all APMs should be identified on all relevant charts of the area. The proposing member State should then ensure that all AMPS are implemented. All member States are then to ensure that ships flying under their flags comply with the APMs when in the PSSA and take action against any vessel violating them.³⁷

While such strategies will depend largely on the applicable legal system, common concerns include jurisdiction, presentation of evidence, standards of proof of violation, whether sanctions are administrative, civil or penal, and the rights of the accused. IMO suggest that an effective compliance program should incorporate all of the following elements:

- (1) Compliance monitoring through routine inspections, surveys, and/or examinations;
- (2) Detection and policing “patrols”;
- (3) Reporting procedures and incentives, including incentives for self-reporting;
- (4) Adequate investigations of violations reported or otherwise detected;
- (5) A system of adequate sanctions in respect of violations;
- (6) Education and public awareness programmes; and
- (7) Cooperation and coordination with other State parties.³⁸

³⁵ *Revised Guidelines* paragraphs 8.1, 8.2.

³⁶ *Revised Guidelines* paragraphs 8.3-8.6

³⁷ *Revised Guidelines* Part 9.

³⁸ Australian Maritime Safety Authority, *Particularly Sensitive Sea Areas – Fact Sheet*, June 2008

4. Assessment of PSSA Concept

While a designation of an area as a PSSA has a number of distinct benefits,³⁹ it must be borne in mind that designation per se does nothing because of the lack of legal basis. Nevertheless, it does have a number of advantages particularly when combined with APMs which do have such a legal basis

First, the process of applying for designation of an area as a PSSA provides a good management tool so that the vulnerability of an area from shipping activities can be specifically addressed and measures taken to address these vulnerabilities. In PSSAs such as the Archipelago of Sabana-Camaguey in Cuba⁴⁰ and the Sea Area around Malpelo Island in Colombia and the Galapagos Archipelago in Ecuador, there is a measure that the area is to be avoided so as to protect the local marine environment. However in providing for what are, in effect, restrictions on the rights of freedom of navigation, the IMO needs to be convinced that this measure is essential for the proper protection of the environment of the area. Nevertheless, even without the designation, the assessment of the area can alert the coastal State to the potential threats to the area.

Second, even where though the actual designation does not have legal implications, the designated area achieves international recognition through identification on international charts and mariners are made aware of the need to exercise particular care when sailing through the PSSA. However, to be effective, the implementation of a PSSA must involve wide dissemination of the existence of the PSSA, education as to its effects and monitoring.

Third, the designation may provide approval for exceptional measures which may be unable to find a precise legal basis in existing instruments but nevertheless can be justified by internationally recognised exceptional circumstance. In this regard, while the designation of areas as Special Areas is permitted under *MARPOL* and ship routing measures are permitted under *SOLAS*, some vital measures are not so easily justified. Examples are compulsory pilotage in the Great Barrier Reef PSSA and routing measures in the Baltic Sea PSSA which can interfere with the freedom of navigation. In discussing and ultimately approving these measures, the IMO made it clear that there must be limits on these exceptional measures where there is no existing legal basis and where such measures may violate freedom of navigation. The reluctance to approve such measures is particularly acute in proposed PSSAs that cover large areas, such as the Baltic Sea and the proposed Western European PSSA.⁴¹

³⁹ Julian Roberts et al. above n.10, 433

⁴⁰ Kristina Gjerd and J Sian Pullen, "Cuba's Sabana-Camaguey Archipelago : The Second Internationally Recognised Particularly Sensitive Sea Area" (1998) 13/2 *The International Journal of Marine and Coastal Law*, 246

⁴¹ Julian Roberts et al. above n.10, 437

Fourth, coastal States are afforded the ability to adopt additional APMs to address particular risks from international shipping activities. An example of this is the Baltic Sea PSSA where all countries bordering the Baltic Sea can take concerted action through APMs to address the risk of environmental damage from international shipping for the benefit of tourism, fishing and other economic benefits. In particular a traffic separation scheme under the Baltic Sea PSSA has resulted in a significant improvement for environmental security in the area.⁴²

Finally, while the lack of legal status has often been cited as a disadvantage in the PSSA system since the *Revised Guidelines* are non-binding and have only a moral force on States, others have argued that this very lack of binding force is an advantage in that it allows States within or bordering a particular area to individually bring about results by the use of APMs that would be more difficult to achieve through a treaty method. This has summed up in the words -“guidelines which are widely accepted and voluntarily put into force may lead to more positive and significant results than a treaty which is not ratified and applied or is ratified and applied by only a few States”.⁴³

5. Current Status and Future of PSSAs

To date only fifteen PSSAs (plus two extensions) have been approved by the IMO, but the rate of acceptance has increased over recent years. This probably reflects the influence of the *Revised Guidelines*.

What is clear is that the IMO is reluctant to approve the APMs where there is unjustifiable interference with navigational freedoms and that successful designation is more likely where the APMs have an existing legal basis.

There is also some debate as to whether the actual areas of PSSAs should be limited to specific areas of environmental risk or more widely to cover areas where the risks are not so clearly defined. The MEPC needs to be more rigorous in its risk assessment so that the valuable benefits that attach to PSSA designation are not diluted and that the concept continues to be credible and acceptable to the shipping community.

⁴² Olof Linden et al. above n 14, 25.

⁴³ Nihan Unlu above n.3, 167.

Table 1 – Current PSSAs (as at January 2017)

Area	Associated Protective Measures (APMs)	Date of final MEPC approval	MEPC Resolution
Great Barrier Reef and Torres Strait - Australia	IMO-recommended compliance with Australian system of pilotage; mandatory ship reporting (GBR), two way route (Torres Strait)	MEPC 30, September 1990 (Torres Strait added at MEPC 53, July 2005) MEPC.74(40) MEPC.133(53)	MEPC.44(30) MEPC.133(53)
Archipelago of Sabana-Camaguey - Cuba	Area to be avoided	MEPC 40, September 1997	MEPC.74(40)
Sea Area Around Malpelo Island - Colombia	Area to be avoided	MEPC 47, March 2002	MEPC.97(47)
Marine Area Around the Florida Keys – United States	Areas to be avoided, mandatory no anchoring areas	MEPC 47, March 2002	MEPC.98(47)
Wadden Sea - Netherlands, Denmark, Germany	Mandatory deep water route	MEPC 48, October 2002	MEPC.101(48)
Paracas National Reserve - Peru	Area to be avoided (for ships > 200 gt carrying hydrocarbons and hazardous liquids in bulk)	MEPC 49, July 2003	MEPC.106(49)
Western European Waters -Belgium, France, Ireland, Portugal, Spain, United Kingdom	Mandatory reporting for single hull tankers carrying heavy grades of fuel oil	MEPC 52, October 2004	MEPC.121(52)
Canary Islands, Spain	Areas to be avoided, recommended routes, mandatory ship reporting system	MEPC 53, July 2005	MEPC.134(53)
Baltic Sea Area – Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden	Traffic separation, deepwater route, areas to be avoided, mandatory ship reporting system, MARPOL Special Area, SOx Emission Control Area	MEPC 53, July 2005	MEPC.136(53)
Galapagos Archipelago - Ecuador	Area to be avoided, mandatory ship reporting system, recommended tracks	MEPC 53, July 2005	MEPC.135(53)
Papahānāmokuākea Marine National Monument - United States	Areas to be avoided; recommended/mandatory ship reporting system	MEPC 57, March 2008	MEPC.171(57)
The Strait of Bonifacio, France and Italy	Recommended/mandatory ship reporting system; pilotage recommended; prohibit or strongly discourage the transit of laden oil tankers and ships carrying dangerous chemicals or substances in bulk	MEPC 62, July, 2011	MEPC.204(62)
Saba Bank in Northeast Caribbean area of the Kingdom of the Netherlands	Area to be avoided for ships > 300 GT and mandatory no anchoring area for all ships	MEPC 64, October 2012	MEPC.226(64)
Extension of Great Barrier Reef and Torres Strait to include SW Coral Sea area	Area to be avoided; two 5nm wide two way routes	MEPC 68, May 2015	MEPC.268(68)

Jomard Entrance, Papua New Guinea	Two way routing measures	MEPC 70, October 2016	
Tubbataha Reef, Philippines	Area to be avoided	MEPC 71, July 2017	

5. PORT REGULATIONS

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1. The notion and purpose of 'port regulations'

The scale, nature and complexity of port operations and activities call for a set of specific rules, distinct from the general regulatory regime. These rules have to ensure the efficient functioning of the port as well as the safety and the security in the port area. They may also serve other purposes, such as the prevention of environmental pollution.

Commonly, these specific rules take the form of port regulations, which, for the purpose of this Chapter, may be defined as rules relating specifically to port operations and activities, prescribed by a competent authority and having the force of law. Port regulations include obligations and prohibitions, and frequently comprise provisions on their enforcement.

In the strict sense, port regulations are limited to rules of conduct adopted for the purpose of ensuring the safety, continuity and smoothness of port operations and activities in general (in some countries, these regulations are also called 'general port regulations', 'port police regulations, or similar). The essence of port regulations seems to be that they regulate the conduct of port users in general and that, as such, they serve the general interest of the port and its users.

From this perspective, port regulations can be distinguished from other sets of rules and instruments targeted at port users which are of a more specific nature. Port tariffs, for example, are typically governed by separate regulations, but this is not always the case. In the event of the port authority operating specific facilities and providing specific ancillary services to port users, the relevant terms and conditions are also typically the subject of separate instruments. Furthermore, private port service providers (including, for example, towage companies) are likely to have their own terms and conditions and individual terminal operators may issue terminal regulations, codes of conduct or practical guidance of their own. Moreover, port sector associations and individual companies may use standard terms and conditions. All of these regulatory and contractual instruments differ from the general port regulations as defined above. Finally, operations and activities in ports may also be governed by unwritten local usages and customs which may be considered as a separate source of (commercial or maritime) law. The present chapter focuses on general port regulations and does not go into other port-oriented sources of law.

Port regulations, and the way they are enforced, impact on a port's competitiveness. Over-regulation may have an adverse impact on a port's performance. Conversely, well-drafted regulations, accompanied by adequate enforcement, are likely to facilitate port operations and activities.

In the same vein, port regulations should take into account the needs and preferences of port stakeholders as well as the changing context of port operations. If the conditions so require, the competent authority should be prepared to adjust the regulations.

2. International context

2.1. Port regulations worldwide

In every major port in the world, there are specific rules that govern port operations and activities. Port regulations, in some form or another, are omnipresent and may be considered as an intrinsic part of the port system. It may even be argued that, in legal terms, the enactment and enforcement of port regulations amounts to an international custom.

Port regulations do not only apply to nationals of the Coastal State but also to foreign vessels calling at the port. From an international law perspective, States have sovereignty over their internal waters and the ports forming part thereof¹. This principle is confirmed in Article 2.1 of the United Nations Convention on the Law of the Sea, 1982. Territorial sovereignty includes regulatory competence², which implies that the coastal State is free to regulate vessel activity in its internal waters³.

However, most States do not effectively enforce all their laws and regulations through the exercise of criminal jurisdiction vis-à-vis foreign vessels calling at their ports unless the peace and good order of the port is affected or the local authorities are asked for assistance⁴. Infringements of port regulations, for that matter, can in principle be assumed to affect the peace and good order of the port, so that infringements of these regulations will normally give rise to enforcement actions by local authorities.

The enforcement of port regulations in ports is generally entrusted to a Harbour Master, who is appointed by a competent authority (for example a central or local government or the port authority). The Harbour Master is responsible for the day-to-day organisation and supervision of activities within the port area. He is accountable to the authority for the safety of operations in the port area and can, for example, refuse entry or require the removal of dangerous vessels⁵.

Port regulations commonly refer to the Harbour Master's role and duties⁶.

2.2. Principles of international law

¹ Ports, in principle, form part of the internal waters of a country (see Art. 11 of the United Nations Convention on the Law of the Sea, 1982).

² See Brownlie, I., *Principles of Public International Law*, Oxford, Oxford University Press, 2008, 116 and 291.

³ Jensen, Ø., *Coastal State Jurisdiction and Vessel Source Pollution*, Lysaker, Fridtjof Nansen Institute, 2006, 15.

⁴ Brownlie, I., *Principles of Public International Law*, Oxford, Oxford University Press, 2008, 318-319; Churchill, R.R. and Lowe, A.V., *The law of the sea*, Manchester, Manchester University Press, 1999, 65-68; Tanaka, Y., *The International Law of the Sea*, Cambridge, Cambridge University Press, 2012, 78-79.

⁵ Mandaraka-Sheppard, A., *Modern Maritime Law*, Abingdon / New York, Routledge Cavendish, 2007, 810.

⁶ See, for example, the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 22 and Port Metro Vancouver, Harbour Operations Manual, [http://www.portmetrovancover.com/Libraries/PORT_USERS_Marine_Operations/WP - 2010 Harbour Operations Manual.sflb.ashx](http://www.portmetrovancover.com/Libraries/PORT_USERS_Marine_Operations/WP_-_2010_Harbour_Operations_Manual.sflb.ashx), Sec. 3.4.1. On the powers of the Harbour Master, see *infra*, para 33.

Draftsmen of port regulations need to take into account a number of principles of international law. These principles, which will be discussed below, relate to:

- access to foreign ports;
- non-discrimination;
- most favoured nation treatment;
- rights of landlocked States;
- trade facilitation;
- publication of regulations.

Access to a country's port means access to its territory. Notwithstanding the fact that coastal States commonly open their maritime ports and waterways to foreign ships, it is disputed whether there exists a general right of access⁷. In principle, this right can only arise by virtue of an international agreement or by unilateral allowance⁸. Moreover, a coastal State has the right to prescribe conditions for the entry into ports⁹ and can close its ports in defence of its vital interests¹⁰. Hence, port regulations may include conditions for port entry as well as prohibitions to enter the port in certain situations.

It is debatable whether the principle of non-discrimination as regards port access and port regulations reflects a rule of international customary law¹¹. However, the principle of non-discrimination is laid down in the Convention and Statute on the International Régime of Maritime Ports, 1923 which provides for equality of treatment among the vessels of the Contracting States¹². Although only a minority of states¹³ have signed the Geneva Convention and Statute, its importance is considerable, as it is the only treaty ever adopted on the international regime of ports. Furthermore, the principle of equality of treatment in ports is confirmed in various instruments developed under the auspices of the Organisation for Economic Co-operation and Development (OECD)¹⁴ and frequently features in instruments of regional economic integration. In sum, international law in many cases precludes port regulations from discriminating against foreign vessels or vessels of specific nationalities.

⁷ See Parameswaran, B., *The Liberalization of Maritime Transport Services*, Berlin-Heidelberg, Springer, 2004, 128 *et seq.*

⁸ Jensen, Ø, *Coastal State Jurisdiction and Vessel Source Pollution*, Lysaker, Fridtjof Nansen Institute, 2006, 16.

⁹ See, for example, International Court of Justice, *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, Merits, Judgment, ICJ Reports 1986, (14), 111, para 213; Churchill, R.R. and Lowe, A.V., *The law of the sea*, Manchester, Manchester University Press, 1999, 62; Tanaka, Y., *The International Law of the Sea*, Cambridge, Cambridge University Press, 2012, 80.

¹⁰ See Bardin, A., "Coastal State's Jurisdiction over Foreign Vessels", *Pace International Law Review*, 2002, 32-33.

¹¹ Van Hooydonk, E., *Beginnelsen van Havenbestuursrecht*, Brugge, die Keure, 1996, 515, para 181.

¹² Brugmann, G., *Access to Maritime Ports*, Norderstedt, Books on Demand, 2003, 10.

¹³ Signatories include *inter alia* Australia, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, France, Germany, Great Britain, Greece, Hungary, India, Iraq, Italy, Japan, Malta, Mexico, Morocco, The Netherlands, New Zealand, Norway, Sweden, Slovakia and Switzerland.

¹⁴ See the Code of Liberalisation of Current Invisible Operations (CLIO), the Recommendation of the OECD Council concerning Common Principles of Shipping Policy for Member countries, the Understanding on Common Shipping Principles and the Understanding between DNMEs (Dynamic Non-Member Economies) and OECD Member Countries on Principles to be adhered to in International Maritime Transport.

Several bilateral trade agreements, maritime agreements and treaties of friendship, commerce and navigation include clauses providing for national or “most favoured nation” treatment¹⁵. When a State grants most favoured nation treatment to trade partners, these trade partners are treated equally compared to each other. Under national treatment, the legal subjects of the trade partner are treated equal to nationals¹⁶. Port regulations may not depart from national or “most favoured nation” treatment accorded to trade partners.

Another point of interest for the draftsmen of port regulations is the rights of landlocked States. There are over 40 landlocked States in the world. Their access to the sea depends on their right of transit across the territory of other States and their right of access to maritime ports. The freedom of transit in general is regulated *inter alia* by the Barcelona Convention and Statute on Freedom of Transit, 1921 and by Article V of the GATT. The right of access to maritime ports for landlocked States and the treatment of their ships in such ports are regulated in, *inter alia*, the Convention and Statute on the International Régime of Maritime Ports, 1923 (Para 4 of the Protocol of Signature), the High Seas Convention, 1958 (Art. 3.1.b) and the United Nations Convention on the Law of the Sea, 1982 (Art. 131). Furthermore, Article 4.2 of the United Nations Convention on Transit Trade of Land-locked States, 1965 obliges the Contracting States to apply reasonable tariffs or charges to the use of port facilities by traffic in transit.

To prevent unnecessary delays in maritime traffic, member countries of the International Maritime Organization (IMO) in 1965 adopted the Convention on Facilitation of International Maritime Traffic (FAL). The purpose of the Convention was 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 voyages¹⁷. The Convention and its amendments reduce the number of declarations which can be required by public authorities to only nine¹⁸.

On 2 January 2013, the FAL Convention had 115 Contracting States, the combined merchant fleets of which constitute approximately 90.77 per cent of the gross tonnage of the world’s merchant fleet. Port regulations in States which are parties to the Convention should not depart from the Convention’s provisions. More generally, port regulations should refrain from placing a large administrative burden on port users.

Yet another principle of international law is the requirement to publish regulations. With regard to port regulations, this principle is enshrined in the abovementioned Convention and Statute on the International Régime of Maritime Ports, 1923 (Art. 4). In many countries, the publication of regulations

¹⁵ OECD, Directorate for Science, Technology and Industry, Division of Transport, *Regulatory Issues in International Maritime Transport*, 2001, <http://www.oecd.org/sti/transport/maritimetransport/2065436.pdf>, 36, para 146.

¹⁶ Brugmann, G., *Access to Maritime Ports*, Norderstedt, Books on Demand, 2003, 25.

¹⁷ See *inter alia* the website <http://www.imo.org/OurWork/Facilitation/ConventionsCodesGuidelines/Pages/Default.aspx>. On trade facilitation in general, see the website http://www.unece.org/cefact/nat_bodies.html and Moisé, E., Orliac, T. and Minor, P., “Trade Facilitation Indicators: The Impact on Trade Costs”, *OECD Trade Policy Working Papers*, para 118, OECD Publishing, <http://www.oecd-ilibrary.org/docserver/download/5kg6nk654hmr.pdf?expires=1355411864&id=id&accname=guest&checksum=6DEA11EDC430F2EC03B2FB4E83816AE6>, 7.

¹⁸ See *infra*, para 21.

is also a constitutional requirement and, if the regulations are enforced through criminal sanctions, often a fundamental principle of criminal law. The publication of port regulations may also be essential from a practical point of view. Regulations which are kept wholly or partly unpublished or which are only disclosed to a limited number of port users, are unlikely to produce the desired effect.

3. Scope and content of port regulations

3.1. Scope of port regulations

3.1.1. National legal context

Individual legal systems are very diverse as to structure and organisation. Generally, however, the national legal order is not a system of norms standing side by side on the same level, but a hierarchy of different levels of norms. The creation of a lower norm is determined by a higher norm. The Constitution – in a material, non-formal sense – is the highest level of national law. The general norms established by way of legislation or custom form the next level in the hierarchy of law. Sometimes, however, the creation of general norms is divided into two or more stages. Some Constitutions give certain administrative authorities the power to enact general norms by which the provisions of a statute are implemented. Such general norms, which are not issued by the legislative body but by an executive authority on the basis of general norms issued by the legislator, are called “regulations” or “ordinances”. They are normally inferior to the general norms issued by the legislator.

Furthermore, in some legal systems, there may be a hierarchy between the regulations and ordinances of the various administrative authorities.

Regulatory authorities should take account of the national legal context and should identify the relation between this context and the port regulations.

The power to adopt port regulations is usually conferred by national legislation. The regulations should not be *ultra vires*, *i.e.* the body which enacts the regulations should not go beyond the powers granted to it.

Port regulations should be in conformity with higher norms. Port regulations should not include rules which are substantially inconsistent with a higher norm, unless the higher norm specifically allows it. Furthermore, port regulations should not unnecessarily duplicate existing rules. More in particular, regulatory authorities should consider to what extent port operations can be sufficiently regulated by general law and private contracts. They should carefully consider what deviations from the general

law are necessary¹⁹. However, deviations from the general law are a typical feature of the port setting. Many examples show that ports can barely function within a regular legal framework and have, for centuries, largely evaded it. Ports, it seems, are made for *lex specialis*²⁰.

Finally, regard should be had to the national legal tradition. It has been observed that the written law as well as contracts in *common law* countries tend to contain more detailed stipulations, whereas in *civil law* countries a more abstract approach is usually adopted²¹. However, this distinction should not be generalised. Individual countries may have different traditions in the drafting of legal texts. The port regulations of a country should be drafted in a style which is familiar to the practitioners of that country.

3.1.2. Relationship between port regulations and other port-oriented laws and regulations

Port regulations typically include rules on the integrity of the port infrastructure, navigation in the port, the use of quays, the handling of certain types of goods, restrictions of access to the port area, restrictions on certain activities in the port, the prevention of fire and the organisation of various port services²². As we have explained, the common feature of these rules is that they aim at ensuring the safe, smooth and efficient operation of the port as a whole²³.

In many countries, some aspects of port operations are regulated by specific national laws and not by port regulations. For example, this can be the case for:

- the handling of dangerous goods;
- the organisation of port labour²⁴;
- the reporting formalities upon the arrival or departure of a vessel;
- the reporting of incidents or defects in the ship.

Furthermore, many aspects of shipping and – indirectly – of port operations are the subject of international conventions and, in some cases, supranational legislation. These instruments often require implementation under national law or approval by the national legislator before they can have domestic legal effects. Therefore, such international instruments are usually not implemented by means of port regulations, but rather by specific national laws and their subordinate regulations. This is the case for:

¹⁹ Comp. Economic and Social Commission for Asia and the Pacific, *Guidelines for Port-Related Legislation*, Bangkok, United Nations, 1991, 3.

²⁰ Van Hooydonk, E., “*The law ends where the port area begins*”: on the anomalies of port law. *Inaugural lecture at the launch of Portius – International and EU Port Law Centre*, Antwerp/Apeldoorn/Portland, Maklu, 2010, 35, para 34.

²¹ Tetley, W., “Mixed jurisdictions: common law vs civil law (codified and uncoded) (Part I)”, *Uniform Law Review - Revue de Droit Uniforme*, 1999, (591), 615.

²² Van Hooydonk, E., *Beginnelsen van havenbestuursrecht*, Bruges, die Keure, 1996, 316, para 145.

²³ See *supra*, para 2.

²⁴ Port labour may be regulated by national laws and regulations, but in some countries it is also governed by collective bargaining agreements, at national or port level.

- the rules on the design, construction, equipment and manning of vessels, which, pursuant to the United Nations Convention on the Law of the Sea, 1982, are set and enforced by the flag State, normally on the basis of, *inter alia*, the SOLAS and Load Lines Conventions;
- the rules on the inspection of foreign ships in national ports to verify their compliance with the relevant international standards. These matters are regulated by, *inter alia*, the SOLAS and Load Lines Conventions and regional port state control agreements;
- the rules with regard to port security, which implement the ISPS Code under the SOLAS Convention²⁵;
- the rules on public health protection, which should implement the International Health Regulations, i.e. an international legal instrument aimed at the prevention of and response to acute public health risks that have the potential to cross borders and threaten people worldwide. The Regulations require countries to report certain disease outbreaks and public health events to the World Health Organisation²⁶.

Some policy areas are of a general nature and do not specifically concern port operations. Nonetheless, they may be of great importance to ports. Examples include the prevention of pollution, the general civil liability law and the general criminal law, particularly dealing with crimes against property such as theft. These policy areas are almost invariably regulated by laws of general application. However, port operations give rise to specific risks and requirements, which are not always sufficiently covered by the general laws. In such circumstances, supplementary provisions may be included in port regulations. For example, many port regulations contain provisions on the discharge of waste water from the cleaning of cargo holds and tanks. A number of port regulations contain provisions on the civil liability of the port authority or of the port users. Occasionally, port regulations contain criminal norms.

There is no universal rule which distinguishes matters to be regulated in port regulations, and other regulatory areas, which are regulated by other laws and regulations. It is up to legislators and regulatory authorities in each country to determine where they draw the distinction. The general guiding principle seems to be that matters are dealt with in port regulations as long as they solely affect the safe and smooth operation of the port as such, while other law-making bodies (including the national legislator) will intervene when higher or broader interests are at stake, such as international and national health, the fight against terrorism, the prevention of major accidents, the preservation of the marine environment, the protection of ship's crews and port workers, etc.

In mixed policy areas, such as pollution prevention, the actions of the administrative bodies of the ports should be carefully coordinated with those of other relevant governmental agencies²⁷.

²⁵ It should be noted that several port regulations include references to the ISPS Code: see *infra*, para 30.

²⁶ Although relevant for ports, port regulations seldom refer to these regulations. For a rare example, see Abu Dhabi, Department of Transport, Maritime Sector, Transport Regulations (General and Port Operations), http://dot.abudhabi.ae/en/content/download?File=129780710353483604port_en.pdf&loc=forms, Schedule 4, Sec. 1.

²⁷ See Economic and Social Commission for Asia and the Pacific, *Guidelines for Port-Related Legislation*, Bangkok, United Nations, 1991, 41.

3.1.3. Regulatory levels

Port regulations are not necessarily set at the level of the individual port.

In some countries, general port regulations are adopted by the government at national level. This is the case in France, where the General Regulations for Commercial and Fishing Seaports (*Règlement général de police dans les ports maritimes de commerce et de pêche*) were enacted by Decree of the Prime Minister²⁸. In Djibouti, the port regulations are issued by the President of the Republic²⁹. In Namibia and Yemen, port regulations are adopted by the Minister responsible for transport³⁰. In Japan, the port regulations are even the subject of a national act of parliament³¹. In other countries, such as South Africa, the general port regulations are issued by an autonomous port authority at national level³².

The existence of national port regulations does not necessarily exclude the possibility to adopt additional local regulations³³.

Many port regulations, however, are adopted at the local level, either by a local representative council or by an autonomous port authority. This is the case, for example, in the ports of Belgium, Germany, the Netherlands, Sweden, Norway, Finland, Latvia and the Omani ports of Sohar and Salalah.

As a rule, the level at which port regulations are adopted will vary with the prevailing national port governance model, but it may be the case that the port regulations are not established by the port authority but by another authority or agency.

3.1.4. Role of the port authority

Four main port administration models have emerged over time: the (public) service port, the tool port, the landlord port and the fully privatised port³⁴. Each of these models has direct implications for the scope of port regulations.

²⁸ Décret No 2009-877 of 17 July 2009 portant règlement général de police dans les ports maritimes de commerce et de pêche, <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020870586&dateTexte=&categorieLien=id>.

²⁹ Règlement general du Port Autonome International de Djibouti, <http://www.presidence.dj/jo/2007/decr0157pr07.php>.

³⁰ Namibian Ports Authority Act, 1994: Port regulations, <http://www.saflii.org/na/other/NAGovGaz/2001/83.pdf>; Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>.

³¹ Act No 174 of 15 July 1948 on Port Regulations.

³² Port Rules of South-Africa, <http://www.transnetnationalportsauthority.net/DoingBusinesswithUs/NationalPortAct/Documents/Port%20Rules%20GG31986%20060309.pdf>. The Port Rules were made by the Transnet National Ports Authority and approved by the South African Minister of Transport. They came into effect on 6 March 2009.

³³ Article L5331-10 of the *Code des Transports* and the Articles 16, 17 and 30 of the *Règlement général de police dans les ports maritimes de commerce et de pêche* specifically refer to this possibility.

³⁴ The World Bank, *Port Reform Toolkit, Second Edition, Module 3. Alternative Port Management Structures and Ownership Models*, Washington, The International Bank for Reconstruction and Development / The World Bank, 2007, http://www.ppiaf.org/sites/ppiaf.org/files/documents/toolkits/Portoolkit/Toolkit/pdf/modules/03_TOOLKITModule3.pdf, 81-83.

The port regulations of a public service port and of a tool port may include the tariffs and the general conditions of use for the services offered, resp. the equipment provided by the port authority. Such provisions will not be included in the port regulations of a pure landlord port. However, even landlord port authorities often perform some ancillary services (for example towage services, the supply of drinking water or electricity to ships, or the reception of garbage) or rent out some sort of equipment (for example floating cranes), in which case their port regulations may include provisions on the applicable tariffs and conditions of use.

On the other hand, the port regulations of a landlord port will often contain provisions with regard to the licensing of port service providers in the port. Where the port authority reserves the exclusive right to perform certain port services, as in a service port model, such provisions will not be included.

In ports where the port authority offers port services or provides equipment, the port regulations may contain provisions on the limitation of the port authority's liability in that respect.

A fully privatised port, too, may issue port regulations. For example, the port owned by the Hovensa LLC company on St. Croix, US Virgin Islands, publishes "marine and terminal port regulations". However, the port regulations of a fully privatised port cannot be put on the same footing as those of a port administered by a public law body. In principle, private regulations do not have the force of law. If that is indeed the case, they should only be considered as a source of information or, possibly, of contractual obligations.

3.2. Content of port regulations

3.2.1. Delimitation of the port area

The precise delimitation of the port area is essential to port regulations. The port area will normally determine the territorial scope of application of the regulations.

In some countries, the delimitation of port areas may be a matter for national laws or regulations. However, a delimitation may also be included in local port regulations³⁵. In many countries, different delimitations of a port area exist side by side for the purpose of various bodies of legislation. Examples of laws and regulations applying a distinct delimitation may include those on port management in general, port financing, port and navigational policing, pilotage and towage, customs, road traffic and port labour³⁶.

³⁵ See, for example, the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 2.

³⁶ Van Hooydonk, E., *"The law ends where the port area begins": on the anomalies of port law. Inaugural lecture at the launch of Portius – International and EU Port Law Centre*, Antwerp/Apeldoorn/Portland, Maklu, 2010, 36, para 37.

3.2.2. Formalities upon arrival and departure

In order to facilitate the necessary arrangements for the safe navigation and the efficient reception of ships and the scheduling of the activities of each arriving vessel as well as to ensure that each vessel will find a berth, it is customary for the shipping company or agent to give advance notice of expected arrivals. Usually, upon notification, a range of information with regard to the ship, its crew and passengers and its cargo must be provided³⁷. In most ports, the rules with regard to advance notice of arrival and the information and documents to be provided are laid down in port regulations³⁸. Some port regulations also require the provision of certain information upon departure of a vessel³⁹. The vessel may not leave the berth until it has received clearance for departure from the port authority. These arrangements allow the authority to ensure safe navigation in the docks and fairways.

It is advisable that the formalities and procedures imposed be in line with the IMO's Convention on Facilitation of International Maritime Traffic (FAL), which was mentioned above⁴⁰. The Convention and the amendments to it reduce the number of declarations which can be required by public authorities to only nine:

- *IMO general declaration;*
- *Cargo declaration;*
- *Ship's stores declaration;*
- *Crew's effects declaration;*
- *Crew list;*
- *Passenger list;*
- *Dangerous goods declaration;*
- *Declaration required under the Universal Postal Convention;*
- *Declaration required by international health regulations.*

Today, maritime facilitation efforts also aim at total electronic clearance of ships and cargo, mainly through pre-arrival electronic messaging⁴¹.

3.2.3. Rules on movement of ships

³⁷ UN Secretariat, Department of Economic and Social Affairs, *Port Administration and Legislation Handbook*, New York, United Nations, 1969, 25.

³⁸ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 6; the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 4-5; the Paradip Port Rules, [paradiport.gov.in/act2005/RR\(BOOK-2004\)11.DOC](http://paradiport.gov.in/act2005/RR(BOOK-2004)11.DOC), Sec. 3; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovenssa.com/pdf/PORTBOOK.pdf>, Sec. 3.12.

³⁹ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 2.13; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 3.39-3.41.

⁴⁰ See *supra*, para 12.

⁴¹ X., *Trade Facilitation Handbook. Part II, Technical Notes on Essential Trade Facilitation Measures*, New York, United Nations, 2006, 51-52.

Port regulations generally contain provisions on movements of ships within the port area. For example, these provisions relate to speed⁴² and pilotage. In many cases, the use of a pilot is made mandatory as a condition for navigation in the port area⁴³. Often, the use of tug assistance is also required, especially in ports which are frequented by medium or large sized vessels and have enclosed docks or other areas of limited access⁴⁴. In some cases, more specific regulations are provided with regard to navigable channels, procedures which must be followed when entering the port area, and communication between vessels and the Harbour Master's office⁴⁵.

Port regulations also commonly address the berthing and anchoring of ships. The relevant rules may relate to mooring⁴⁶ and the assignment of berths⁴⁷. They may also relate to the removal of vessels in emergencies or when required for the safety or convenience of the port⁴⁸.

The navigation rules in port regulations should conform as closely as possible to the detailed set of navigation rules contained in the International Regulations for Preventing Collisions at Sea (COLREGs). The COLREGs themselves do not necessarily apply to ports. Rule 1(a) of the COLREGs reads: “[t]hese Rules shall apply to all vessels upon the high seas and in all waters connected therewith navigable by seagoing vessels”. Rule 1(b) of the COLREGs provides that “[n]othing in these Rules shall interfere with the operation of special rules made by an appropriate authority for roadsteads, harbours, rivers, lakes or inland waterways connected with the high seas and navigable by seagoing vessels”, but that “[s]uch special rules shall conform as closely as possible to these Rules”. Whether the waters of a port are navigable by seagoing vessels is a question of fact, which, in the case of seaports, should logically be answered in the positive. The term “waters connected with the high seas” is open to interpretation. Some commentators believe that this phrase concerns only tidal waters, while others believe that it concerns both tidal and non-tidal waters. In the latter view,

⁴² See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 6-7; the Port Salalah Rules & Regulations, <http://www.salalahport.com/uploadedFiles/Port%20of%20Salalah/Port%20Information/Port%20Rules%20&%20Regulations.pdf>, Sec. 3.20-3.21.

⁴³ See, for example, the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 8-9 and 14; the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)11.DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)11.DOC), Sec. 10; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovenssa.com/pdf/PORTBOOK.pdf>, Sec. 3.9.

⁴⁴ See Economic and Social Commission for Asia and the Pacific, *Guidelines for Port-Related Legislation*, Bangkok, United Nations, 1991, 35. See, for example, the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 8-9 and 14; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 23; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovenssa.com/pdf/PORTBOOK.pdf>, Sec. 4.3.

⁴⁵ See, for example, Port Metro Vancouver, Harbour Operations Manual, http://www.portmetrovancover.com/Libraries/PORT_USERS_Marine_Operations/WP_-_2010_Harbour_Operations_Manual.sflb.ashx, Sec. 3.1-3.4, 3.8 and 3.10-3.11; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 12; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovenssa.com/pdf/PORTBOOK.pdf>, Sec. 3.2-3.3.

⁴⁶ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 15-16; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 3.3; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovenssa.com/pdf/PORTBOOK.pdf>, Sec. 4-2-4.5.

⁴⁷ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 7; the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)11.DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)11.DOC), Sec. 4-6; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 17.

⁴⁸ See, for example, the Port Klang Authority By-Laws, Art. 29; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 24.

the COLREGs would apply to all the water areas of a port – whether or not they are behind a lock – but special navigation rules inconsistent with the COLREGs would be allowed if there are strong reasons to justify them. In the former view, the COLREGs would apply – although different navigation rules may be justified – only to tidal areas within ports. In basins behind locks the COLREGs would not apply, but the competent authority would be at liberty to enact similar navigation rules⁴⁹.

Occasionally, port regulations contain rules with regard to the boarding of ships by officials (for example, the Harbour Master and his staff and officers performing security, customs or health inspections)⁵⁰. Usually, they do not board a vessel until it is at some convenient place within the harbour, or at its berth⁵¹.

Another specific issue dealt with in some port regulations are ship wrecks and other objects in the waters of the port that obstruct or endanger navigation. Port regulations may prohibit the throwing of objects into the waters of the port and may provide that the owner must take all necessary measures in order to report and remove a wreck or other object as soon as possible⁵². They may further oblige the owner to reimburse the port authority for the costs incurred in removing them or otherwise taking the necessary measures.

3.2.4. Loading, unloading, handling and storage of cargo

The purpose of a merchant ship's call at any port is generally the loading and unloading of goods. The prompt loading and unloading of vessels and the adequate handling and storage of cargo are of considerable importance not only to ship owners and the consignees of cargoes but also to the port authorities who are interested in the efficiency and profitability of the port operations, and to the port State's economy at large. Therefore, the provisions on the loading, unloading, handling and storage of cargo are an important part of port regulations.

Port regulations may contain provisions on the organisation of port work, with regard to, *inter alia*, working hours⁵³.

⁴⁹ Extensively: Van Hooydonk, E., *Beginnselen van Havenbestuursrecht*, Bruges, die Keure, 1996, 359-366, para 150. Comp. Douglas, R.P.A., Lane, P. and Peto, M., *Douglas and Geen on the law of harbours, coasts and pilotage*, London/Hong Kong, LLP, 1997, 52, para 6.39.

⁵⁰ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 1.6; the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 51-54.

⁵¹ UN Secretariat, Department of Economic and Social Affairs, *Port Administration and Legislation Handbook*, New York, United Nations, 1969, 26.

⁵² See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 31; the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 22; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 29; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 2.8.

⁵³ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 8.5; the Paradip Port Rules, [paradiport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradiport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 82-83.

Regulations that prescribe the way cargo operations should be carried out may also be included. They deal with, *inter alia*, the carrying out of inspections of cargo⁵⁴, the supervision of cargo handling⁵⁵, proper lighting during port work⁵⁶, the use of personal protective equipment⁵⁷, the proper use of equipment for loading and unloading⁵⁸ and the use of the quay and the sheds⁵⁹.

Port regulations may take into account the provisions of the Internal Labour Organisation's Code of Practice on Safety and Health in Ports (2003), or may refer to them⁶⁰. Offering many detailed technical illustrations and examples of good practice, the provisions of the Code cover all aspects of port work where goods or passengers are loaded or unloaded to or from ships, including work incidental to such loading and unloading activities in the port area⁶¹. The Code is not a legally binding instrument. Practical recommendations are intended to provide guidance on safety and health to those responsible for or involved in the management, operation, maintenance and development of ports.

Guidelines on safe stowage and securing of cargoes can be found in the international Code of Safe Practice for Cargo Stowage and Securing (CSS Code). These guidelines are primarily aimed at the ship owner and the master, who is responsible for the safe conduct of the voyage and the safety of the ship, its crew and its cargo. However, some of the Code's rules and guidelines also concern the safety of operations in ports, by the ship's crew as well as stevedores and terminal operators. Port regulations may implement rules of the CSS Code or may require port users to follow the Code⁶².

Port regulations often include particular rules on the handling of certain kinds of cargo⁶³. They may for example include specific rules on container and ro-ro operations⁶⁴. In this regard, some port regulations explicitly refer to the IMO/ILO/UN ECE Guidelines for Packing of Cargo Transport Units⁶⁵. These Guidelines are an international instrument which includes practical measures to ensure that cargo is safely stowed in shipping containers, road vehicles and railway wagons. The Guidelines were

⁵⁴ See, for example, the Port Klang Authority By-Laws, Art. 36.

⁵⁵ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 8.7 and Part II, Sec. 8.1.2; the Port Klang Authority By-Laws, Art. 51.

⁵⁶ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part II, Sec. 8.1.3; the Port Klang Authority By-Laws, Art. 24.

⁵⁷ See, for example, Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 8.7.4 and 9.7.

⁵⁸ See, for example, the Port Klang Authority By-Laws, Art. 51.

⁵⁹ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 31; the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 46; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 8.7.1.

⁶⁰ See, for example, Abu Dhabi, Department of Transport, Maritime Sector, Transport Regulations (General and Port Operations), http://dot.abudhabi.ae/en/content/download?File=129780710353483604port_en.pdf&loc=forms, Art. 32.4.

⁶¹ See the website http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_PUBL_9221152871_EN/lang-en/index.htm.

⁶² See, for example, the Freeport of Riga Regulations, <http://www.rop.lv/en/multimedia/downloads/docdownload/174-freeport-of-riga-regulations.html>, Sec. 244.2.

⁶³ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 8.12-8.15 and 8.18.

⁶⁴ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part II, Chapter 7.

⁶⁵ See, for example, the Freeport of Riga Regulations, <http://www.rop.lv/en/multimedia/downloads/docdownload/174-freeport-of-riga-regulations.html>, Sec. 244.5; the Liepaja Port Regulations, http://www.bma.lv/download/files/port_regulations.doc, Sec. 201.6.

approved by the IMO Maritime Safety Committee and are currently under revision⁶⁶. The measures apply to transport operations by sea and all land modes, *i.e.* to the entire intermodal transport chain. Furthermore, the Guidelines cover safe handling, securing and receiving of cargo transport units and include provisions on training.

Likewise, regulatory authorities can use the international know-how which has been developed within the IMO with regard to the loading, unloading and stowage of bulk cargoes. Regulation VI/7 of the 1974 SOLAS Convention sets out a few general rules. These rules are directed at the master of the ship and the terminal representative. They must agree on a plan to ensure that the permissible forces and moments on the ship are not exceeded during loading or unloading. The Code of Practice for the Safe Loading and Unloading of Bulk Carriers (BLU Code) provides guidance to masters of bulk carriers, terminal operators and other parties concerned with the safe loading and unloading of solid bulk cargoes. The BLU Code is complemented by the BLU Manual. The purpose of the Manual on Loading and Unloading of Solid Bulk Cargoes for Terminal Representatives is to provide more detailed guidance to terminal representatives and others involved in the handling of solid bulk cargoes, including those responsible for the training of personnel. Both the BLU Code and the BLU Manual are included as a supplement in the International Maritime Solid Bulk Cargoes Code (IMSBC Code). Port regulations may use these instruments as guidance or refer to them⁶⁷.

An important share of the cargoes transported by sea may be classified as dangerous by virtue of the hazards which they can pose to human life and health, to other cargoes, to property or to the environment. Consequently there is general recognition of the need for appropriate precautions to be taken to prevent or reduce the risks of damage from such substances.

For this purpose, provisions for the safe packing, loading, transport and storage of dangerous goods are generally included in port regulations⁶⁸. For example, often separate zones are designated for specific categories of dangerous goods. However, this has become increasingly complex as industrial processes change and the various risk categories begin to overlap. Furthermore, spatial restrictions may in some ports add to the complexity.

For a variety of reasons, some types of cargo may be refused. The port regulations may provide that the port authority's officials can refuse or prohibit the handling of "objectionable cargo" because of the hazards it poses⁶⁹.

Regulatory authorities should have regard to the detailed international regulations that exist in relation to the handling of dangerous goods.

⁶⁶ See <http://www.unece.org/trans/wp24/guidelinespackingctus/documents.html>.

⁶⁷ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, §40 (d).

⁶⁸ See, for example, the Port Klang Authority By-Laws, Artt. 120-132AF.

⁶⁹ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part III, Sec. 2.1; the Port Klang Authority By-Laws, Art. 41.

The International Maritime Dangerous Goods (IMDG) Code contains a detailed set of norms, prescriptions, regulations and information on dangerous cargo. It became mandatory in international law from 1 January 2004.

The IMDG Code requires dangerous goods to be stored and segregated according to the hazard class and compatibility. Although the IMDG Code is primarily aimed at ship stowage, the requirements can also be applied to storage ashore and even to container packing⁷⁰. Numerous port regulations refer to the IMDG Code. The Code is frequently used to define dangerous goods⁷¹. Port regulations may also provide that goods must be labelled, marked, stowed or segregated in accordance with the Code⁷².

The (Revised) Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas set out a standard framework within which port regulations can be prepared to ensure the safe transport and handling of dangerous cargoes in port areas. Port regulations may explicitly refer to the Recommendations⁷³.

Certain types of dangerous cargoes are governed by specific international regulations. This is the case, for example, for petroleum products. The International Safety Guide for Oil Tankers and Terminals (ISGOTT) is the standard reference work on the safe operation of oil tankers and oil terminals. In 2006, the fifth edition of ISGOTT was published by ICS, OCIMF and the International Association of Ports and Harbors (IAPH). The Guide provides operational advice to directly assist personnel involved in tanker and terminal operations, including guidance on, and examples of, certain aspects of tanker and terminal operations and how they may be managed. Several port regulations refer to ISGOTT⁷⁴. Port regulations may require port users to comply with ISGOTT and/or may provide that the regulations are supplemented by the most recent edition of ISGOTT.

⁷⁰ The IMDG Code is supported by a variety of international codes and recommendations such as the International Maritime Solid Bulk Cargoes Code (IMSBC Code), the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) and the Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas (X, *Handling Dangerous Goods in Ports General Awareness Course. Participants' Manual*, ASEAN – German Technical Cooperation, 2011, 2-3).

⁷¹ See, for example, Port of Antwerp, Gemeentelijke Havenpolitieverordening, <http://www.portofantwerp.com/sites/portofantwerp/files/Gemeentelijke%20havenpolitieverordening.pdf>, Art. 64; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 6.1; Règlement d'exploitation du port de Casablanca, http://www.anp.org.ma/Publications/Documents/Lois_et_reglementation/Reglementations_portuaires/REGLEMENT_EXPLOITATION_CASABLANCA.pdf, Art. 1; Sohar Industrial Port, Rules and Regulations, http://www.portofsohar.com/download/cmsfiles/PDFs/SIP_Rules_Regulations.pdf, Sec. 1.

⁷² See, for example, the General Port Regulations for the Port of Göteborg, http://www.portofgothenburg.com/Documents/PDF-bank/General_Port_Regulations.pdf?epslanguage=en, Sec. 9.2.3; Namibian Ports Authority Act, 1994: Port regulations, <http://www.safii.org/na/other/NAGovGaz/2001/83.pdf>, Art. 106.7; Règlement d'exploitation du port de Casablanca, http://www.anp.org.ma/Publications/Documents/Lois_et_reglementation/Reglementations_portuaires/REGLEMENT_EXPLOITATION_CASABLANCA.pdf, Art. 114; Règlement general du Port Autonome International de Djibouti, <http://www.presidence.dj/jo/2007/decr0157pr07.php>, Art. 89.

⁷³ See, for example, Tallinn Bekker Port, Port Regulations, www.tallinnbekkerport.com/popFile.php?file=231, Sec. 4.1.3.

⁷⁴ See, for example, the Port Rules of South-Africa, <http://www.transnetnationalportsauthority.net/DoingBusinesswithUs/NationalPortAct/Documents/Port%20Rules%20GG31986%20060309.pdf>, Sec. 104, 2(a); Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 7.3.1, 9.2.1 and 10.1; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 8.1(1); Sohar Industrial Port, Rules and Regulations, <http://www.portofsohar.com/download/cmsfiles/PDFs/SIPRules>

The International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code) sets out how irradiated nuclear fuel, plutonium and high-level radioactive wastes should be carried. The Code became mandatory on 1 January 2001. Several port regulations refer to the INF Code, for example with regard to the definition of dangerous goods⁷⁵ or reporting obligations⁷⁶.

3.2.5. Safety measures

In addition to the rules on safe navigation and on safe handling of cargoes, various other safety-related issues may be addressed in port regulations.

The regulations may contain rules on the safe operation and accommodation of vessels while at berth in order to avoid danger to the vessels themselves, to other vessels, to port installations and facilities and to persons or property in the port area. For example, the regulations may prohibit the use of the propellers of a vessel while berthed or moored⁷⁷. They may require the vessels to be adequately manned in order to detect dangerous situations and to allow them to be safely moved when necessary⁷⁸.

Port regulations may include rules on the embarkation and disembarkation of passengers or crew. For example, they may contain prescriptions on the safety of gangways⁷⁹.

Many port regulations contain provisions with regard to road traffic in the port area⁸⁰.

They may prohibit the performance of any port services, such as bunkering, mooring and unmooring or stevedoring, by private operators, unless they obtain a licence from the port authority⁸¹. Port

[Regulations.pdf](http://www.hovensa.com/pdf/PORTBOOK.pdf), Sec. 5. 10. 3; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovensa.com/pdf/PORTBOOK.pdf>, Sec. 6.1 and 7.5.

⁷⁵ See, for example, the Port Rules of South-Africa, <http://www.transnetnationalportsauthority.net/DoingBusinesswithUs/NationalPortAct/Documents/Port%20Rules%20GG31986%20060309.pdf>, Sec. 1(1)(I)(vii).

⁷⁶ See, for example, Director of the Maritime Office in Szczecin, Port Regulations, <http://www.ums.gov.pl/prawne/porte.pdf>, Sec. 150a (4).

⁷⁷ See, for example, the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 28(a); the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 25; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 3.7.

⁷⁸ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 17; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 26.

⁷⁹ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 5.4; Namibian Ports Authority Act, 1994: Port regulations, <http://www.saflii.org/na/other/NAGovGaz/2001/83.pdf>, Sec. 52.

⁸⁰ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 34-42; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 4.3.

⁸¹ See, for example, the Port Klang Authority By-Laws, Artt. 49-50; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 11.2.1-11.2.3.

regulations may also contain operational prescriptions with regard to ship repair⁸², ship breaking activities⁸³ and bunkering⁸⁴. A relatively new risk factor, which requires specific safety regulations, is the storage and bunkering of LNG (liquefied natural gas) in ports.

In addition, the use of inflammable material, performing hot work, lighting fires or smoking may be restricted or prohibited in certain areas of the port⁸⁵. Port regulations may furthermore specify fire prevention measures and the action to be taken in the event of fire or other emergencies⁸⁶.

Port regulations may restrict or prohibit the presence of animals in the port⁸⁷ or the presence of (loaded) firearms⁸⁸. They may also restrict the use of alcohol or drugs⁸⁹ and prohibit activities such as swimming, bathing, diving, angling, fishing or other recreational activities in the waters of the port⁹⁰.

3.2.6. Health and hygiene measures

Port regulations often contain rules on health and hygiene. For example, they may prescribe how to deal with infectious diseases on board ships calling at the port. They may also provide that vessels can be ordered to leave their berth when they have goods on board which are dangerous to public health⁹¹. Furthermore, provisions on deratting may be included⁹².

⁸² See, for example, the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 26; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 4.8-4.9; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovensa.com/pdf/PORTBOOK.pdf>, Sec. 6.3.

⁸³ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 48; Namibian Ports Authority Act, 1994: Port regulations, <http://www.saflii.org/na/other/NAGovGaz/2001/83.pdf>, Sec. 67.

⁸⁴ See, for example, the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 33; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 6.2-6.6.

⁸⁵ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 37-38; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 30; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 7.2-7.5; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 5.2-5.3 and 6.2-6.3.

⁸⁶ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 57; Port Metro Vancouver, Harbour Operations Manual, http://www.portmetrovancover.com/Libraries/PORT_USERS_Marine_Operations/WP_-_2010_Harbour_Operations_Manual.sflb.ashx, Sec. 8.1-8.3; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovensa.com/pdf/PORTBOOK.pdf>, Sec. 6.6-6.8.

⁸⁷ See, for example, the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 38; the Port Klang Authority By-Laws, Artt. 20 and 77.

⁸⁸ See, for example, the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 38; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 9.8.

⁸⁹ See, for example, Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 3.12 and 4.6; St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovensa.com/pdf/PORTBOOK.pdf>, Sec. 6.2.

⁹⁰ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 20; the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 28(b) and (c); the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 3.10.

⁹¹ See, for example, the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 39; the Port Klang Authority By-Laws, Artt. 27-28; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 5.22; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 18.

⁹² See, for example, the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 46.

The regulations may further contain rules on the removal of goods which have perished or are detrimental to health⁹³.

3.2.7. Security measures

Port regulations often include provisions on security-related issues⁹⁴.

The International Ship and Port Facility Security Code (ISPS Code) is a comprehensive set of measures to enhance the security of ships and port facilities. The ISPS Code is implemented – and made binding – through Chapter XI-2 of the 1974 SOLAS Convention, on “Special measures to enhance maritime security”. The Code has two parts, one mandatory and one recommendatory. In essence, the Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case. The purpose of the Code is to provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures⁹⁵.

Several port regulations include references to the ISPS Code. For example, these regulations contain provisions on security declarations⁹⁶ or provide that all vessels calling at the port must comply with the Code⁹⁷.

3.2.8. Environmental rules

Several port regulations contain provisions for the prevention of pollution of port water, land and air. Such provisions may, for example, prohibit the discharge of any liquids, materials or objects onto the wharves⁹⁸ or into the waters of the port⁹⁹, or regulate various types of emissions into the air¹⁰⁰. They

⁹³ See, for example, the Paradip Port Rules, [paradiport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradiport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 59; the Port Klang Authority By-Laws, Art. 64.

⁹⁴ See, for example, Port Metro Vancouver, Harbour Operations Manual, http://www.portmetrovancover.com/Libraries/PORT_USERS_Marine_Operations/WP_-_2010_Harbour_Operations_Manual.sflb.ashx, Sec. 9.1-9.3; the Port of Melbourne Corporation Operations Handbook, <http://www.portofmelbourne.com/~media/Global/Docs/Operations-Handbook.ashx>, Sec. 3.3; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 4.1.

⁹⁵ See the website <http://www.imo.org/ourwork/security/instruments/pages/ispscode.aspx>.

⁹⁶ See, for example, the General Port Regulations for the Port of Göteborg, http://www.portofgothenburg.com/Documents/PDF-bank/General_Port_Regulations.pdf?epslanguage=en, 24 and Port of Vaasa, Port Regulations, <http://www.vaasa.fi/Link.aspx?id=451356>, Sec. 2, §5.

⁹⁷ See, for example, the Freeport of Riga Regulations, http://www.rop.lv/en/multimedia/downloads/doc_download/174-freeport-of-riga-regulations.html, Sec. 244.11; Port of Rijeka Authority, Port Regulation, <http://www.portauthority.hr/en/docs/portauthorityEN/documents/14/2.1/Original.pdf>, Art. 26(1) and Sohar Industrial Port, Rules and Regulations, http://www.portofsohar.com/download/cmsfiles/PDFs/SIP_Rules_Regulations.pdf, Sec. 7.1.

⁹⁸ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 6.5-6.6; the Port Klang Authority By-Laws, Art. 19

⁹⁹ See, for example, the Falmouth Harbour Bye-Laws, <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 53; the Istanbul Port Regulations, <http://www.ukshipagency.com/files/downloads/istport.pdf>, Art. 28(d); St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovensa.com/pdf/PORTBOOK.pdf>, Sec. 7.3.

¹⁰⁰ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 29a; Port Metro Vancouver, Harbour Operations Manual, http://www.portmetrovancover.com/Libraries/PORT_USERS_Marine_Operations/WP_-_2010_Harbour_Operations

may also prescribe certain precautionary measures, *inter alia* with regard to the loading, unloading and handling of potentially polluting cargoes, and the action to be taken in the event of a spill¹⁰¹. Furthermore, port regulations may contain provisions on the disposal of garbage and waste from ships¹⁰².

Under the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78), the discharge of waste into the sea by ships is severely restricted. Coastal States have the obligation to provide facilities in all their ports for the reception of ship-generated residues and garbage. Regulations for the prevention of air pollution from ships are included in Annex VI of the MARPOL Convention. The regulations in this Annex, *inter alia*, set limits on the sulphur content of marine fuels. Those limits are set lower in so-called Emission Control Areas at sea. Port regulations may contain references to MARPOL, for example for the definition of polluting goods¹⁰³ or with regard to

the requirements on waste disposal¹⁰⁴ or pollution prevention¹⁰⁵.

3.2.9. Rules on the construction and operation of structures and installations

In order to avoid the risk that some structures or installations would disproportionately obstruct navigation or interfere with other uses of the port, it may be advisable that the right to construct and operate any structure or installation within the port be subject to prior authorisation by the port authority¹⁰⁶.

The local port regulations may set out a requirement to obtain a licence or authorisation and the relevant procedure, as well as applicable technical specifications¹⁰⁷.

3.2.10. Powers of the Harbour Master

Good port regulations alone are insufficient. To ensure safe and efficient port operations, a Harbour Master should have the responsibility for the day-to-day organisation and supervision of activities within the port. The duties involved may entail the taking of decisions at short notice and the need to

¹⁰¹ [Manual.sflb.ashx](http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf), Sec. 4.7; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 3.8.

¹⁰² See, for example, Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 17.

¹⁰³ See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 54-55; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 7.

¹⁰⁴ See, for example, Port of Antwerp, Gemeentelijke Havenpolitieverordening, <http://www.portofantwerp.com/sites/portofantwerp/files/Gemeentelijke%20havenpolitieverordening.pdf>, Art. 64.

¹⁰⁵ See, for example, the Port of Rijeka Authority, Port Regulation, <http://www.portauthority.hr/en/docs/portauthorityEN/documents/14/2.1/Original.pdf>, Art. 56.

¹⁰⁶ See, for example, St. Croix, U.S. Virgin Islands, Marine and Terminal Port Regulations, <http://www.hovensa.com/pdf/PORTBOOK.pdf>, Sec. 7.4.

¹⁰⁷ See Economic and Social Commission for Asia and the Pacific, *Guidelines for Port-Related Legislation*, Bangkok, United Nations, 1991, 6.

See, for example, the Act on Port Regulations, Japan, http://dinrac.nowpap.org/documents/law/Japan/Act_on_Port_Regulations_Japan.pdf, Art. 31; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 32-33.

deal with emergency situations. For this reason, the Harbour Master should be empowered to make rules or give instructions as may be necessary. Port users should be placed under an obligation to comply with any such rules and directions¹⁰⁸. If this is not specified by national law, such provisions may be included in the port regulations¹⁰⁹.

3.2.11. Statement of responsibilities

Some port regulations contain provisions on the responsibility of the master and the owner of a vessel¹¹⁰ as well as on the civil responsibility of the port authority itself¹¹¹.

In particular, port regulations may contain provisions on the liability of a port user for damage caused to port facilities¹¹² or the duty of a vessel to pay compensation to the port for pollution damage suffered or for expenses incurred in taking measures to avert or minimise pollution damage¹¹³.

On the other hand, they may limit or exclude the liability of the port authority for damage which may be caused as a result of enforcement measures¹¹⁴, measures taken to deal with emergencies¹¹⁵ or any instruction, direction or act by the port authority^{116,117}.

3.2.12. Enforcement

In order to enforce the rules contained in port regulations, sanctions may be imposed on those who violate them. It should be noted that in many countries there can be no criminal punishment without a corresponding legal provision¹¹⁸. Therefore, the legal provisions on criminal sanctions will usually not form part of the port regulations¹¹⁹, but rather be contained in a national law.

¹⁰⁸ See Economic and Social Commission for Asia and the Pacific, *Guidelines for Port-Related Legislation*, Bangkok, United Nations, 1991, 29.

¹⁰⁹ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 1.6; the Port Klang Authority By-Laws, Artt. 13-14; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 2.4.

¹¹⁰ See, for example, the Port Klang Authority By-Laws, Art. 11(1).

¹¹¹ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 1.8 and 5.11 and Part II, Sec. 1.6; the Port Klang Authority By-Laws, Artt. 90-105, 108 and 112; the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, § 37-41.

¹¹² See, for example, the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 89; the Port Klang Authority By-Laws, Artt. 7(2), 8 and 16; the Port Salalah Rules & Regulations, http://www.salalahport.com/uploadedFiles/Port_of_Salalah/Port_Information/Port%20Rules%20&%20Regulations.pdf, Sec. 3.47.

¹¹³ See, for example, Namibian Ports Authority Act, 1994: Port regulations, <http://www.saflii.org/na/other/NAGovGaz/2001/83.pdf>, Sec. 47; the Paradip Port Rules, [paradipport.gov.in/act2005/RR\(BOOK-2004\)\[1\].DOC](http://paradipport.gov.in/act2005/RR(BOOK-2004)[1].DOC), Sec. 29.

¹¹⁴ See, for example, the Port Klang Authority By-Laws, Art. 115.

¹¹⁵ See, for example, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 9.9.

¹¹⁶ See, for example, the Port Klang Authority By-Laws, Art. 11(2).

¹¹⁷ See Economic and Social Commission for Asia and the Pacific, *Guidelines for Port-Related Legislation*, Bangkok, United Nations, 1991, 38-39 and 44.

¹¹⁸ UNCTAD secretariat, *Legal aspects of port management*, UNCTAD/SHIP/639, 11 February 1993, 49, para 192.

¹¹⁹ See, however, the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 10, Part II, Sec. 10 and Part III, Sec. 10; the Dockyard Port Regulations, Bermuda, http://www.commonlii.org/bm/legis/consol_act/dpr1905268, Sec. 13; the Falmouth Harbour Bye-Laws,

Some legal systems accept that a port authority may impose, (partly) on the basis of the port regulations, non-penal sanctions. They are often called “administrative sanctions”. Port regulations may include provisions on these administrative sanctions¹²⁰.

Frequently, port authorities have the authority to take administrative measures *ex officio* in order to enforce port regulations. For example, in some circumstances port authorities may have the power to detain a vessel or to have it removed from its berth, or to move or remove goods within the port¹²¹.

3.2.13. Terms and conditions of ancillary services

In the event of the port authority operating certain facilities and providing services to port users, the port regulations may contain the general terms and conditions of use for these services¹²². The regulations may furthermore include provisions on the liability of the port authority for loss or damage occurred at the facilities or relating to the performance of the services¹²³.

In many cases, however, the terms and conditions of ancillary services will be dealt with in separate instruments.

3.2.14. Rules on charges and dues

The right of a port authority to levy charges for the services and facilities which it provides to vessels and other users is universally accepted. It is however disputed whether international customary law requires ports dues and charges to be in line with the actual cost of service or whether it allows for, for example, a reasonable profit¹²⁴. In many countries, it is a requirement of national law that port dues and charges are set in accordance with actual expenditure. Furthermore, policy makers may wish to take into account the adverse effect of high port charges to the nation’s economy and to the port’s competitiveness.

¹²⁰ <http://www.falmouthport.co.uk/pdf/bye-laws.pdf>, Sec. 63A and 65; Namibian Ports Authority Act, 1994: Port regulations, <http://www.saflii.org/na/other/NAGovGaz/2001/83.pdf>, Sec. 110; the Rotterdam Port Management Bye-Laws, <http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>, Art. 14.2. See, for example, the Bremen Port Ordinance, <http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>, § 60.

¹²¹ See, for example, the Port Klang Authority By-Laws, Art. 110.

¹²² See for example the Port Klang Authority By-Laws, Artt. 17(1) and 48; Ports of Stockholm, Port Regulations and Ordinance, http://www.stockholmshamn.se/Documents/EN/Port_Regulations_and_Ordinance.pdf, Sec. 15-16.

¹²³ See for example the Decree concerning rules and regulations in Yemeni Ports, <http://www.portofhodeidah.com/MJLH/endoc.pdf>, Part I, Sec. 4.4; the Port Klang Authority By-Laws, Artt. 8, 48, 113 and 116-117.

¹²⁴ On this matter, see Van Hooydonk, E., "The regime of port authorities under European law including an analysis of the Port Services Directive", in Van Hooydonk, E. (Ed.), *European Seaports Law*, Antwerp / Apeldoorn, Maklu, 2003, (79), 116-118.

It should be recalled that international treaties may require port dues and charges to be applied without discrimination. Moreover, under international law and practice, ports are required to lay down the rates in tariff regulations and publish them¹²⁵.

In some instances, port regulations contain provisions on the payment of charges to the port authority¹²⁶ and on remedies in case of non-payment¹²⁷. In many ports, port tariffs are the subject of a separate instrument.

4. Outline of model port regulations

The structure of port regulations varies greatly throughout the world. This may be confusing for port users who are not acquainted with the local regulations, yet are required to comply with them.

When competent authorities develop new or revised port regulations, they may draw inspiration from the following structure:

1. Definitions of terms

2. General provisions

2.1. Port area

[provisions on delimitation of the port area]

2.2. Port authority

[provisions on services offered by the port authority, licensing of port service providers and of structures and installations]

2.3. Harbour Master

[provisions on powers of the Harbour Master]

3. Arrival and departure of vessels

[provisions on advance notice of arrival, declarations, clearance for departure]

4. Navigation of vessels

4.1. Traffic regulations

[provisions on speed of vessels, entering the port area, movements within the port area, movements in navigable channels, communication with Harbour Master]

4.2. Pilotage and towage

[provisions on (compulsory) use of pilot, (compulsory) use of tugs]

¹²⁵ Economic and Social Commission for Asia and the Pacific, Guidelines for Port-Related Legislation, Bangkok, United Nations, 1991, 61. See *supra*, para 9-11 and 13.

¹²⁶ See, for example, the Port of Oxelösund Port Regulations, <http://www.oxhamn.se/documents/oxhamn/documents/port-regulations-2011.pdf>, §§ 12-13.

¹²⁷ See, for example, the Port Klang Authority By-Laws, Art. 47.

4.3. Berthing and anchoring

[provisions on mooring, assignment of berths, emergency removal of vessels]

4.4. Obstruction of navigation

[provisions on shipwrecks and other objects obstructing or endangering navigation, reporting of wrecks, removal of wrecks, reimbursement of costs]

5. Loading, unloading, handling and storage of cargo

[provisions on organisation of port work, cargo inspection, supervision, lighting, personal protective equipment, proper use of equipment for loading and unloading, use of the quay and the sheds, different kinds of cargo, dangerous goods, prohibited cargo]

6. Specific safety rules

6.1. Safe operation and accommodation of vessels

[provisions on use of propellers, minimum manning level]

6.2. Embarkation and disembarkation of passengers or crew

[provisions on safety of gangways]

6.3. Road traffic in the port area

6.4. Bunkering

[provisions on licensing, operational prescriptions, storage and bunkering of LNG]

6.5. Ship repair and ship breaking

6.6. Fire and hot work

[provisions on smoking, lighting fire, use of inflammable material, fire prevention measures, fire emergency procedures, hot work]

6.7. Recreational activities

7. Health and hygiene measures

[provisions on infectious diseases, goods dangerous to public health, deratting]

8. Port security

[provisions on security declarations, compliance with ISPS]

9. Environmental protection

9.1. Pollution of port waters

[provisions on discharges, precautionary measures, action to be taken in the event of a spill]

9.2. Pollution of the air

[provisions on air emissions, precautionary measures]

9.3. Disposal of waste

[provisions on disposal of garbage and waste from ships]

10. Responsibilities and liabilities

[provisions on responsibility of the master and the owner of a vessel, responsibility of the port authority]

11. Enforcement

11.1. Boarding of ships by officials

11.2. Administrative measures

11.3. Administrative sanctions

11.4. Penal sanctions

12. Terms and conditions of ancillary services

[provisions on use of services, liability]

13. Charges and dues

[provisions on tariffs, payment of charges and dues, remedies in case of non-payment]

5. Links to interesting existing port regulations

5.1. Examples of port regulations in English

Act on Port Regulations, Japan

http://dinrac.nowpap.org/documents/law/Japan/Act_on_Port_Regulations_Japan.pdf

Bremen Port Ordinance

<http://www.hbh.bremen.de/sixcms/media.php/13/Port-Bye-Laws--Port-Regulations.pdf>

Cayman Islands Port Regulations

<http://faolex.fao.org/docs/pdf/cay94748.pdf>

Decree concerning Rules and Regulation in Yemeni ports

<http://www.portofhodeidah.com/MJLH/endoc.pdf>

Maritime and Port Authority of Singapore Port Regulations

<http://statutes.agc.gov.sg/aol/search/display/view.w3p;query=DocId%3A48cc6b85-9f3e-4413-81fe-c5090bd73562%20Depth%3A0%20ValidTime%3A01%2F06%2F2012%20TransactionTime%3A02%2F05%2F2012%20Status%3Ainforce;rec=0>

Namibian Ports Authority Act, 1994: Port regulations

<http://www.saflii.org/na/other/NAGovGaz/2001/83.pdf>

Port of Long Beach Tariff No. 4

<http://www.polb.com/civica/filebank/blobdload.asp?BlobID=6866>

Port of Melbourne Corporation Operations Handbook

<http://www.portofmelbourne.com/~media/Global/Docs/Operations-Handbook.ashx>

Regulations and Charges Tariff of Thessaloniki Port Authority SA

<http://www.thpa.gr/files/financial/timologio17122012en.pdf>

Rotterdam Port Management Bye-Laws

<http://www.portofrotterdam.com/en/shipping/rules-regulations/documents/port-management-bye-laws.pdf>

Port Rules of South-Africa

<http://www.transnetnationalportsauthority.net/DoingBusinesswithUs/NationalPortAct/Documents/Port%20Rules%20GG31986%20060309.pdf>

5.2. Examples of port regulations in French

Décret n° 2009-877 du 17 juillet 2009 portant règlement général de police dans les ports maritimes de commerce et de pêche

[http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020870586&dateTexte=&cat](http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020870586&dateTexte=&categorieLien=id)
[egorieLien=id](http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020870586&dateTexte=&categorieLien=id)

Règlement d'exploitation du port de Casablanca (projet)

http://www.anp.org.ma/Publications/Documents/Lois_et_reglementation/Reglementations_portuaires/REGLEMENT_EXPLOITATION_CASABLANCA.pdf

Règlement d'exploitation Saint-Malo

http://ports.region-bretagne.fr/saint-malo/documents/exploitation_Malo.pdf

Règlement particulier de police pour le port de Cherbourg

http://www.manche.gouv.fr/content/download/9535/52529/file/CIRCULATION_Reglement-particulier-police-port-civil_96_PREFET.pdf

Règlement général du Port Autonome International de Djibouti, <http://www.presidence.dj/jo/2007/decr0157pr07.php> and <http://faolex.fao.org/docs/texts/dji75114.doc>.

5.3. Examples of port regulations in Spanish

Autoridad Maritima Portuaria Republica de El Salvador, Reglamento de Operaciones Portuarias,
http://www.amp.gob.sv/images/stories/reglamentos_subsector/REGLAMENTO_DE_OPERACIONES_PORTUARIAS.pdf

Reglamento de Operaciones Portuarias de la Autoridad Portuaria de Manta,
http://www.dirnea.org/data/leyes_y_reglamentos/Reglamentos%20de%20Puertos/REGLAMENTO%20DE%20OPERACIONES%20PORTUARIAS%20DE%20LA%20AUTORIDAD%20PORTUARIA.pdf

6. BALLAST WATER MANAGEMENT

Introduction

Much of the recent discussion on environmental degradation and threats to global ecosystems has centered on the external, “big picture”, issues of climate change, pollution and genetic modification of foods. On the more “micro” level, one threat that has not been given much exposure until recent years is the serious damage which introduced, invasive species can cause to environments and ecosystems into which they are introduced.¹

While alien invasive species can be introduced into new areas by a number of means, both intentional and unintentional, one of the main vectors is through the release of ballast water from the holds of ships. This ballast water contains the alien species which have been transported from their native environments to new environments.² On most voyages, these organisms survive until a ship reaches its destination and are discharged through the ship's ballast water. This has resulted in serious damage to the environments into which the organisms are introduced through environmental degradation which can quite often cause economic disaster for the region as well as human health problems.³ Some of the most injurious alien invasive species in the world today have been introduced in the ballast water of ships. It is estimated that 3,000 species are transferred to new environments in the ballast water of ships per day.⁴ Due to improvements in the technology of modern day shipping, more organisms survive the shorter journeys of newer vessels.⁵

The spread of invasive species has been recognized by the IMO as one of the greatest threats to the world's oceans and a major problem for the ecological and economic well-being of the planet⁶ and it has sought to control and manage the problem through voluntary Guidelines and a multilateral convention. Management and control of the problem posed by the introduction of alien species through ballast water has been the subject of much action particularly over the last 20-30 years not only by the IMO but also other organs of the United Nations. Although the

¹ Meinhard Doelle, “The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America,” (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 261.

² Sarah McGee, “Proposals for Ballast Water Regulation: Biosecurity in an Insecure World,” (2002) 13 *Colorado Journal of International Environmental Law and Policy*, 141, 142.

³ Meinhard Doelle, “The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America,” (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 262.

⁴ Briony MacPhee, “Hitchhikers’ guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species” (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 34.

⁵ Ibid; R.J. Williams et al, “Cargo Vessel Ballast Water as a Vector for the Transport of Non-indigenous Marine Species,” (1988) 26 *Estuarine, Coastal and Shelf Science*, 409, 418.

⁶ GloBallast Partnerships, “The Issue,” < www.globaalast.imo.org/index.asp?page=problem.htm&menu=true>; David Ciesla, “Developments in Vessel-Based Pollution: The International Maritime Organization's Ballast Water Convention and the European Union's Regulation to Phase out Single-Hull Oil Tankers,” (2004) 15 *Colorado Journal of International Environmental Law and Policy*, 107, 108.

issue of alien invasive species is addressed in many legal documents, none deals comprehensively with the prevention, control, and eradication of the threat posed by them.⁷

This chapter will examine and analyze the ways in which the IMO and other bodies of the United Nations have tried to prevent, control and manage the problems posed by the transportation of alien species through ballast water of ships. It will first look at existing legal documents and guidelines that have been established to address the issue of alien invasive species as a whole and will analyze and comment on the effectiveness of these instruments and conventions in eradicating or controlling the problem of invasive alien species. The chapter will then look more particularly at invasive aquatic alien species and the methods adopted to deal with them. In so doing the chapter will particularly examine and analyze the ways in which the International Maritime Organization has sought to deal with the problem, namely, through voluntary Guidelines and by way of a multilateral convention, the *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004*. Finally, the chapter will discuss the benefits and disadvantages of the new Convention and what else can be done to deal with the problem.

The problem of ballast water

Over the past millennia, aquatic species have travelled across the oceans by natural means and temperature and salinity regimes and landmasses have prevented many species from dispersing into certain areas. This has changed through the introduction of alien species directly through such vectors as ships' ballast water.⁸

When all factors are favourable, a species introduced to a new environment may survive to reproduce in the host environment.⁹ Once an invading species has established a viable population in a new environment, it is almost always impossible to remove and there are no recorded cases of successful control and eradication of aquatic invasive species that have established in open waters.¹⁰ In many cases, the alien species thrive because their natural conditions and natural predators are not present to control the population or inhibit its growth. They may even out-compete native species and multiply into pest proportions. As a result, whole ecosystems are being changed.¹¹

⁷ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 35-36; Meinhard Doelle, "The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America," (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 264-271.

⁸ GloBallast Partnerships, "The Issue," < www.globaallast.imo.org/index.asp?page=problem.htm&menu=true >

⁹ Ibid.

¹⁰ Michael Tsimplis, "Alien Species Stay Home: The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004," (2005) 19/4 *The International Journal of Marine and Coastal Law*, 411, 412.

¹¹ International Maritime Organisation, "Ballast Water Management" <www.imo.org/OurWork/Environment/BallastWaterManagement/pages/default.aspx>

Modern shipping cannot operate without ballast water which provides balance and stability to un-laden ships.¹² Over recent decades the increase in size of ships has also resulted in an increase in the amount of ballast water carried in these ships. It is estimated that in some ships the amount of ballast water in a ship could amount to between 25% and 50% of the deadweight tonnage of the ship. The IMO has recognised that each vessel contains anywhere from "several hundred litres to more than 100,000 tons, depending on the size and purpose of the vessel".¹³ Shipping vessels transport approximately ten billion tons of ballast water globally per year. Since it is estimated that 3,000 species are transferred to new environments in the ballast water of ships per day, the magnitude of the ballast water problem is evident.¹⁴ It is clear from recent data that the rate of bio-invasions is increasing, in some cases exponentially, and new areas are being found to be invaded all the time.¹⁵ As volumes of seaborne trade continue overall to increase, the problem may not yet have reached its peak.¹⁶

The regulatory response – Alien invasive species generally

Currently there is no international convention or other binding legal document that successfully and comprehensively addresses the issue of alien invasive species as a whole, although the issue is mentioned and referred to in a number of documents and conventions.

The Convention on Biological Diversity

Of the dozen or so documents and conventions that refer to the threat posed by the introduction of alien species generally, the most important is the *Convention on Biological Diversity (CBD)*.¹⁷ Article 8 of the *CBD* requires that "each contracting party shall, as far as possible and appropriate," maintain the biodiversity of species within their natural habitat (in situ conservation). Article 8(h) specifically calls upon the parties to "prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species."

Despite the fact that the *CBD* is binding on its signatories, it does not provide any mechanism for compliance with or enforcement of Article 8 and only requires the parties to do act "as far as possible and appropriate". This gives no guidance as to what is required to address the threat let alone control or eradicate it.

¹² Michael Tsimplis, "Alien Species Stay Home: The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004," (2005) 19/4 *The International Journal of Marine and Coastal Law*, 411, 411.

¹³ International Maritime Organisation, Ballast Water Management, Focus Paper- Alien Invaders- Putting a Stop to the Ballast Water Hitchhikers, <www.imo.org/home.asp>.

¹⁴ Ibid; Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 34.

¹⁵ International Maritime Organisation, "Ballast Water Management" <www.imo.org/OurWork/Environment/BallastWaterManagement/pages/default.aspx>

International Maritime Organisation, "International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)" <[www.imo.org/about/conventions/listofconventions/pages/international-convention-for-the-control-and-management-of-ships'-ballast-water-and-sediments-\(bmw\).aspx](http://www.imo.org/about/conventions/listofconventions/pages/international-convention-for-the-control-and-management-of-ships'-ballast-water-and-sediments-(bmw).aspx)>

¹⁷ *Convention on Biological Diversity*, opened for signature 5 June 1992, in force 29 December 1993, (1992) 33 *International Legal Materials*, 822

United Nations Convention on the Law of the Sea

The *United Nations Convention on the Law of the Sea* (LOS) ¹⁸ specifically refers to the prevention of alien invasive species in Article 196 (1) which provides:

States shall take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from ... the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto.

Similar to the Article 8(h) of the *CBD*, this Article requires all States to “take all means necessary” but as with the *CBD* does not indicate how this is to be done. Also, when compared with the *CBD* the obligations under *LOS* are less to the extent that States are not required to eliminate the alien or new species but only to prevent, reduce and control their introduction.

Although *LOS* does provide for a commitment to prevent the introduction of alien invasive species, it is nonetheless appears to be limited in its scope and application since it makes no provision for the obligation under Article 196(1) to be enforced.

SBSTTA Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species That Threaten Ecosystems, Habitats or Species

In recognition of the limitations of Article 8(h) of the *CBD*, the Committee of Parties (COP) to the *CBD* requested the Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA) to create guiding principles in order to implement the provisions of Article 8(h) effectively. In January 2000, the COP agreed to *Interim Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species That Threaten Ecosystems, Habitats or Species*.¹⁹ In March 2001, the SBSTTA discussed the Interim Guidelines and submitted them to the next meeting of the COP in 2002.²⁰ The guiding principles set out principles for controlling, eradicating, and preventing the spread of alien species, and a process for the conduct of case studies on alien species.²¹

The SBSTTA created these guiding principles in an effort to provide the international community with a set of comprehensive and pragmatic guidelines to follow with respect to the issue of alien invasive species. Overall, these principles provide a blueprint for State action, focusing on

¹⁸ *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, entered into force 16 November 1994, 1833 UNTS 3.

¹⁹ *Convention on Biological Diversity*, 5th Conference of Parties, Decision V/8, *Interim Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species That Threaten Ecosystems, Habitats or Species*, <www.cbd.int/decisions/?id=7150>; Meinhard Doelle, “The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America,” (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 266.

²⁰ The Guidelines were endorsed in April 2002 by Decision VI/23 of the 6th Conference of the Parties <www.cbd.int/decisions/?id=7197>.

²¹ Meinhard Doelle, “The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America,” (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 266

defining the parameters of the problem, preventing its further expansion by either intentional or unintentional introductions, and mitigating its impacts.²²

IUCN Guidelines for the Prevention of Biodiversity Loss Caused by Alien Invasive Species, 2000

In February 2000, the International Union for Conservation of Nature (IUCN) approved the *Guidelines for the Prevention of Biodiversity Loss Caused by Alien Invasive Species*²³ (*IUCN Guidelines*)

As with the SBSTTA guiding principles, the *IUCN Guidelines* are designed to assist States to give effect to Article 8(h) of the *CBD*. They address issues of improving awareness of the problem as well as providing legal and institutional mechanisms that can be used in support of Article 8(h).²⁴ In doing so they go into more detail than the SBSTTA guiding principles and provide practical guidance and suggestions on how the objectives of the *IUCN Guidelines* can be implemented.²⁵ However, as with the SBSTTA guiding principles they are non-binding and to this extent of limited benefit.

Therefore, it can be said that the current international legal mechanisms for dealing with the issue of alien invasive species in general are inadequate. The international conventions are limited in their application and provide no clear guidance as to how compliance with the obligations imposed on the signatory States is to be achieved. Although the SBSTTA guiding principles and the *IUCN Guidelines* are of value in that they supplement the conventions to a degree and provide some form of conduct to which States can aspire, they are not binding and to that extent are inefficient and ineffective.

The regulatory response – Ballast water & Sediments

As discussed above, ballast water is one of the major vectors in the spread of alien invasive species. As such, prevention and control of damage caused by alien invasive species in ballast water is a subset of the overall problem with all its attendant limitations. Some States have addressed the problem by way of domestic legislation but have clearly indicated that the preferable approach would be by way of international regulation.²⁶

²² Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 37

²³ *Guidelines for the Prevention of Biodiversity Loss Caused by Alien Invasive Species*, approved at 51st Meeting of the IUCN Council, Gland, Switzerland, February 2000 <<http://www.iucn.org/dbtw-wpd/edocs/Rep-2000-052.pdf>>

²⁴ Ibid – Section 2 - Goals and Objectives.

²⁵ Meinhard Doelle, "The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America," (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 269.

²⁶ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 40-41; see also Preamble to IMO Resolution A.774(18) dated 4 November 1993 and Resolution A.868(20) dated 27 November 1997

In an effort to fill in the gap between compliance with inadequate international conventions and their implementation on the ground, some states, such as the United States, Canada, Australia and New Zealand have been particularly proactive in passing domestic legislation.

While the passing of domestic legislation by individual countries can be useful in addressing the ballast water problem particularly by establishing management and enforcement regimes, the IMO has warned that domestic legislation is not the answer to what is an international, trans-boundary problem and has the potential to create problems and difficulties for international shipping both in applying different regulatory requirements and the cost implementation of legislation.²⁷ This could ultimately render the international process ineffective, be detrimental to the achievement of an international solution and so it is vital that the solution to the problem and the implementation of the solution through domestic laws be uniform and consistent.²⁸

Even though they had developed and implemented their own domestic legislation countries like the United States and Australia as well as other countries such as Canada and New Zealand which had experienced serious aquatic infestations from ballast water in the 1980s and 1990s pressed the IMO to develop an international response to the problem. In response, the Marine Environment Protection Committee (MEPC) of the IMO developed and adopted voluntary, non-binding *Guidelines for Preventing the Introduction of Unwanted Aquatic Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges* in 1991. These Guidelines were adopted in 1991 by MEPC and by the IMO on 4 November 1993²⁹ (1993 Guidelines).

In 1992, the United Nations Conference on Environment and Development (UNCED) promulgated Agenda 21.³⁰ This is a non binding, voluntary set of measures to promote sustainable development, including protection of the oceans, seas and coastal areas. Chapter 17.30(a) (vi) of Agenda 21 specifically called upon the IMO and other international bodies to consider "the adoption of appropriate rules on ballast water discharge to prevent the spread of non-indigenous organisms". In response to Agenda 21, in 1997, the IMO adopted *Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful*

²⁷ Michael Julian, Chairman of MEPC has stated:

"It is of great concern to both IMO and the global shipping industry that in the absence of an agreed single, uniform, international convention, some individual jurisdictions at the national, provincial and local level are proceeding with implementing their own regulatory regimes ... a piece-meal, disjointed approach is counter-productive when dealing with a trans-boundary, global industry such as shipping."

quoted in Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 45; World Wildlife Fund (WWF), *Silent Invasion : The spread of marine invasive species via ships' ballast water*, 6 <http://awsassets.panda.org/downloads/silent_invasion_briefing.pdf> .

²⁸ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 45.

²⁹ International Maritime Organisation, Assembly, 18th Session, Resolution A.774(18) *Guidelines for Preventing the Introduction of Unwanted Aquatic Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges*, adopted on 4 November, 1993.

³⁰ <www.unep.org/documents/default.asp?documentid=52>

*Aquatic Organisms and Pathogens*³¹ (1997 Guidelines), which replaced the earlier 1993 Guidelines. They were designed to be used as a risk management tool and not as a solution to the problem.³² Several management strategies were suggested in Part 9:

- minimizing uptake of organisms into ballast water tanks by avoiding ballast water uptake in areas where propellers can stir up sediment, and avoiding uptake at night when many organisms migrate vertically to feed;
- removing ballast sediment through the routine cleaning of ballast water tanks and removal of sediment in mid-ocean or at specific facilities provided in port;
- avoiding unnecessary discharge of ballast water;
- performing ballast water exchange in order to reduce the risk of organisms carried in the water finding a suitable environment on discharge;
- treating ballast water by various methods including mechanical treatment (e.g. filter or cyclonic separation), physical treatment (e.g. ultraviolet, ultrasound or heat treatment), chemical treatment (e.g. the use of disinfectants or biocides), biological treatment, or a combination of these;
- discharge to reception facilities.

Although it is not perfect, the most widely used method is ballast water exchange.³³ This method is adopted by many countries either under the 1997 Guidelines or through their own Guidelines. In the case of ballast water exchange, the 1997 Guidelines recommend in paragraph 9.2.1 that that where practicable, ships should conduct ballast water exchange in deep water in the open ocean and as far as possible from the shore or, if applying the flow through method, by pumping through at least three times the volume of the tank.

Under the 1997 Guidelines, each ship is required to have a ballast water management plan which specifies the method of ballast water management used and such plans are to be included in the ship's operational documentation and subject to port state inspection.³⁴ Port States requirements are to be made available which specify the requirements concerning ballast water management, the location and use of alternative exchange zones and any other port contingency arrangements.³⁵

³¹ International Maritime Organisation, Assembly, 20th Session, Resolution A.868(20) *Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens*, adopted 27 November 1997 (1997 Guidelines)

³² Ibid. paragraph 1.3; Meinhard Doelle, "The Quiet Invasion: Legal and Policy Responses to Aquatic Invasive Species in North America," (2003) 18/2 *The Journal of Marine and Coastal Law*, 261, 267.

³³ GloBallast Partnerships, "The Issue," < www.globaallast.imo.org/index.asp?page=problem.htm&menu=true>; Eugene H Buck, *Ballast Water Management to Combat Invasive Species*, Congressional Research Service, 7-5700, RL32344, April 10, 2012 <www.crs.gov>.

³⁴ 1997 Guidelines, paragraph 7.1

³⁵ 1997 Guidelines, paragraph 7.2

However, none of these documents is binding, and, hence, due to their voluntary nature, countries did not have to comply with their provisions. Consequently, in 2002, at the World Summit on Sustainable Development (WSSD), the commitment to Agenda 21 was reaffirmed, and the IMO was called upon to finish a freestanding and binding ballast water convention.³⁶

International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004.

At the International Conference on Ballast Water Management for Ships, in February 2004, the *International Convention for the Control and Management of Ship's Ballast Water and Sediments*³⁷ (the *Ballast Water Convention*) was finalized and adopted.

The *Ballast Water Convention* is divided into 22 Articles and an Annex which includes the technical standards and requirements. The main work is done by the Annexes. The basic structure of the *Ballast Water Convention* is, first, the creation of a process for the Contracting Parties to adhere to and follow which includes a Ballast Water Sediments Management Plan and a Ballast Water Management Standard. Contracting Parties must then demonstrate their compliance with the regimen by producing and maintaining a Ballast Water Record Book and a Ballast Water Management Certificate. The Annex describes requirements and regulations under the Ballast Water Management and Standard. The Appendices to the Annex contain an example of the Certificate and the Ballast Water Management Book.³⁸

Preamble

The Preamble details the past history of the ballast water problem and resolves by means of the Convention to: prevent, minimize and ultimately eliminate the risks to the environment, human health, property and resources arising from the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships. Ballast Water and Sediments, as well as to avoid unwanted side-effects from that control and to encourage developments in related knowledge and technology.

³⁶ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 46.

³⁷ *International Convention for the Control and Management of Ship's Ballast Water and Sediments*, opened for signature 1 June 2004, not yet in force, BMM/Conf/36 dated 16 February 2004 (*Ballast Water Convention*).

³⁸ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 47.

Definitions (Article 1)

The Convention applies to 'ships' which include "any vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating craft, floating platforms, FSUs [Floating Storage Units] and FPSOs [Floating Production Storage and Offloading Units]."

Ballast water is defined as "water with its suspended matter taken on board a ship to control trim, list draft, stability or stresses of the ship" so it includes not just the water but also any suspended matter in the water, which presumably includes living organisms.

Management of ballast water, which parties under the Convention are obliged to undertake, is defined as "mechanical, physical, chemical, and biological processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of Harmful Aquatic Organisms and Pathogens within Ballast Water and Sediments."

Finally, the term 'alien invasive species' is not used in the *Ballast Water Convention* but rather the, arguably, more limited term 'harmful aquatic organisms and pathogens' which is defined as "aquatic organisms or pathogens which, if introduced into the sea including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas."

General Obligations (Article 2)

The obligations of the Parties are set out in Article 2. Under this Article, Parties are to fully apply the provisions of the Convention and the Annexes in order to achieve the overall objective of the Convention. In doing so, Parties are encouraged to develop alternate management standards and can apply more stringent measures but must apply the measures provided for under the Convention as a minimum.³⁹ As far as possible, such measures should not impair or damage the environment, human health, property or resources of other States or sensitive, vulnerable or threatened marine ecosystems beyond national boundaries.⁴⁰

Application (Article 3)

The *Ballast Water Convention* applies to all ships entitled to fly the flag of a Party or under the authority of a Party but not to ships not designed or constructed to carry ballast water or designed such that no ballast water can be discharged;⁴¹ where the ships operate only in national waters of the Party or another Party with the authority of that other Party provided that

³⁹ Michael Tsimplis, "Alien Species Stay Home: The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004," (2005) 19/4 *The International Journal of Marine and Coastal Law*, 411, 417.

⁴⁰ *Ballast Water Convention*, Article 2(7)

⁴¹ *Ballast Water Convention*, Articles 3(2) (a), 3(2) (f).

such ships would not “impair or damage their environment, human health, property or resources, or those of adjacent or other States”;⁴² warships or other ships on non-commercial government service.⁴³

Reception facilities (Article 5)

Under Article 5, Parties undertake to ensure that ports and terminals where cleaning or repair of ballast tanks occurs have adequate reception facilities for the reception of sediments.

Survey, certification, inspection and enforcement (Articles 4, 7, 8, 9, 10, 11)

Flag States must ensure that its ships are regularly surveyed and certified and that they otherwise comply with the requirements of the *Ballast Water Convention* including the requirements and standards set out in the Annexes.⁴⁴ The Flag State must also take measures to enforce the requirements, including taking action against offenders and imposing penalties that are of sufficient severity to discourage future violations.⁴⁵ Where the violation is reported to the Flag State by another Party or by the IMO the result of such enforcement proceedings must be reported back to them.⁴⁶

Port State control officers can inspect any ship to verify that the ship has a valid certificate, can inspect the Ballast Water Record Book and can take a sample of the ballast water.⁴⁷ Where there is no certificate or the officer has clear grounds for believing that the ship does not comply with the certificate, that the master and crew are either unfamiliar with the procedures or have not implemented the procedures, a detailed inspection may be carried out⁴⁸ and the ship shall not discharge ballast water until it can do so without presenting a threat of harm to the environment, human health, property or resources.⁴⁹ If after inspection a violation is found, the ship may be given a warning or be either detained in port or excluded from entry and prohibited from discharging ballast;⁵⁰ the Flag State is to be informed and evidence provided to assist in enforcement proceedings⁵¹ and, if the ship has been permitted to proceed to its next port of call, that port is to be notified of the violation.⁵²

⁴² *Ballast Water Convention*, Articles 3(2) (b), 3(2) (c), 3(2) (d).

⁴³ *Ballast Water Convention*, Article 3(2) (e).

⁴⁴ *Ballast Water Convention*, Article 7(1)

⁴⁵ *Ballast Water Convention*, Article 8

⁴⁶ *Ballast Water Convention*, Article 11(2)

⁴⁷ *Ballast Water Convention*, Article 9(1)

⁴⁸ *Ballast Water Convention*, Article 9(2)

⁴⁹ *Ballast Water Convention*, Article 9(3)

⁵⁰ *Ballast Water Convention*, Article 10(2)

⁵¹ *Ballast Water Convention*, Article 11(1)

⁵² *Ballast Water Convention*, Article 10(2)

Undue Delay and Damages (Article 12)

In taking any action under Articles 7, 8, 9 or 10, all steps must be taken to avoid any undue delay. If such delay takes place, the ship can claim damages.

Research and monitoring (Article 6)

Parties are to promote and facilitate, individually or jointly, scientific and technical research on ballast water management and to monitor the effects of ballast water management in waters under their jurisdiction.

Technical assistance, Cooperation and Communication (Articles 13, 14)

Parties undertake to provide support for those Parties which request technical assistance to train personnel, to ensure the availability of relevant technology, equipment and facilities, to initiate joint research and development programmes,⁵³ and to undertake other action aimed at the effective implementation of this *Ballast Water Convention*.⁵⁴ Agreements between Parties in a particular region to promote common interests are also encouraged.⁵⁵

Parties are to report to the IMO and other parties, where appropriate, information concerning the ways in which the Party has been implemented the *Ballast Water Convention*, the availability of reception facilities and any requirements for ships that have been unable to comply with ballast water management for reasons permitted by the Convention.⁵⁶ Such notification to the IMO is to be distributed to all parties by the IMO.⁵⁷

Annex - Regulations for the Control and Management of Ships' Ballast Water and Sediments

The Annex to the *Ballast Water Convention* consists of 5 Sections and includes technical standards and requirements.

Section A - General Provisions

This includes definitions, application and exemptions. Under Regulation A-2 General Applicability: "Except where expressly provided otherwise, the discharge of Ballast Water shall only be conducted through Ballast Water Management, in accordance with the provisions of this Annex."

⁵³ *Ballast Water Convention*, Article 13(1)

⁵⁴ *Ballast Water Convention*, Article 13(2)

⁵⁵ *Ballast Water Convention*, Article 13(3)

⁵⁶ *Ballast Water Convention*, Article 14(1)

⁵⁷ *Ballast Water Convention*, Article 14(2)

Exceptions from the ballast water quality requirements are made in five situations – where discharge or ingress of ballast water is needed to save life at sea; where discharge or ingress is accidental or where it caused by damage to the ship where the owner, company or master were not willful or reckless and all reasonable precautions to minimise the discharge were taken before and after the accident; where the discharge or ingress of ballast water is needed to prevent or minimise pollution; where the uptake and discharge occur on the high seas; where the uptake and discharge occur at the same place without further uptake.⁵⁸

Parties can also exempt certain ships from the ballast water quality requirements for five years where the ships sail between specified ports and only exchange ballast water at those ports. This would include ferries and other ships on particular voyages between the same ports. However these exemptions cannot be made where such exemption would cause damage to the environment, human health, property or resources of another State.⁵⁹

Section B - Management and Control Requirements for Ships

All ships must have on board at all times a Ballast Water Management Plan approved by the Administration and must implement it.⁶⁰ The Plan is specific to each ship and includes a detailed description of the actions to be taken to implement the Ballast Water Management requirements and supplemental Ballast Water Management practices.⁶¹

All ships must also have on board a Ballast Water Record Book to record when ballast water is taken on board, when it is circulated or treated for ballast water management purposes, when it is discharged into the sea, when it is discharged to a reception facility and any accidental or other exceptional discharges of ballast water.⁶² All operations must be recorded without delay. The Book must be on board at all times and available for inspection by Port State control officers when in port or at an offshore terminal.⁶³

The specific timetable by which the requirements for ballast water management must be implemented according to tonnage and date of construction is set out in regulation B-3. The performance standards required under the *Ballast Water Convention* are set out in Regulations D-1 for ballast water exchange and D-2 for other ballast water methods. The effect of the timetable is that by 2016, all ships had to be compliant with the standards in D-2. This effectively

⁵⁸ *Ballast Water Convention*, Annex A, Regulation A-3; Michael Tsimplis, "Alien Species Stay Home: The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004," (2005) 19/4 The International Journal of Marine and Coastal Law, 411, 418-419; Stephan Gollasch and Matej David, "A unique aspect of ballast water management requirements – The same location concept," (2012) 64 Marine Pollution Bulletin, 1774.

⁵⁹ *Ballast Water Convention*, Annex A, Regulation A-4

⁶⁰ *Ballast Water Convention*, Annex B, Regulation B-1

⁶¹ *Ballast Water Convention*, Annex B, Regulation B-1

⁶² *Ballast Water Convention*, Annex B, Regulation B-2

⁶³ *Ballast Water Convention*, Annex B, Regulation B-2

means that ballast water exchange is no longer an acceptable performance standard under the *Ballast Water Convention*.

Under Regulation B-4 all ships using ballast water exchange had to exchange ballast water at least 200 nautical miles from the nearest land and in water at least 200 metres deep. Where this was not possible the ship needed to exchange ballast water as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land and in water at least 200 metres deep.

Section C - Additional measures

In addition to the requirements under the *Ballast Water Convention*, a Party may impose on ships additional measures to prevent, reduce, or eliminate the transfer of Harmful Aquatic Organisms and Pathogens through ships' Ballast Water and Sediments. These additional measures can be imposed individually or jointly with other Parties and, if necessary should obtain the approval of the IMO.

Section D Standards for Ballast Water Management

Theoretically, since 2016, there has been only one standard for ballast water management – a ballast water performance standard and the ballast water exchange standard is no longer an acceptable standard for ballast water management. Although the Convention came into force on 8 September 2017, it was clear before this that implementation of the Convention would take much longer. Accordingly, in July 2017, The Maritime Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) decided to extend the time for compliance with the Ballast Water Management (BWM) Convention. As a result, only vessels built after its entry into force on September 8, 2017 will immediately be subject to the new ballast water performance standard. Other vessels will be exempt until their first International Oil Pollution Prevention (IOPP) renewal survey after September 8, 2019. Such surveys typically take place every five years. Thus, some vessels will have until 2024 to comply. While not explicitly stated, where ships are permitted to extend the time for compliance it follows logically that these ships would be permitted to use the ballast water exchange standard until compliance is achieved..

Subject to the timetable in Regulation B-3, where ballast water exchange is still permitted, it must be used to meet the performance standard in accordance with Regulation D-1. In doing so, ballast water exchange has to be done with an efficiency of 95 per cent volumetric exchange of ballast water. This could be achieved by two methods – the contemporaneous discharge and uptake of ballast water or the pumping through method. For ships exchanging ballast water by the pumping-through method, pumping through three times the volume of each ballast water tank was considered to meet the standard described.

Regulation D-2 sets out the ballast water performance standard. At the end of the gradual implementation period until 2024, this will be the sole method of ballast water management permitted under the *Ballast Water Convention* and all ships must either be built with an alternative method of managing ballast water or be adapted to do so. The Regulation sets out in detail the level of discharge of viable organisms by volume by ships conducting ballast water exchange. A number of treatment systems have already been developed and will continue to be developed to meet the standard set out in Regulation D-2.

Under Regulation D-3, any ballast water management system other than ballast water exchange designed to meet the standard set out in Regulation D-2 can be used provided it have been approved by the IMO.

Regulation D-4 allows for ships participating in a programme approved by the IMO to test and evaluate promising ballast water treatment technologies prior to the implementation of Regulation D-2 in 2016. These ships shall be permitted a leeway of five years before having to comply with the requirements.

Section E - Survey and Certification Requirements for Ballast Water Management

This section contains the requirements for surveys and certification for ballast water management. These include initial, renewal, intermediate, annual, and additional surveys and certification requirements. Appendices provide the forms for the Ballast Water Management Certificate and the Ballast Water Record Book.

Treatment Systems

Although ballast water exchange is still seen as the most efficient and the safe manner in which to discharge a ship's ballast, it is not 100 percent effective⁶⁴ and is now no longer available as an approved management method. As a result, many countries have been studying alternatives to ballast water exchange. These new methods include heat treatment, hydrocyclones, biodegradable chemicals, and electrochemical control.⁶⁵

As at October 2012, 28 ballast water management systems that make use of Active Substances have received final approval from IMO. A number of others have received either basic approval

⁶⁴ GloBallast Partnerships, "The Issue," < www.globaallast.imo.org/index.asp?page=problem.htm&menu=true>; Eugene H Buck, *Ballast Water Management to Combat Invasive Species*, Congressional Research Service, 7-5700, RL32344, April 10, 2012 <www.crs.gov>.

⁶⁵ World Wildlife Fund (WWF), *Silent Invasion: The spread of marine invasive species via ships' ballast water*, 8 <http://awsassets.panda.org/downloads/silent_invasion_briefing.pdf>; Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 43-4.

by the IMO or approval by individual administrations.⁶⁶ These include a system whereby heated water is routed to the ballast tanks to kill the organisms in the ballast water;⁶⁷ treatment by centrifugal separators, backed by UV treatment;⁶⁸ the use of biodegradable chemicals,⁶⁹ and a process of using electric power to kill any micro-organisms present.⁷⁰

While these are all innovative technologies, there are still concerns about the application of these various processes and their economic costs.⁷¹

Globallast Programme/Partnerships

In 2000, the IMO together with the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) set up the Global Ballast Water Management Programme (GloBallast). The aims of the programme are to assist developing countries to reduce the transfer of harmful aquatic organisms in ships' ballast water and to implement the *1997 Guidelines* and the *Ballast Water Convention*.⁷² After its completion in 2007, the second phase of the Programme, *Building Partnerships to Assist Developing Countries to Reduce the Transfer of Harmful Aquatic Organisms in Ships' Ballast Water*, known as GloBallast Partnerships (GBP), was introduced with the aims of continuing the progress made in the original project. The main aim of the GBP is on national policy, legal and institutional reforms in specific developing countries. Ultimately, the GBP is designed to prepare developing countries for implementing the *Ballast Water Convention*.⁷³

IMO Technical Guidelines

To further assist in the uniform implementation of the *Ballast Water Convention*, the IMO has issued Technical Guidelines. Currently there are 15 Guidelines that have been issued with two more under preparation. The subjects of the Guidelines are varied and include Guidelines for ballast water exchange, water sampling, water and sediment reception facilities, designation of ballast water exchange areas and risk assessment under Regulation A-4.⁷⁴

The Role of Ports in Ballast Water Management

⁶⁶ See complete list at www.imo.org/OurWork/Environment/BallastWaterManagement/Documents/Table%20updated%20in%20October%202012%20including%20TA%20information.pdf.

⁶⁷ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 43

⁶⁸ Ibid., 44

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ See www.imo.org/OurWork/Environment/BallastWaterManagement/Documents/Table%20updated%20in%20October%202012%20including%20TA%20information.pdf at

⁷² See <http://globallat.imo.org/index.asp?page=gef_intro_project.htm>

⁷³ See <<http://globallat.imo.org/index.asp?page=GBPintro.html&menu=true>>

⁷⁴ Stephan Gollasch et al., "Critical Review of the IMO international convention on the management of ships' ballast water and sediments," (2007) 6 *Harmful Algae*, 585, 587.

Ports can play a role in the management and control of ballast water in at least three ways:

- (1) In enforcement of the *Ballast Water Convention* through port State control;
- (2) Potentially, through the provision of sediment reception facilities;
- (3) Potentially, through the provision of ballast water reception facilities.

Port State Control

Port State control forms one of the main methods of enforcement of international conventions and supplements the roles of the flag State and classification societies.

As outlined earlier, Articles 9, 10 and 11 of the *Ballast Water Convention* give port State control officers powers to inspect ships when they are in any port or offshore facility of that State and enforcement powers with respect to any violations. It is important to note that, generally, port State control is limited to verifying the existence on board and validity of the International Ballast Water Management Certificate; inspecting the Ballast Water record book; and taking samples of the ballast water. Only if there are grounds to doubt the validity of the certificate or the crew are unfamiliar the on-board procedures relating to ballast water management can a more detailed inspection be carried out.

The taking of samples of ballast water must be carried out in accordance with guidelines produced by the IMO. In this regard the IMO adopted *Guidelines for Ballast Water Sampling* (G2) on 10 October, 2008.⁷⁵ The *Guidelines* provide detailed technical requirements and procedures for the taking and analysis of samples to test the compliance with the Ballast Water Exchange Standard in Regulation D-1 and the Ballast Water Performance Standard in Regulation D-2.

Sediment Reception Facilities

Article 5 of the *Ballast Water Convention* provides for port States to provide adequate facilities in its ports and terminals for the reception of sediments from ballast water in ships.

It is important to note that this Article does not require all ports and facilities to have these facilities but only where such ports and facilities are designated by the port State as places where cleaning and repair of ballast tanks occurs.

Where reception facilities are required, they should be provided and operated in accordance with *Guidelines for Sediment Reception Facilities* (G1).⁷⁶ These guidelines provide detailed

⁷⁵ Resolution MEPC 173(58) *Guidelines for Ballast Water Sampling* adopted 10 October 2008 and annexed as Annex 3 to *Report of the Marine Environment Protection Committee on its 58th Session* MEPC 58/23 dated 16 October 2008.

⁷⁶ Resolution MEPC 152(55) *Guidelines for Sediment Reception Facilities* adopted 13 October 2006 and annexed as Annex 4 to *Report of the Marine Environment Protection Committee on its 55th Session* MEPC 55/23 dated 6 November 2006.

requirements for the provision of reception facilities, the treatment and handling of sediments and the capabilities of the reception facility.

Ballast Water Reception Facilities

Under Regulation B-3.6 of the *Ballast Water Convention*, the ballast water management requirements in Regulation B-3 do not apply where ships discharge their ballast water into a reception facility developed in accordance with IMO guidelines. Accordingly these ships do not need to meet the Ballast Water Exchange Standard in Regulation D-1 or the Ballast Water Performance Standard in Regulation D-2.

The IMO adopted the *Guidelines for Ballast Water Reception Facilities (G5)* on 13 October 2006.⁷⁷ The *Guidelines* do not require port States to provide reception facilities for ballast water. Where such facilities are provided, there are general requirements that the facilities are able to receive ballast water without creating a risk for environment, human health, property and resources. Substantial infrastructure is required as well as adequate equipment for mooring ships and the provision of safe anchorage for the ships using the facility. Although ballast water delivered into a reception facility are exempt from the requirements of Regulation D-2, the *Guidelines* recommend that any ballast water disposed of from the reception facilities after treatment should meet the performance standard in Regulation D-2.⁷⁸

The provision of ballast water reception facilities has been considered by a number of countries including the United States, Australia and Norway. In all cases, it was considered that the investment costs and logistics involved, the amount of land required and the fact that most ships exchange large amounts of ballast water before entering a port, combine to make the provision of land based facilities an unattractive option.⁷⁹

While it is open to port States to provide ballast water reception facilities and while the provision of such facilities is and will continue to be a permitted method of managing ballast water, the high costs and limited potential use of such facilities would limit the likely widespread implementation of this option.

Assessment of the Ballast Water Convention

⁷⁷ Resolution MEPC 153(55) *Guidelines for Ballast Water Reception Facilities* adopted 13 October 2006 and annexed as Annex 5 to *Report of the Marine Environment Protection Committee on its 55th Session* MEPC 55/23 dated 6 November 2006.

⁷⁸ *Guidelines for Ballast Water Reception Facilities*, paragraph 5.

⁷⁹ See report by Det Norske Veritas at <http://projects.dnv.com/portenv/ASP/ReductionmethodsInfo.asp?ID=28&Category=Sea>; BIMCO, 'Norwegian Ballast Water Management Regulations' www.bimco.org › BIMCO › News › News articles 2009 › December; Geoff Rigby and Alan Taylor, *Ballast Water Treatment to Minimise the Risks of Introducing Nonindigenous Marine Organisms in to Australian Ports - Review of Current Technologies and Comparative Indicative Costs of Practical Options* (Australian Government, Department of Forestry and Fisheries (DAFF), Canberra) 44.

Benefits

- The overall objective of the *Ballast Water Convention* is the control, management and ultimate elimination of bio-invasions through the vector of ballast water. If fully implemented, the *Ballast Water Convention* will greatly assist in doing so.⁸⁰
- The recognition that ballast water exchange is not a complete answer to the problem provides the *Ballast Water Convention* with the opportunity to require Parties to investigate and develop alternative technologies that could eliminate alien species from the ballast water of ships before the ballast water is discharged.⁸¹ The requirement that the ballast water standard consist of methods other than ballast water exchange by 2016 effectively provides parties with a regulatory driven incentive to develop new technologies and use them on board their ships with the approval of the IMO.
- While the *CBD* deals with conservation of biodiversity and to prevent the introduction of, control or eradicate of those alien species which threaten ecosystems, habitats or species, the *Ballast Water Convention* deals with the introduction of alien species through a single vector, namely ballast water of ships.⁸² The *Ballast Water Convention* is the most comprehensive instrument to date that does so and is one of the most important steps taken to regulate the further introduction and dispersal of aquatic alien invasive species through ballast water.⁸³
- As with any Convention, the most important aspect of the *Ballast Water Convention* is the fact that, unlike Guidelines, it is binding on the Parties. By making the implementation of the *Ballast Water Convention* binding and by providing guidelines and regulations that ships must follow to adhere to its provisions, it assists in bringing about stability, consistency, clarity and uniformity and articulating clear goals.⁸⁴ It also ensures that the approach taken to dealing with the ballast water problem is an international one and not one that relies on disparate domestic legislation.⁸⁵ By dealing with the problem internationally, the *Ballast Water Convention* can ensure that there is not a conflict between the respective requirements of the States and that all Parties are working to develop the same standards.⁸⁶

⁸⁰ World Wildlife Fund (WWF), *Silent Invasion : The spread of marine invasive species via ships' ballast water*, 6 <http://awsassets.panda.org/downloads/silent_invasion_briefing.pdf

⁸¹ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 53.

⁸² Ibid.

⁸³ Ibid., 50

⁸⁴ Briony MacPhee, "Hitchhikers' guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species" (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 51; World Wildlife Fund (WWF), *Silent Invasion : The spread of marine invasive species via ships' ballast water*, 11 <http://awsassets.panda.org/downloads/silent_invasion_briefing.pdf>

⁸⁵ World Wildlife Fund (WWF), *Silent Invasion : The spread of marine invasive species via ships' ballast water*, 7 <http://awsassets.panda.org/downloads/silent_invasion_briefing.pdf

⁸⁶ Sarah McGee, "Proposals for Ballast Water Regulation: Biosecurity in an Insecure World," (2002) 13 *Colorado Journal of International Environmental Law and Policy*, 141, 159.

- Other initiatives of the IMO will also assist the implementation of the *Ballast Water Convention*. The Globallast Programme and the Globallast Partnerships will assist with the implementation of the *Ballast Water Convention*⁸⁷ as will the development of Technical Guidelines.

Disadvantages

- Technology is lagging behind the objectives laid out in the *Ballast Water Convention*. While Parties are encouraged to develop new and improved methods of ballast water removal, the implementation for the *Ballast Water Convention* depends on the development of a technology that achieves this standard. Such development and implementation of new technology can be expensive and if an effective method of removal is not efficiently and economically achieved by Parties by 2016, they will be in violation of the *Ballast Water Convention*.⁸⁸
- The fact that the dates for implementation are set far in advance could mean that the problem may be too far advanced by the time these dates arrive to ameliorate it if the rate of transfer of aquatic invasive species increases as it has done in recent decades.⁸⁹
- Enforcement may also be a problem in view of the fact that much of the implementation of the *Ballast Water Convention*, including surveying and certification of ballast water standards, depends on the willingness of the Flag States to install new technologies into their ships. Flag States, particularly the “flags of convenience” may not have the expertise or resources to do so and Port States may not have the time or resources to board every vessel to check whether or not its certificate and book are adequate.⁹⁰
- Much of the effectiveness of the *Ballast Water Convention* depends on cooperation and monitoring of Parties. If Parties fail to comply with these requirements of notifying other parties about violations or lodging complaints, the Convention may be rendered useless.⁹¹
- The economic and cost implications of meeting the requirements of the *Ballast Water Convention* can be high. The cost implications of new technologies to satisfy the standard in Regulation D-2, particularly in the installation and continued maintenance

⁸⁷ Briony MacPhee, “Hitchhikers’ guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species” (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 51.

⁸⁸ Ibid.

⁸⁹ Briony MacPhee, “Hitchhikers’ guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species” (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 52

⁹⁰ Ibid.

⁹¹ Ibid.

of unproven technologies, could prove prohibitive for wealthy Flag States let alone open registries

Conclusion

The establishment of the *Ballast Water Convention* represents another attempt by the international community to address the main vector of introduction of alien invasive species. While prevention is the optimum aim experience has shown that this may not be achievable and accordingly, management and control after introduction is vital. This Convention is a major advance on the current situation of diverse domestic legislation and voluntary Guidelines. When combined with the attendant Technical Guidelines and the Globallast Programme, it is to be hoped that adherence to the *Ballast Water Convention* will bring the international community one step closer to the eventual eradication of alien invasive species.

The aim of the IMO is to stop the spread of unwanted organisms and to manage and control if not eradicate them where they have already been introduced. The *Ballast Water Convention* calls for this activity to cease and by requiring flag States to develop and introduce new technologies to combat the problem, the Convention ensures that the international community will phase out ballast water exchange and develop, test and install new technologies. Furthermore, the Globallast Programme will assist developing countries to achieve this.

In the context of the aim of the *CBD* to prevent the introduction controlling or eradicating alien species which threaten ecosystems, habitats or species, the *Ballast Water Convention* creates an internationally recognized and accepted mechanism for dealing with one major ways such species are introduced. A fully comprehensive Convention dealing with all ways of introduction would be preferable, but in view of the immediacy of the ballast water problem, the negotiation and implementation of such a document, even if achievable, would take too long. Further work needs to be done to address other vectors which introduce alien species but the regulation of ballast water is a good start.

The *Ballast Water Convention* entered into force on 8 September 2017. It currently has 81 signatories representing 80.76% of the world tonnage.

To sum up, it has been rightly stated that “inaction is not an option, unilateral enforcement is a start, but international cooperation is, and will be, the means of realization of effective progress toward the eventual eradication of alien invasive species.”⁹²

⁹² Briony MacPhee, “Hitchhikers’ guide to the Ballast Water Management Convention: an analysis of legal mechanisms to address the issue of alien invasive species” (2007) 10/1 *Journal of International Wildlife Law and Policy*, 29, 54.

7. THE LAW OF SALVAGE

This chapter will examine the law of salvage, which is a branch of maritime law relating to the rescue of ships and cargo from danger at sea and the rights of parties who attempt such rescue. After a brief introduction to the general law and the relevant international conventions, the chapter will examine the elements which must be present to constitute salvage, the basis on which persons who undertake the salvage can claim a 'salvage reward' and how such salvage reward is calculated, paid and, in some cases, lost. This will also involve a discussion on special ways the law of salvage tries to protect the environment and also proposed ways of expanding the right of salvors to salvage reward. Finally the chapter will briefly outline the way in which salvage is actually undertaken with particular reference to standard contracts and other agreements such as the Lloyds Open Form of Salvage Agreement (LOF).

Part I – Introduction

For well over two thousand years it has been a well-respected maritime tradition that mariners will voluntarily assist other mariners and their ships when they are in danger at sea. It is only in recent years that this tradition has been codified into an obligation.¹ Human nature being what it is, it did not take long before those performing the rescue started to seek and receive compensation from the rescued for saving their lives and property. When it was subsequently realised that this rescue service and potential rewards would be more readily achieved through specialist providers, the salvage industry was born.²

The payment of what became known as 'salvage reward' was codified very early. Codes of maritime practice evolved from the earliest times of maritime trade. Prior to the promulgation of Codes, there was some evidence that where ships were wrecked on a foreign shore, the local inhabitants were permitted to seize the property from the ship and the crew and passengers could be either ransomed or enslaved.³ These Codes developed because of the need for consistency of treatment of merchants, ships and cargoes among all the trading ports. As trade was essentially an international concern it was necessary for there to be a common legal basis for trade and ships that carried trade.⁴ Gradually these Codes gained widespread acceptance such that they were enforced by the courts of most trading centres of Europe.⁵ In some

¹ Under such conventions as the *Safety of Life At Sea Convention (SOLAS)* and the *United Nations Convention on the Law of the Sea (LOSC)*. Such a duty can also be found in the two specific conventions dealing with salvage the *Convention for the Unification of Certain Rules of Law respecting Assistance and Salvage at Sea, 1910* (Article 11) and *International Convention of Salvage, 1989* (Article 10).

² Donald Kerr, 'The 1989 Salvage Convention: Expediency or Equity?' (1989) 20 *Journal of Maritime Law and Commerce* 505,505.

³ Walter Ashburner, *The Rhodian Sea-Law* (Clarendon, 1909) vii as quoted Aldo Chircop, 'The Customary Law of Refuge for Ships in Distress' in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 163, 171.

⁴ Albert Musson, *Mediaeval Law in Context* (Manchester University Press, 2001) 11; B.Obinna Okere, 'The Technique of International Maritime Legislation' (1981) 30 *International and Comparative Law Quarterly* 513, 513-514.

⁵ Stanley Jados, *Consulate of the Sea and Related Documents* viii-ix <<http://libro.uca.edu/consulate/preface.htm>>.

countries special courts were established, like the courts of pied-poudre in England and other maritime centres, elsewhere merchant's courts were set up to deal with disputes in such a way as to not unduly interfere with the carrying on of trade.⁶

The best known of the early maritime Codes, the Rhodian law as incorporated into the *Code of Justinian*, attempted to codify existing maritime custom at the time⁷ particularly in relation to an early form of General Average and payment of salvage reward.⁸ The Rhodian Law, at least that version which was promulgated in the 8th century,⁹ does deal with dangers and difficulties of navigation.¹⁰ Gradually the calculation of salvage reward was set out in the Rhodian law in the form of fixed proportions of the saved property depending on the circumstances of the salvage and reflected the difficulty of the salvage process. So, for example, if the property salvaged was washed up on the shore or in waters close to shore, the salvor was entitled to one tenth of the value of the property salvaged while if the property was raised from 15 fathoms, the salvor was entitled to half the value of the property.¹¹ The Rhodian Law formed the basis of maritime codes in other waters and other countries such as *Lo Libre de Consolat de Mar* which appeared in writing in Barcelona in 1435; *The Maritime Ordinances of Trani* (1063) which is considered to be the first maritime Code for the Mediterranean;¹² the *Rules of Oleron* and the *Ordinance of Louis XIV* in 1681 which codified the *Rules of Oleron* into French law;¹³ the *Laws of Visby* and the *Laws of the Hanse Towns* promulgated to deal with trade with and between the towns of the Haseatic League.¹⁴ In England the laws were codified into the Black Book of the Admiralty¹⁵ and were based largely on the *Rules of Oleron*.¹⁶ Similarly, in Scotland the *Rules of Oleron* and the *Laws of Visby* formed the basis of maritime law.¹⁷ By the 14th century the admiralty courts had been established and by the 16th century they were dealing with commercial disputes.¹⁸ In the case of *Luke v Lyde* ¹⁹in 1759, Lord Mansfield decided the case on the Rhodian Law and

⁶ Ibid vii.

⁷ Wolfgang Vitzthum, 'From the Rhodian Sea Law to UNCLOS III' in Peter Ehlers, Elizabeth Mann-Borghese and Rudiger Wolfrum (eds), *Marine Issues from a Scientific, Political and Legal Perspective* (Kluwer, 2002) 2-3; William Agyebeng, 'Theory in Search of Practice: The Right of Innocent Passage in the Territorial Sea' (2006) 30 *Cornell International Law Journal* 371, 375.

⁸ Aldo Chircop, 'The Customary Law of Refuge for Ships in Distress' in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 163, 171; Book XIV of *Justinian's Digest Title II* at <<http://www.admiraltylawguide.com/documents/digestxiv.html>>.

⁹ Stanley Jados, *Consulate of the Sea and Related Documents* xii <<http://libro.uca.edu/consulate/preface.htm>>.

¹⁰ Walter Ashburner, *The Rhodian Sea – Law* (Clarendon, 1909) clxi.

¹¹ William L Neilson, "The 1989 International Convention on Salvage, 1989," (1992) 24 *Connecticut Law Review* 1203, 1208

¹² Trani was a major trading port in southern Italy and flourished in the 10th century under the Kings of Sicily. See Aldo Chircop, 'The Customary Law of Refuge for Ships in Distress' in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 163, 172; Rene-Jean Dupuy and Daniel Vignes, *Handbook on the New Law of the Sea Volume I* (Martinus Nijhoff, 1991) 62-63.

¹³ Bridget Murphy, 'Luke v Lyde – an Analysis' (2003) 9 *Auckland University Law Review* 1140, 1148.

¹⁴ <<http://www.admiraltylawguide.com/documents/hanse.html>>

¹⁵ Royal Connell and William Mack, *Naval Ceremonies, Customs and Traditions* (U S Naval Institute Press, 6th ed, 2004) 25.

¹⁶ Martin Norris, 'The Seaman as Ward of the Admiralty' (1954) 52 *Michigan Law Review* 479, 481.

¹⁷ Aldo Forte, "Kenning be Kenning and Course be Course': Maritime Jurimetrics in Scotland and Northern Europe 1400-1600' (1998) 2 *Edinburgh Law Review* 56, 57; as to the laws of Visby see <http://www.1911encyclopedia.org/Sea_Law>.

¹⁸ Maritime Legal Resources, 'History of Admiralty Law' <<http://www.marlegal.com/mlhist.html>>.

¹⁹ (1759) 2 Burr 882; 97 ER 614.

justified this use of maritime Codes as by stating that ‘...maritime law is not the law of any particular country, but the general law of nations....’.²⁰ The judgement then surveys the origins of maritime law as commencing with the Rhodian Law and then conveniently sets out the growth and development of the Codes from which it can be established that by 18th century that there existed a common set of rules and practices among the major maritime States of Europe and their colonies and overseas territories that could form the basis of customary law.²¹ This included the law of salvage and the calculation of salvage reward which had a simplicity and universality to it.²²

The situation started to change in the 19th century. The courts, particularly those in England and the United States, started to question to continued validity of the fixed percentage approach of the Rhodian Law and began to take into account factors such as the cost of labour and the peril involved, the speed with which the salvage was pursued, the value of the ship and cargo saved and the level of danger from which they were saved. Simultaneously with the changing judicial attitudes the development of steam engines and steam powered vessels had a major effect on the demand for salvage and the growth in the number of salvage claims.²³ Not only were steam driven ships more prone to damage through explosions, fire and collision than sailing vessels, steam powered vessels could also travel faster and over greater distances and in rougher seas thereby increasing their ability to engage in salvage operations. This also resulted in economic conditions being right for the founding and developing of specific salvage operators and so the salvage industry was established and quickly expanded.²⁴

By the late 19th century it was becoming clear that agreement between the major maritime nations on the basis of salvage and the calculation of salvage reward was needed. In 1885, on the initiative of the Belgian government, an international conference was called to examine commercial law relating to maritime matters and at this and a subsequent conference held in 1888 the law of salvage was discussed. The Comité Maritime International, which had been founded in 1897, drafted a convention on salvage which was presented to and adopted by an international conference in 1910.²⁵ This was known as the *Convention for the Unification of Certain Rules of Law respecting Assistance and Salvage at Sea* and informally as the *1910 Brussels Convention on Salvage (1910 Brussels Convention)*.²⁶

²⁰ Ibid 617.

²¹ Aldo Chircop, ‘The Customary Law of Refuge for Ships in Distress’ in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 163, 175; Bridget Murphy, ‘Luke v Lyde – an Analysis’ (2003) 9 *Auckland University Law Review* 1140, 1147-1148.

²² Barry Sheen, “Conventions on Salvage” (1983) 57 *Tulane Law Review* 1387, 1390

²³ Barry Sheen, “Conventions on Salvage” (1983) 57 *Tulane Law Review* 1387, 1390

²⁴ William L Neilson, “The 1989 International Convention on Salvage, 1989,” (1992) 24 *Connecticut Law Review* 1203, 1219-1210

²⁵ Ibid., 1210

²⁶ *Convention for the Unification of Certain Rules of Law respecting Assistance and Salvage at Sea*, opened for signature 23 September 1910, UKTS 4 (1913) Cd 6677 (entered into force 1 March 1913 (“1910 Brussels Convention”).

The primary objective of the *1910 Brussels Convention* was to codify the existing law on salvage so that the major maritime powers followed the same rules in relation to salvage and the criteria for calculating salvage rewards.²⁷ Over the last century, it has been signed or ratified by over 80 States and currently around 75 States are still parties to it.²⁸

For a number of reasons, particularly the increased environmental dangers from shipping in the latter part of the 20th century, which will be discussed more fully later in this chapter, the IMO initiated discussions for a new convention in the early 1980s.²⁹ This resulted in the *International Convention of Salvage, 1989 (1989 Salvage Convention)*³⁰ which came into force on 14 July 1996. To date has been signed or ratified by 64 States accounting for 50.63% of the world tonnage. Forty two of these States were also parties to the *1910 Brussels Convention* but only 11 of them have formally denounced the *1910 Brussels Convention*.

While it is sometimes said that the *1989 Salvage Convention* replaced the *1910 Brussels Convention*,³¹ this is only correct for those States which have formally denounced it or, in practical terms, have passed legislation which enacts the *1989 Salvage Convention* without formal denunciation of *1910 Brussels Convention*.³² The *1910 Brussels Convention* is still binding on those States that apply it exclusively and, to the extent that it is not inconsistent with the *1989 Salvage Convention*, to those States that are parties to both conventions and have not denounced the earlier one or have made implementation impossible by domestic legislation enacting the *1989 Salvage Convention*.³³

Part II - What is Salvage?

The definition of salvage has developed over centuries and has been considered in numerous court decisions and government regulations. The public policy which forms the basis of these

²⁷ Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 531.

²⁸ It is difficult to obtain an accurate number of current signatories to the *1910 Brussels Convention* as the depositary is the Belgian Government not the IMO and the latest update was in 2005 where it appears that 91 States were parties. However this includes former States or territories such as Newfoundland, Goa, Danzig and Yugoslavia which were parties but which no longer exist as independent States or at all and it appears that the number of current States is 86 (including China on behalf of Hong Kong and Macau, but which itself is not a party). The situation is further confused by the fact that 42 of these States are now parties to the *1989 Salvage Convention* but only 11 of them have formally denounced the *1910 Brussels Convention*. Furthermore, the United Kingdom has denounced the *1910 Brussels Convention* on behalf some but not all of its dependencies and ratified the *1989 Salvage Convention* for some but not all its dependencies leaving a number of gaps, such as Gibraltar and Bermuda, where it appears that the *1910 Brussels Convention* not the *1989 Salvage Convention* applies.

²⁹ William L Neilson, 'The 1989 International Convention on Salvage, 1989,' (1992) 24 *Connecticut Law Review* 1203, 1211

³⁰ *International Convention on Salvage*, opened for signature 28 April 1989, 93 UKTS 8; Cm 3458 (entered into force 14 July 1996) ("*1989 Salvage Convention*")

³¹ Nicholas Gaskell, 'The International Convention on Salvage 1989,' (1989) 4/4 *International Journal of Estuarine and Coastal Law*, 286, 268

³² For example, Australia has not formally denounced the *1910 Brussels Convention* but has enacted the *1989 Salvage Convention* in amendments to the *Navigation Act 1912* (now *Navigation Act 2012*) made in the *Transport Legislation Amendment Act 1995*. The Supplementary Explanatory Memorandum states that these amendments enact the *1989 Salvage Convention* and replace the *1910 Brussels Convention*.

³³ The problem that this profusion of conventions can cause is exemplified in Martin Davies, 'Whatever Happened to the Salvage Convention 1989?' (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 464.

decisions and regulations is important for all contributors to the marine adventure. Persons who place their lives, well-being and time at risk in pursuing the marine adventure are interested in having their lives, wellbeing and time protected by timely intervention of salvors. Similarly owners of ships and cargo, and, especially, their insurers are interested in preserving the ship and cargo from loss. The purpose which underlies decisions relating to salvage is to encourage volunteers to rescue property from peril on the sea and, if successfully performed, the law permits such persons to be rewarded for their efforts.³⁴

Salvage under general rules of maritime law can be defined as:

...a service which confers a benefit by saving or helping to save a recognised subject of salvage when in danger from which it cannot be extricated unaided, if and so far as the rendering of such service is voluntary in the sense of being attributable neither to a pre-existing obligation nor solely for the interests of the salvor.³⁵

This definition is reflected in Article 1 of the *1910 Brussels Convention* as:

Assistance and salvage of seagoing vessels in danger, of any things on board, of freight and passage money, and also services of the same nature rendered by sea-going vessels to vessels of inland navigation and vice versa...

More succinctly, the *1989 Salvage Convention* defines 'salvage operation' in Article 1(a) as:

any act or activity undertaken to assist a vessel or any other property in danger in navigable waters or in any other waters whatsoever.

When distilled down to its essential elements, for an act to constitute salvage and therefore entitle the person performing the act (the salvor) to a salvage reward, three conditions must be complied with³⁶:

- (1) The property must be in danger at sea;
- (2) For the service to be remunerated, it must be successful or must contribute to the successful conclusion of the service. This requirement is generally referred to as the 'no cure – no pay' rule;
- (3) The salvor must be a volunteer.

Since the law of salvage has been effectively codified by two international conventions, each of these elements will now be discussed within these conventions.

³⁴ Michael White, *Australian Maritime Law* (Federation Press, 2000) 238

³⁵ Francis D Rose, *Kennedy & Rose: The Law of Salvage* (6th ed, 2002) 8

³⁶ Brian Binney, 'Protecting the Environment with Salvage Laws: Risks, Rewards, and the 1989 Salvage Convention' (1990) 65 *Washington Law Review* 639, 640

(1) Property must be in danger at sea

Again there are three elements:

- (a) What is meant by property;
- (b) What is meant by danger;
- (c) What is meant by sea.

(a) What is meant by Property?

Salvage can only be claimed for saving certain types of property. The essential reason why there must be some property saved in the salvage operation is that there must be a fund from which a salvage reward is able to be paid. Thus, as will be seen later in the chapter, where no property is saved, under general rules no salvage can be paid since no fund can be created.³⁷ This is the so-called 'no cure – no pay' principle. For similar reasons, under general rules no salvage is payable where only human life is saved but no property.³⁸

Traditionally, salvable property includes a ship and its cargo as well as freight, which is more properly regarded as an adjunct of property rather than an item of property itself. In certain circumstances wreck or remains of a ship can also constitute salvable property.³⁹ This traditional scope has been widened by international convention and, in the case of the *1989 Salvage Convention*, quite substantially.

(i) Ships

What constitutes a 'ship' is a subject much wider than simply as an element of salvage law and it is not easy to define it. Essentially, the term is defined more in domestic law than in international convention. However, even where 'ship' is defined it is generally not defined precisely or exhaustively either in legislation or by decisions of Courts and there is much scope to limit or extend the definition. One element that does appear to be necessary is the necessity for self-propulsion.⁴⁰ In days of sail this meant having rigging and masts and in the case of propulsion by steam or other mechanical means, it means having equipment to bring this about. This would exclude such things as rafts, floating gas beacons, floating landing stages, pontoons fitted with a crane to form a floating crane all of which have been held by courts of various countries not to be 'ships'.⁴¹ Recent doubts have been expressed in English, Australian and

³⁷ Under the *1989 Salvage Convention*, while the traditional rule of 'no cure – no pay' is maintained, there is provision for special salvage reward in cases of pollution damage even where the salvage has not been successful.

³⁸ Martin Davies, "Whatever Happened to the Salvage Convention 1989?" (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 498. This principle continues in *1989 Salvage Convention*, Art 16(1) but the Article does permit parties to pass legislation permitting life salvage. In many countries life salvage is permitted under legislation.

³⁹ *Wells v The Gas Float Whitton No 2* (1897) AC 337

⁴⁰ *Ibid*

⁴¹ *Ibid*

United States courts as to the validity of the requirement of self-propulsion in relation to towage where the goods are transported in dumb barges or similar non self-propelled containers which, although not capable of navigating by themselves are capable of navigation in water.⁴² This raises another traditional element that appears to be necessary, namely, that of navigability i.e. it must be capable of being used for navigation in water. This has been held to include actual navigation and being capable of navigation and intended to be navigated even if it is temporarily not actually being used for such purpose.⁴³ So, even wrecks waiting to be raised, those which have lost rudders and those temporarily beached have been held to be ships.⁴⁴

Whether or not something is a 'ship' in the context of salvage can be confusing and unclear. Suffice to say, while in the majority of claims for salvage what is a 'ship' is clear, in unusual cases such as dumb barges the result is not as clear cut. In the end result, each case must be determined on its facts and essentially whether or not something is a 'ship' or has ceased to be a 'ship' is a matter of fact and degree to be determined by the law of the State in which the matter is litigated. For the purposes of salvage reward, 'ship' includes not just the hull and structures but also its tackle and equipment.⁴⁵ It does not include intangible things like the value of licences.⁴⁶

As mentioned earlier, the *1910 Brussels Convention* was intended to codify the law on salvage. Article 1 defines the scope of the Convention as

Assistance and salvage of seagoing vessels in danger, of any things on board, of freight and passage money, and also services of the same nature rendered by seagoing vessels to vessels of inland navigation and vice versa...

This limits the operation of the Convention to actions taken by or to 'seagoing vessels'. 'Seagoing' traditionally means the sea and any inland tidal waters.⁴⁷ This will be further discussed later, but at this stage it is important to note that only seagoing vessels were encompassed by the *1910 Brussels Convention*. This excluded vessels that while operating in inland lakes and non-tidal waters.⁴⁸ Article 14 also excludes from the Convention, warships and government ships used for non-commercial purposes. This exclusion was reversed by a *Protocol to the 1910 Brussels Convention* in 1967 for parties to the Protocol.⁴⁹

⁴² William L Neilson, "The 1989 International Convention on Salvage, 1989," (1992) 24 *Connecticut Law Review* 1203, 1231-1232

⁴³ Michael White, *Australian Maritime Law* (Federation Press, 2000) 245

⁴⁴ Ibid

⁴⁵ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 606

⁴⁶ Ibid

⁴⁷ Ibid

⁴⁸ Although not determined under the *1910 Brussels Convention*, the decision of House of Lords in *The Goring* (1988) AC 831 confirms the law in England that salvage is not available in non-tidal waters.

⁴⁹ There are only 8 parties to the Protocol one of whom has denounced it.

When discussing the scope of what became the *1989 Salvage Act*, the United States, in particular, wanted to expand the type of vessel to which salvage services could be rendered. Despite strong opposition, particularly from the United Kingdom, which wanted to retain the restriction to 'seagoing' vessels, the restriction was removed.⁵⁰ Article 1(a) of the *1989 Salvage Convention* now extends the scope of vessel to "a vessel ... in navigable waters or in any other waters whatsoever." To a degree this expansion has been nullified under Article 30 which permits parties to make reservations excluding the application of the Convention to inland waters. A number of States including Australia, China and the United Kingdom have made such a reservation.⁵¹

Article 1(b) of the *1989 Salvage Convention* substantially expands the definition of "vessel" to mean "any ship or craft, or any structure capable of navigation". This removes all tests except capability of use. It therefore removes any question of self- propulsion or intent of use that existed in the classical restrictions in English law and moves to a clearer basis of the vessel being capable of navigation as the sole test. This means that objects such as dumb barges and other towed objects and craft, floating beacons and other aids to navigation, floating cranes, floating dry docks and heavy lift barges would now be included as vessels under the Convention.

The scope of salvage under the Convention is further expanded by the definition of "property" in Article 1(c) of the Convention which states: "property means any property not permanently and intentionally attached to the shoreline and includes freight at risk." This raises the question of oil and gas rigs which prima facie could be "vessels" or "property" depending on the degree of attachment to the shoreline. During initial discussions on the Convention, the IMO proposed excluding oil and gas rigs.⁵² At the insistence of the United States they were included but subject to the terms of Article 3 which limits the application of the convention to

them.⁵³ Article 3 excludes fixed permanently installed on the sea-bed, semi-submersible units and drilling ships provided that they are on location and engaged in the exploration, exploitation or production of sea-bed mineral resources. The provisos mean that where the units are in transit or are not at the time of distress attached to the sea-bed or engaged in activities other than drilling, then arguably they are either "vessels" or "property" within the meaning of Articles 1(b) and (c).⁵⁴ The exclusion of fixed oil rigs has been criticised as rigs are most exposed when working and would benefit from the services of professional salvors. Salvors are unlikely to assist if they are excluded from claiming any reward.⁵⁵

⁵⁰ William L Neilson, "The 1989 International Convention on Salvage, 1989," (1992) 24 *Connecticut Law Review* 1203, 1232; Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 549.

⁵¹ Martin Davies, "Whatever Happened to the Salvage Convention 1989?" (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 500-501

⁵² Nicholas Gaskell, "The International Convention on Salvage 1989," (1989) 4/4 *International Journal of Estuarine and Coastal Law*, 286, 274

⁵³ *Ibid.*, 275

⁵⁴ *Ibid*

⁵⁵ *Ibid*

The Convention does not deal specifically with sunken vessels and their cargoes so whether or not salvage could be claimed for recovery of such vessels and property falls to be determined under national laws. The only mention in the Convention is a right under Article 30(d) for a party to make a reservation in relation to cultural or historic wrecks. A substantial number of parties have made such a reservation.

Finally, Article 4 of the Convention excludes from the Convention warships and other non-commercial vessels on government service. This flows from the long accepted principle of sovereign immunity and reinstates the position under the original *1910 Brussels Convention* prior to the 1967 Protocol.

(ii) Cargo

What constitutes 'cargo' is easier to define. Essentially, 'cargo' consists of goods, merchandise or wares that are conveyed by the ship under contract of carriage. It does not matter if these goods are on the ship when the ship is salvaged, have fallen overboard and are floating independent of the ship, have sunk or have washed up on shore.⁵⁶ Nor does it matter that the cargo is damaged provided it still has value.⁵⁷ 'Cargo' must also be owned by someone at the time of salvage as otherwise the person saving the cargo would be a finder not a salvor and so entitled to keep the entire property.⁵⁸ 'Cargo' does not include such things as ship's provisions or crews' or passengers' clothing or possessions.⁵⁹

(iii) Freight

'Freight' is the earnings of the ship in carrying cargo and so would not be a separate subject of salvage since it cannot be salvaged independently of the ship or cargo. However, it is an adjunct of salvaged property and can be included in calculating 'salvage reward'. The *1989 Salvage Convention* only includes "freight at risk" as a subject of salvage.

(b) What is meant by Danger?

Although both the *1910 Brussels Convention* and the *1989 Salvage Convention* require the element of danger to be present before salvage can be performed and salvage reward claimed, neither elaborates any further on what danger consists of. Therefore any definition of danger must rely on domestic legislation and case law.

⁵⁶ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 602

⁵⁷ Ibid

⁵⁸ Ibid; Martin Davies, "Whatever Happened to the Salvage Convention 1989?" (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 483

⁵⁹ *The Willem III* (1871) LR 3 A & E 487, 490; Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 602.

In particular, the case law of English courts and the courts of other common law jurisdictions has looked at the meaning of danger in the context of salvage and has established a number of principles.

First and foremost, there must be a real fear that a ship or its cargo may suffer loss or damage if assistance is not provided from outside sources. The damage or loss can be immediate or prospective.⁶⁰ The classic decision on this point is by Dr Lushington in *The Charlotte*⁶¹ where he states:

It is not necessary...that the distress should be actual or immediate, or that the danger should be imminent or absolute; it will be sufficient if, at the time the assistance is rendered, the ship has encountered any damage or misfortune which might possibly expose her to destruction if the services were not rendered.⁶²

The circumstances that can give rise to danger are many and various. Sometimes the danger is quite obvious such as where a storm or rough seas might cause the ship to founder or be damaged. Similarly, where a ship's steering equipment is so damaged that it cannot properly navigate and is in danger of collision or foundering such a ship would be in danger.⁶³ Less obvious is the situation where there has been an accident to essential members of crew or illness has affected the crew such that it is difficult to navigate the ship or to cope with worsening weather conditions and so there is a risk that the ship may not complete its voyage without outside help.⁶⁴ Further if a ship is unseaworthy, in the sense that a reasonable person would not be justified in sending it to sea, such a ship could be considered to be in danger if it actually goes to sea.⁶⁵

The major limitation is that the fear of loss or damage must be reasonable. It is not sufficient that the fear is fanciful or only vaguely possible or that the claimants merely believed the ship to be in danger.⁶⁶ The requirement is that there must appear to be a danger to the ship from an objective point of view. Provided that the claimants has a formed a reasonable opinion that there was a risk, it does not matter that ultimately the danger doesn't exist.⁶⁷ Anything else would mean that potential salvors would hesitate to render assistance until it is absolutely clear that there is a danger. For this reason and because courts encourage salvage, courts tend to

⁶⁰ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 603

⁶¹ (1848) 3 W Rob 68

⁶² Ibid 71

⁶³ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 603

⁶⁴ Ibid

⁶⁵ Ibid, 604

⁶⁶ So, for example, in *The British Inventor* (1933) 46 Ll L R 137 where claimants mistakenly believed the ship to have run aground, attempts to rescue it could not be claimed for.

⁶⁷ So, in *The Smaragd* (1927) 28 Ll L Rep 302 the court granted salvage reward to claimants who formed the reasonable view that there was a risk that a ship's boiler would explode because it was surrounded by steam even though ultimately there was no danger.

err on the side of the salvors where possible.⁶⁸ It is for the claimant to establish 'danger' and whether or not 'danger' is present is a question of fact to be considered on a case-by-case basis. This is assisted where a salvage contract, such as Lloyds Open Form, is used since the existence or otherwise of 'danger' is not usually disputed.⁶⁹

While 'danger' almost always from risk of loss or damage, there are cases which extend the concept to include circumstances where the ship is not at risk of loss but is of no immediate value to the owner. The most obvious example is where the ship is immobilised for some reason thereby depriving the owner of effective commercial use.⁷⁰ This has also been held in the case of *The Cythera*⁷¹ to apply to claims for costs of recovery of ships seized by pirates or stolen by other parties and so taken out of the reach of the owners. In that case of the court held that 'danger' includes "a danger to the proprietary rights of the owner" and in such a case "the physical safety of the ship ceases to be the dominant element in assessing the degree of danger and the deprivation of the property, and the restoration of that property to the owners are sufficient."⁷²

Finally, once a ship or other salvable property is in danger it remains in danger until it is in a position of safety.⁷³ Just when that occurs is a question of fact in each case.

(c) What is meant by sea?

In most cases, ships involved in salvage operations would be either seagoing ships or inland water ships. However, there is no reason why private pleasure craft could not also be the subject of salvage.⁷⁴ As mentioned earlier, the requirement for the property to be in danger at sea meant under general maritime law that salvage was restricted to incidents on, under or alongside the high seas i.e. the high seas itself and any inland tidal waters. Non-tidal waters and land locked inland were excluded. This restriction continued in the *1910 Brussels Convention* where salvage is restricted in Article 1 to services to or by "sea-going vessels".

The situation changed under the *1989 Salvage Convention*. Under Article 1(b) the geographical extent of area in which salvage can take place was widened. Salvage can now take place where a ship is in danger "in navigable waters or in any other waters whatsoever". This clearly includes non-tidal waters and inland lakes and other water bodies, whether natural or man-made, which were excluded under general maritime law and the *1910 Brussels Convention*. During discussions there was much debate over this provision but in the end a compromise was

⁶⁸ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 603

⁶⁹ Edgar Gold et ors, *Maritime Law* (Irwin Law, 2003) 605

⁷⁰ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 605

⁷¹ *Societe Maritime Caledonienne v the Cythera* [1965] NSWR 146

⁷² Ibid 152

⁷³ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 605-606

⁷⁴ Martin Davies, "Whatever Happened to the Salvage Convention 1989?" (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 467

reached whereby the provision remained but parties were permitted to make reservations under Article 30(1) excluding the application of the *1989 Salvage Convention* to inland waters.⁷⁵

The end result is that the question of whether or not salvage operations are such that a successful claim for salvage can be made depends on the domestic law of the State in which the claim is brought. In particular, the result would depend on which Convention the State applies and, if the *1989 Salvage Convention* is applied, whether or not there is a reservation excluding the application of the Convention to waters other than the high seas and inland tidal waters.

(2) Success

Under general maritime law it is a fundamental rule that for the service to be remunerated, it must be successful or must contribute to the successful conclusion of the service. This principle, known as the 'no cure-no pay' rule, was summed up in the decision by Lord Phillimore in the House of Lords decision of *The San Onofre*⁷⁶ where the following general rule was laid down:

Success is necessary for a salvage reward. Contributions to that success, or as it is sometime expressed, meritorious contributions to that success give a title to a salvage reward. Services however meritorious, which did not contribute to the ultimate success do not give title to salvage reward. Services which rescue a vessel from one danger but end up by leaving her in a position of as great or nearly as great danger, though of another kind, are held not to contribute to the ultimate success and do not entitle to salvage reward.⁷⁷

The *1910 Brussels Convention* retained this principle in Article 2 which stated that:

Every act of assistance or salvage which has had a useful result gives a right to equitable remuneration. No remuneration is due if the services rendered have no beneficial result. In no case shall the sum to be paid exceed the value of the property saved.

Similarly the *1989 Salvage Convention* retained the requirement in Article 12 which states:

1. Salvage operations which have has a useful result give right to a reward.
2. Except as otherwise provided, no payment is due under this Convention if the salvage operations have had no useful result.

⁷⁵ Ibid 500-501

⁷⁶ *Owners of the SS Melanie v Owners of the SS San Onofre* [1925] AC 246

⁷⁷ This reflected the earlier decision of Dr Lushington in *The Zephyrus* ((1842)1 W Rob 329, 330-331) where he stated:

"A mere attempt to save [a] vessel and cargo, however meritorious that attempt may be, or whatever degree of risk or danger may have been incurred, if unsuccessful, can never be considered in this court as furnishing any right to a salvage reward. The reason is obvious, viz that salvage reward is for the benefits actually conferred, not for a service attempted to be rendered."

The term 'useful result' has been held to mean the same as 'success'.⁷⁸

What is meant by 'contribution' and whether a person has contributed sufficiently to the success of the operation is a question of fact to be determined by a court. The best statement of what a person must contribute is in *The Atlas*⁷⁹ where the Privy Council stated:

Where a salvage is finally effected, those who meritoriously contribute to that result are entitled to a share in the reward, although the part they took, standing by itself, would not in fact have produced it.⁸⁰

The principle of 'no cure – no pay' can result in harsh consequences for would-be salvors. No matter how much time, effort and money is expended, if the ship eventually sinks with the result that all property which could form a fund from which a salvage reward could be paid, then the would-be salvor receives nothing in return. As will be discussed later, it was for this reason and to encourage salvors to be involved in cases of potential pollution to the environment, that the *1989 Salvage Convention* contains provision for the payment of special compensation. This is not salvage reward per se but more accurately a return of some or all expenses incurred in an unsuccessful salvage operation. The principle of 'no cure - no pay' still prevails under general maritime law and both conventions.

(3) Voluntariness

Any person providing services must be a volunteer i.e. there must be no pre-existing legal obligation to provide the services. In *The Neptune*,⁸¹ Lord Stowell described this requirement:

What is a salvor? A person who, without any particular relation to a ship in distress, proffers useful service, and gives it as a volunteer adventurer, without any pre-existing covenant that connected him with the duty of employing himself for the preservation of that ship.⁸²

Whether or not a would-be salvor is a volunteer depends on the facts of each case. In many cases the outcome depends on whether the actions of the parties involved.

So it has been held that passengers on a ship cannot ordinarily claim salvage required since, at law, they are under a duty to provide assistance.⁸³ The same applies to the crew who are

⁷⁸ *The Mbash* [2002] 2 Lloyd's Rep 602, 607

⁷⁹ *The Atlas* 167 ER 235

⁸⁰ *Ibid.*, 240.

⁸¹ (1824) 1 Hagg Adm 227

⁸² *Ibid.* 236

⁸³ *The Branston* (1826) 2 Hagg Adm 3n

similarly under a duty to provide such services as are necessary to save the ship and cargo, although this duty does not include the general duty to assist help ships in difficulty.⁸⁴

However it has also been held that where the passengers provide services which are greater than those ordinarily expected of passengers, they can claim salvage reward.⁸⁵ As for the crew of a ship, once their employment is terminated by being ordered to abandon the ship, they can claim salvage reward.⁸⁶

Similarly firefighters and other similar persons performing public duties can claim salvage reward where they perform actions beyond those which are ordinarily required under their contracts of employment.⁸⁷ Article 5 of the *1989 Salvage Convention* provides for the possibility of claims for salvage reward by public authorities. Whether or not such claims are permitted is subject to the law of the State where the public authority is situated.

Two problem areas are towage and pilotage.

Under towage contracts, a party simply performing its contractual obligation to 'expedite the voyage of another [vessel], when nothing more is required than the accelerating [of] her progress'⁸⁸, can only claim the contractual payment and cannot additional fees from salvage reward for towing a ship in difficulty to safety. If, however, the services are outside the terms of the contract or beyond what could reasonably have been contemplated by the parties to the contract of towage, then salvage reward can be claimed.⁸⁹ This is specifically permitted under Article 4 of the *1910 Brussels Convention* and but is not specifically mentioned in the *1989 Salvage Convention*.

The same considerations apply to pilotage contracts. This was summed up in *The Santiago*⁹⁰ as:

If a pilot does render such services to a vessel in distress as no reasonable person, whether owner or pilot, would consider ought to come within the scope of his contract, then there is no reason why he should not be paid some salvage reward, because he runs risk outside that which anybody has in contemplation.⁹¹

Article 17 of the *1989 Salvage Convention* deals with both situations as follows:

⁸⁴ *The Neptune* (1824) 1 Hagg Adm 227

⁸⁵ *The Sava Star* [1995] 2 Lloyd's Rep 134

⁸⁶ *The Vrede* (1861) Lush 322

⁸⁷ *Fire Brigades Board v Elderslie Steamship Co* (1899) 15 WN (NSW) 320

⁸⁸ This is the classic definition of 'towage' set out in *The Princess Alice* (1849) 3 W Rob 138, 140.

⁸⁹ *The Princess Alice* (1849) 3 W Rob 138,

⁹⁰ *The Santiago* (1900) 9 Asp MLC 147.

⁹¹ *Ibid.*, 149.

No payment is due under the provisions of this Convention unless the services rendered exceed what can reasonably be considered as due performance of a contract entered into before the danger arose

As with all matters dealing with voluntariness, whether or not a tower or pilot can claim salvage reward is a matter of fact. However in these two instances the courts are more reluctant to find in favour of them than for most claimants.⁹²

Part III – Salvage Reward

Once it is established that salvage within the legal parameters has occurred then those persons who contributed to the salvage are entitled to salvage reward. This part will look at how that salvage reward is calculated and paid and will also briefly examine the situations under which an otherwise successful claim for salvage reward can be reduced or denied.

(1) Basic Principles

There are two supervening principles that are applied when salvage reward is calculated.⁹³

The first is that salvors should be liberally rewarded so as to encourage persons to undertake salvage operations. Potential salvors must know that in attempting salvage they will be generously rewarded but only if they succeed. This must amount to reward and not just a refunding of expenses.⁹⁴ This principle is reflected in Article 2 of the *1910 Brussels Convention* where it is stated:

Every act of assistance or salvage of which has had a useful result gives a right to equitable remuneration.

It is more explicitly set out in Article 13(1) where it is stated:

The reward shall be fixed with a view to encouraging salvage operations...

The second principle is that the reward must not exceed the value of the property saved. This flows from the practical point that salvage reward is paid from a fund constituted by the saved property which, once expended, is gone. This is reflected in Article 2 of the *1910 Brussels Convention* and Article 13(3) of the *1989 Salvage Convention*. Although general maritime law and both conventions appear to allow the salvage reward to equal the value of the property

⁹² Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 616

⁹³ Brian Binney, 'Protecting the Environment with Salvage Laws: Risks, Rewards, and the 1989 Salvage Convention' (1990) 65 *Washington Law Review* 639, 641

⁹⁴ *The Albion* (1861) Lush 282

salved, in practice, the second principle is applied so that the owner recovers something and any order for salvage reward must not result in the owner being deprived of the full value of the salved property. The point was made in *North Coast Steam Navigation v Ship Eugene*⁹⁵ :

[the court] will not allow salvage services, however meritorious, to unduly and unfairly degenerate into an opportunity for extracting the last penny possible from the pockets of the owner.⁹⁶

Just as salvors are to be encouraged to undertake salvage operations by granting them a generous reward, so the owner must be encouraged to actually seek salvage services by being allowed to retain at least some of the value of his property. This reflects the view expressed in *The City of Chester*⁹⁷ that the purpose of salvage is not to reward salvors but more importantly to rescue the property for the benefit of the owner.

(2) Method of Calculating Salvage Reward.

Salvage reward is payable by the owners of the salved property. Unless the law of the forum states otherwise, the owners must pay the salvage reward in proportion to the value of their goods. This is reflected in Article 13(2) of the *1989 Salvage Convention*.

Under general maritime law, salvage reward is calculated and ordered to be paid by a court seised with jurisdiction according to rules of international law. However, as will be examined later, in the vast majority of cases, salvage operations are conducted pursuant to a contract entered into by the owner or master of the vessel requiring salvage. The most common contract, the Lloyds Open Form of Salvage Agreement has, since the 1890s, specified that the contract, and hence the calculation of salvage reward, would be governed by English law and arbitration in London. There are other forms used in other jurisdictions reflecting the same procedure i.e. determination under the law of a particular State by its courts or by arbitration.⁹⁸ In some jurisdictions, particularly common law jurisdictions, there may a right of appeal to the courts from the decision of the arbitrator. However, extensive use of the right of appeal would tend to defeat one of the main purposes of arbitration, namely speed of resolution.

As expressed earlier, in the nineteenth century courts moved away from the earlier Rhodian law which determined reward by way of fixed percentage and began to take into account factors such as the cost of labour and the peril involved, the speed with which the salvage was pursued, the value of the ship and cargo saved and the level of danger from which they were saved.⁹⁹ Each case was determined on its facts and in light of earlier decisions and established factors.

⁹⁵ (1909) 9 SR (NSW) 246, 250

⁹⁶ Ibid 250

⁹⁷ (1884) 9 PD 182, 202.

⁹⁸ For example, Japan, Russia, China and Turkey have their own standard contracts.

⁹⁹ *The Clifton* (1834) 3 Hagg Adm 117

The *1910 Brussels Convention* provides guidance on the specific factors in Article 8 in a general sense but Article 13(1) of the *1989 Salvage Convention* gives a more comprehensive list. This list reflects the criteria that had been used by the courts prior to the *1989 Salvage Convention* and so is largely a codification of practice at the time. So the criteria include the value of property, the degree of danger, the measure of success, the skill of the salvors, the time taken and resources expended in the salvage operation, the liability faced by the salvors and the way the operation was carried out.

While most criteria in Article 13(1) of the *1989 Salvage Convention* were not considered controversial, the inclusion of Article 13(1)(b) was.¹⁰⁰ This criterion is expressed as “the skill and efforts of the salvors in preventing or minimizing damage to the environment”. This was inserted in what was called the Montreal Compromise which also resulted in the inclusion of Article 14 which provided for special compensation in cases of threatened damage to the environment,¹⁰¹ which will be discussed later in this Chapter. It reflected the push by salvors for what was loosely called ‘liability salvage’. This simply put is the concept that the salvage reward should also include a value of liability claims to which the owner could have been liable but for the successful efforts of salvors and that prevented harm should be used to increase the value of the reward.¹⁰² In the environmental arena, liability salvage would include saving the owner from damages claims for remedial action for oil spills and other damage to the environment which would flow from oil spills.¹⁰³ The concept of ‘liability salvage’ had been consistently rejected by the American courts in particular.¹⁰⁴ The main basis for this rejection was the difficulty of proving the value of the liability avoided with the result that cases which would ordinarily be settled easily and quickly would become protracted.¹⁰⁵ The wording of Article 13(1)(b) makes clear that it is not liability salvage that is being considered but the skills and efforts of the salvors that are being included.¹⁰⁶

Once the amount of the salvage reward is calculated, the court must then apportion the amount between all claimants. Under general maritime law apportionment was always at the sole

¹⁰⁰ Donald Kerr, ‘The 1989 Salvage Convention: Expediency or Equity?’ (1989) 20 *Journal of Maritime Law and Commerce* 505, 512-513; Nicholas Gaskell, “The International Convention on Salvage 1989,” (1989) 4/4 *International Journal of Estuarine and Coastal Law*, 286, 280-281.

¹⁰¹ Martin Davies, “Whatever Happened to the Salvage Convention 1989?” (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 495

¹⁰² Barry Sheen, “Conventions on Salvage” (1983) 57 *Tulane Law Review* 1387, 1404; Donald Kerr, ‘The 1989 Salvage Convention: Expediency or Equity?’ (1989) 20 *Journal of Maritime Law and Commerce* 505, 513

¹⁰³ Donald Kerr, ‘The 1989 Salvage Convention: Expediency or Equity?’ (1989) 20 *Journal of Maritime Law and Commerce* 505, 512-513

¹⁰⁴ Martin Davies, “Whatever Happened to the Salvage Convention 1989?” (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 494-497

¹⁰⁵ Brian Binney, ‘Protecting the Environment with Salvage Laws: Risks, Rewards, and the 1989 Salvage Convention’ (1990) 65 *Washington Law Review* 639, 651; Martin Davies, “Whatever Happened to the Salvage Convention 1989?” (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 495

¹⁰⁶ It has recently been held *United Salvage Pty Ltd v Louis Dreyfus Armateurs, SNC* (2006) 163 FCR 151 (Fed Ct of Australia) that the *1989 Salvage Convention* does not prohibit liability salvage and that in appropriate circumstances it may be valid to consider any liability avoided but that such liability does not warrant consideration as an independent factor.

discretion of the presiding judge.¹⁰⁷ This approach is reflected in Article 6 of the *1910 Brussels Convention* except that determination by the court is the alternative should the parties be unable to agree between themselves. The *1989 Salvage Convention* is less explicit stating in Article 15(1) simply that “the apportionment of a reward under Article 13 between salvors shall be made on the basis of the criteria contained in that article”. In practice in the apportionment all property, whether vessel or cargo, is treated equally regardless of the circumstances.

Once salvage reward is awarded to one or more salvors, payment of the reward is protected by a maritime lien over such property as still exists as well as any freight attached to the property. Each salvor has an individual maritime lien. This right is preserved in Article 21 of the *1989 Salvage Convention*. The effect of the maritime lien is that it attaches to the property in priority to all other charges except a paramount statutory charge, and continues to so attach even if the vessel or cargo is transferred to another party.¹⁰⁸ In the event of non-payment, an action in rem can be taken against the ship regardless of its then owner.¹⁰⁹

Under Article 23 of the *1989 Salvage Convention*, any claim for salvage reward must be made within two years of the day on which salvage operations begin but may be extended at any time by the person against whom the claim is made. This time bar is also included in Article 10 of the *1910 Brussels Convention*.

(3) Loss of Salvage Reward

In certain circumstances, parties to a successful salvage operation can be denied a share of salvage reward to which they would ordinarily have been entitled.

Under general maritime law, salvors could be deprived of salvage reward in part or in whole by their conduct in performing the salvage operation. While traditionally Courts do not deprive salvors of reward readily because of the need to encourage salvage, they will do so in the case of negligence and gross negligence of the salvor.¹¹⁰ This right was confirmed in Article 8 of the *1910 Brussels Convention* and more particularly in Article 18 of the *1989 Salvage Convention* which states:

A salvor can be deprived of the whole or part of the payment due under this Convention to the extent that the salvage operations have become necessary or more difficult

¹⁰⁷ Barry Sheen, “Conventions on Salvage” (1983) 57 *Tulane Law Review* 1387, 1391; *The Gypsy Queen* [1895] P 176, 177

¹⁰⁸ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 99

¹⁰⁹ Ibid 100

¹¹⁰ Donald Kerr, ‘The 1989 Salvage Convention: Expediency or Equity?’ (1989) 20 *Journal of Maritime Law and Commerce* 505, 517

because of fault or neglect on his part or if the salvor is guilty of fraud or other dishonest conduct.

The question of negligence involves consideration of Article 8 which sets out the duties of a salvor. Under this Article a salvor is under a duty to the owner of the property in danger to exercise due care in both the salvage operations and to prevent or minimise damage to the environment and to seek from other salvors when reasonably required and to accept assistance when reasonably requested to by the owner of the property in danger. Negligent breach of these duties could result in the payment of salvage reward being denied.

Each case turns on its own facts but the classic example in this regard is that of *The Tojo Maru*.¹¹¹ In that case salvage of a damaged oil tanker damaged in a collision was successful. Subsequently, the hole in the hull caused by the collision needed to be patched with a metal plate prior to being towed to a repair yard. The salvor's chief diver attempted to affix the metal plate with bolts fired from a Cox gun. The firing of the bolt caused the tanker to explode resulting in over \$1 million damage, far in excess of the salvage reward of \$300,000. The House of Lords ultimately¹¹² held that the negligence of the salvor's diver not only deprived the salvor of the salvage reward but also required the salvor to pay the additional \$700,000 in damages.

(4) Salvage and Protection of the Environment

Changes to shipping practice, maritime law and the emergence of international environmental law since the 1970s combined to create serious problems for the salvage industry.¹¹³ These problems revolved around the inadequacy of the *1910 Brussels Convention* to deal with modern circumstances, particularly the conflict between the requirement for the ship to be actually saved to gain a salvage reward and the increasing tendency for coastal States to thwart such success by refusing access to a place of refuge.¹¹⁴ Several high profile shipping disasters, such as the *Torrey Canyon* in 1967, involved oil tankers which could not be rescued resulting in no reward for the salvors.¹¹⁵ This failure to obtain a salvage reward was becoming common with the increasing number and size of oil tankers and their cargoes. In many cases salvors were unable to save the vessel and were compelled to stow them off to be sunk. This of course

¹¹¹ *Owners of Tojo Maru (MV) v NV Bureau Wijsmuller; The Tojo Maru* [1972] AC 242; Barry Sheen, "Conventions on Salvage" (1983) 57 *Tulane Law Review* 1387, 1400.

¹¹² There were four decisions, one by an arbitrator and three levels of court, which varied one from the other.

¹¹³ Donald Kerr, 'The 1989 Salvage Convention: Expediency or Equity?' (1989) 20 *Journal of Maritime Law and Commerce* 505, 506; Hans van Rooij, 'How the Salvor can Reduce the Shipowner's Risk Exposure and Liabilities' (Paper presented at Interspill 2006 Conference, London, March 21-23 2006).

¹¹⁴ Brian Binney, 'Protecting the Environment with Salvage Laws: Risks, Rewards, and the 1989 Salvage Convention' (1990) 65 *Washington Law Review* 639, 643-644; Brian Makins, Peter McQueen and Brian White, 'Salvage and the Environment' (1987) 4 *Maritime Law Association of Australia and New Zealand Journal* 3, 5-7.

¹¹⁵ Barry Sheen, "Conventions on Salvage" (1983) 57 *Tulane Law Review* 1387, 1395-1396; Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 532; see also the decision of Tamberlin J in *United Salvage Pty Ltd. v Louis Dreyfus Armateurs SNC; The La Pampa* [2006] 163 FCR 151, 162.

meant that despite all the time and expense involved in the salvage operation ultimately meant that the salvors, under existing rules, gained nothing. The failure to change the salvage rules to address the increasing risk of salvors being unable to obtain salvage reward resulted in salvors threatening to refuse to attend to oil tankers in distress.¹¹⁶ This meant that pollution of the environment which could have been avoided or minimised was being ignored because there was little or no return for salvors under the 'no cure – no pay' rule in the *1910 Brussels Convention*.

The difficulties experienced by the salvage industry in relation to oil tankers and their cargoes started to be addressed by the IMO in 1979. The main problem with the *1910 Brussels Convention* was the need for success to found a salvage reward. Where, through no negligence of the salvor, there is no success or where the salvor is prevented from completing the salvage, no salvage reward can be awarded.¹¹⁷ The latter aspect in particular is an important consideration where a place of refuge is refused and the ship subsequently sinks.¹¹⁸ Therefore, one major reform that was considered was the provision of a safety net for salvors in relation to tankers with oil as cargo.¹¹⁹ The resulting *1989 Salvage Convention*¹²⁰ recognised the importance of protecting the environment¹²¹ and provided the safety net to salvors. As was seen earlier this was a significant compromise.¹²²

While the need to protect the environment was recognised in Article 13(1)(b) of the *1989 Salvage Convention* as an element in calculating salvage reward, the essential problem remained that without a successful salvage operation there was no salvage reward payable. Rather than allow the benefits accruing to the owners of ships and cargo from the actions of the salvors preventing pollution or other environmental damage, to form part of the salvage reward, which was viewed as tantamount to liability salvage, the IMO discussions leading up to the *1989 Salvage Convention* reached a compromise that would at least compensate the salvor

¹¹⁶ Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 533; Proshanto Mukherjee, 'Refuge and Salvage' in Aldo Chircop and Olof Linden (eds), *Places of Refuge for Ships – Emerging Environmental Concerns of a Maritime Custom* (Martinus Nijhoff, 2006) 271, 274-275.

¹¹⁷ James Wooder, 'The New Salvage Convention: A Shipowner's Perspective' (1990) 21 *Journal of Maritime Law and Commerce* 81, 81.

¹¹⁸ For example, with the *Torrey Canyon*, the ship was sunk on UK Government orders rather than salvaged, the *Christos Bitas* was scuttled on the orders of the United Kingdom Government, the *Kurdistan* was scuttled on the orders of the Canadian Government, the *Eastern Mariner I* was refused access in Bermuda and was scuttled and the *Atlantic Empress* was refused access to ports in Tobago and sank. The latter two cases and their results were replicated in the *Erika* in 1999 and the *Prestige* in 2002; Brian Binney, 'Protecting the Environment with Salvage Laws: Risks, Rewards, and the 1989 Salvage Convention' (1990) 65 *Washington Law Review* 639, 644; Edgar Gold, 'Marine Salvage: Towards a New Regime' (1989) 20 *Journal of Maritime Law and Commerce* 487, 488-490.

¹¹⁹ Michael Allen, 'The International Convention on Salvage and LOF 90' (1991) 22 *Journal of Maritime Law and Commerce* 119, 120.

¹²⁰ *International Convention on Salvage*, opened for signature 28 April 1989, 93 UKTS 8; Cm 3458 (entered into force 14 July 1996).

¹²¹ Richard Shaw, 'Places of Refuge: International Law in the Making' (2003) 9 *Journal of International Maritime Law* 159, 160.

¹²² Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 538-539; Tamberlin J in *United Salvage Pty Ltd. v Louis Dreyfus Armateurs SNC; The La Pampa* [2006] 163 FCR 151, 163.

for his expenses in an unsuccessful salvage operation.¹²³ This resulted in Article 14 which permits salvors to claim special compensation in cases where the salvor is unable to claim salvage reward for operations involving ships and cargo which threaten damage to the environment or where, in cases of successful salvage, the salvage reward was not sufficient to compensate the salvor for his expenses in doing so.

In cases of threatened damage to the environment, Article 14 of the *1989 Salvage Convention* provides for a safety net of special consideration for the salvors where no reward is earned or where any salvage reward earned is less than the special compensation assessed under Article 14.¹²⁴ This compensation covers the salvors expenses which include not only out of pocket expenses but also the cost of equipment and personnel reasonably used,¹²⁵ but does not include an element of profit.¹²⁶ This can be increased by up to 30% where the salvage operations 'has prevented or minimised damage to the environment' and can in some circumstances be increased by a tribunal to a maximum of 100% of the expenses.¹²⁷ Article 14 of the *1989 Salvage Convention* was considered by the House of Lords in *The Nagasaki Spirit*, where Lord Mustill held that the Article did not create a new basis for salvage but merely enhanced the benefits available from the performance of salvage operations. Lord Mustill concluded:

Paragraphs 1, 2 and 3 of article 14 all make it clear that the right to special compensation depends on the performance of 'salvage operations' which, as already seen, are defined by article 1(a) as operations to assist a vessel in distress. Thus, although article 14 is undoubtedly concerned to encourage professional salvors to keep vessels readily available, this is still for the purposes of salvage, for which the primary incentive remains a traditional salvage award. The only structural change in the scheme is that the incentive is now made more attractive by the possibility of obtaining new financial recognition for conferring a new type of incidental benefit. Important as it is, the remedy under article 14 is subordinate to the reward under article 13, and its functions should not be confused by giving it a character too closely akin to salvage.¹²⁸

Therefore, while the success requirement of salvage remained, the provision of special compensation without reward meant that the salvor could at least recover expenses. Even though there was no right to salvage reward in the absence of success, recovery of expenses

¹²³ The so called 'Montreal Compromise' see Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 538-540

¹²⁴ *International Convention on Salvage* Article 14(1); Geoffrey Brice, 'Salvage and the Marine Environment' (1995-1996) 70 *Tulane Law Review* 669, 672.

¹²⁵ *1989 Salvage Convention* Article 14(3).

¹²⁶ Justice Donnell Michael Ryan, 'Protection of the Environment : a new Focus in the Convention on Salvage 1989' (2009) 23 *Maritime Law Association of Australia and New Zealand Journal* 1, 8.

¹²⁷ *1989 Salvage Convention* Article 14(2).

¹²⁸ *Semco Salvage and Marine Pte Ltd v Lancer Navigation Co Ltd; The Nagasaki Spirit* (1997) AC 455, 468.

was an incentive for salvors to continue to provide services where there was a threat to the environment.¹²⁹

Special compensation can be denied, reduced or limited. Just as it is possible for salvors to be denied salvage reward through their negligence, so under Article 14(5) salvors can be denied all or part of the special compensation if the salvor is negligent and through that negligence fails to prevent or minimize damage to the environment. Special Compensation can also be limited under Article 14(4) to the amount by which it exceeds any salvage reward awarded under Article 13. It follows that where any salvage reward exceeds the special compensation, no further compensation will be paid under Article 14.

It is also important to note that any special compensation paid under Article 14 is payable solely by the shipowner and cannot be the subject of a maritime lien in the way that salvage reward payable under Article 13 is covered. A 1999 amendment to the *Arrest Convention, 1952*¹³⁰ remedies this by including special compensation in the definition of maritime claim. However, this amendment is not yet in force.

(5) Environmental Salvage?

The Comité Maritime International (CMI) has in recent years been discussing changes to the *1989 Salvage Convention*, most recently at its 2012 Conference in Beijing.

One of the main proposed changes, and the most contentious one, is to amend Article 14 to include a claim for environmental salvage. By this is meant that salvors should be given a separate environmental award over and above the salvage reward in Article 13 where the salvage is successful and there was a threat to the environment. Payment would be made, even if the salvor does not in fact prevent damage to the environment, as is presently required under Article 14, effectively avoiding the problems with liability salvage.¹³¹ This would differ from the current Article 13(1)(b) (which would be removed) in that it would not be capped by the value of the salvage fund available and would also differ from the special compensation in the current Article 14 since recovery for environmental salvage would not be limited to expenses.¹³²

¹²⁹ Geoffrey Brice, 'Salvage and the Marine Environment' (1995-1996) 70 *Tulane Law Review* 669, 677; in the United States, there is little use made of the benefits in Article 14 as, generally, pollution response comes from the US Coast Guard and there is little need for ad hoc assistance from salvors and the Coast Guard cannot claim salvage for performing its duties see Martin Davies, 'Whatever Happened to the Salvage Convention 1989?' (2008) 39 *Journal of Maritime Law and Commerce* 463, 472, 480-481.

¹³⁰ *Arrest of Seagoing Ships Convention 1952*, opened for signature 10 May 1952 439 UNTS 193, entered into force 24 February 1956

¹³¹ "Report of the International Working Group on Review of the Salvage Convention," in *Proceedings of the 40th Conference of the Comité Maritime International 14-19 October 2012, Beijing, China*

¹³² Ibid 382

Salvors have argued that much has changed since 1989, in particular the increasing emphasis being placed on protection of the environment. Under the current convention, there is little incentive for salvors to take decisive action in situations where there is a risk of pollution and other environmental damage, particularly where the salvage operation is unsuccessful. At best the salvors could claim a part of their expenses or, if successful, a part of the salvage reward, which could amount to very little. With a separate claim for environmental salvage, the salvor would at least be awarded all of the costs of the operation and, if successful in preventing damage to the environment, would receive a more generous reward than currently.¹³³ The quantum of the environmental award would not be open-ended but would be limited by a formula based on the tonnage of the vessel.¹³⁴ This award would be paid by the ship owner and could be lost by the salvor if the salvor is negligent and thereby fails to prevent or minimise damage to the environment.¹³⁵

The proposals were not accepted by the majority of national delegations to the CMI in Beijing.¹³⁶ However, discussions are continuing.

Part IV - The Salvage Operation

(1) Introduction

As mentioned in the introduction to this Chapter, the salvage industry was established around the mid-19th Century. By the late in the century, the industry was being structured by the introduction of salvage contracts the earliest of which was the Lloyds Open Form of Salvage Agreement (LOF) which was approved by the Committee of Lloyds in 1892. This contract has been regularly amended since 1892 to meet changes in the law and shipping practice and is still the most widely used contract in the salvage industry.¹³⁷

The benefit of an agreed form of contract is that in a salvage situation there is no time to be lost in the discussion of terms. In practice the vast majority of salvage operations and subsequent claims are governed by some form of contract. In the absence of contract the claimants are obliged to take any claim for salvage reward to court.¹³⁸

The ability to use contracts is recognised in both conventions. In the *1910 Brussels Convention*, Article 6 provides that remuneration and its distribution can be fixed by agreement, or, in the absence of agreement, by the court. In the *1989 Salvage Convention* Article 6 provides that in

¹³³ Ibid 368-372

¹³⁴ Ibid 382

¹³⁵ Ibid

¹³⁶ Ibid 372

¹³⁷ Graham Daines, *Lloyds Open Form and the Special Compensation P&I Clause (SCOPIC)* available at www.comitemaritimeinternational.org

¹³⁸ Martin Davies and Anthony Dickey, *Shipping Law* (Law Book, 3rd ed., 2004) 627-628

a salvage operation, the Convention can be displaced to the extent of the express or implied provisions of a contract. The master of a vessel can conclude salvage contracts on behalf of both the owner of the ship and the cargo.

(2) Authority to Bind

The provisions in both conventions concerning the ability to conclude contracts codify earlier cases on the authority of the master to bind other parties. The owner of a vessel or cargo could in most situations authorise salvage but in most cases this decision must be made by an intermediary, normally the master of the vessel, who may or may not be in a position to seek permission from the owner.¹³⁹ Questions about the necessity for consent, the extent of it and who can exercise it were always difficult ones.¹⁴⁰ In relation to salvage of a vessel, the body of case law has varied from one extreme that only the master in control of a vessel can authorise salvage services,¹⁴¹ to cases of what a prudent master would do and to the opposite extreme of a salvor assuming that where a ship is in danger that it would be unreasonable to have to seek authority from anyone or that consent is assumed unless specifically denied.¹⁴² In relation to cargo the same arguments applied but in addition the question of the authority of a master to bind the owners of the cargo, and thereby make them potentially liable for salvage reward, was more contentious since actual permission of the owners of cargo would have been more difficult to obtain than the consent of the owner of a vessel. In relation to cargo, the problem was solved by making the master of a vessel the agent of necessity of the cargo owners in situations where it is reasonably necessary to accept salvage services and not practicable to obtain the cargo owner's consent.¹⁴³

On the question of authority the *1910 Brussels Convention* only treats the question indirectly in Article 3. This provides that no party can receive remuneration for taking part in salvage operations if the services were reasonably and expressly refused. This is repeated in Article 19 of the *1989 Salvage Convention* but the Convention goes further in Article 6(2) to specifically give the master authority to conclude salvage contracts on behalf of the owner of the vessel and also gives authority to the owner and master of the vessel to conclude such contracts on behalf of the cargo owner.

(3) Annulment and Modification of Salvage Contracts

Balancing the relative bargaining powers of the master and salvor is also dealt with in case law and both conventions.

¹³⁹ Ibid 617

¹⁴⁰ Michael White, *Australian Maritime Law* (Federation Press, 2000) 251-252

¹⁴¹ *Fisher v The Oceanic Grandeur* (1972) 127 CLR 312

¹⁴² *Bingle v Ship Queen of England* (1862) 1 SCR (NSW) Eq 47

¹⁴³ *The Choko Star* [1990] 1 Lloyd's Rep 516

In emergency situations there is often little time for calm deliberation on the necessity for salvage and so the bargaining power of the salvor tends to be greater than the master or owner. In the absence of a standard salvage agreement like LOF, there would be a temptation on the part of the salvor to take advantage of the situation.¹⁴⁴ Under English contract law there was always a right in the aggrieved party to challenge the contract on the grounds that it was harsh and unconscionable.¹⁴⁵ This contractual right is codified in Article 7 of the *1910 Brussels Convention*. Under this Article, either party may request a court to annul or modify the conditions of a contract agreed to under the influence of danger. The court can annul or modify if it concludes that the conditions are not equitable or the remuneration agreed was too large or small in proportion to the services rendered or where either party was guilty of fraud or concealment. This is repeated, in part, in Article 7 of the *1989 Salvage Convention*, with the provisions relating to fraud and concealment being dealt with in Article 18 where such conduct deprives the salvor of all or part of the salvage reward.

(4) Lloyds Open Form of Salvage Agreement

Many of the problems discussed above are absent where a standard contract is used. For the purposes of this Chapter the Lloyds Open Form of Salvage Agreement (LOF), in its various versions, will be briefly examined as this is the most widely used agreement.¹⁴⁶ However, it should be borne in mind that other forms of agreement can and are used as well as instances where a standard form is not used and the contract is negotiated individually.

The first LOF was issued in 1892 and the current form is LOF 2011. LOF has been amended from time to time to reflect changing conditions. In particular LOF 80 was amended to bring in a safety net for salvors in much the same way as Article 14 of the *1989 Salvage Convention* now does. Amendments made in LOF 90 were made to reflect many of the changes in the *1989 Salvage Convention*. In addition extra clauses can be added, the most common of which is the Special Compensation P and I Club (SCOPIC) Clause.

While there have been many variations of LOF over the last century, this Chapter will only examine the current 2011 version and the current corresponding SCOPIC clause agreed to in 2011.

LOF 2011 is a simple document in form consisting of two pages of terms as well as a separate form of Lloyd's Standard Salvage and Arbitration Clauses which are incorporated into every

¹⁴⁴ Brian Binney, 'Protecting the Environment with Salvage Laws: Risks, Rewards, and the 1989 Salvage Convention' (1990) 65 *Washington Law Review* 639, 642.

¹⁴⁵ Martin Davies, "Whatever Happened to the Salvage Convention 1989?" (2008) 39/4 *Journal of Maritime Law and Commerce*, 463, 500.

¹⁴⁶ Michael Kerr, 'The International Convention on Salvage 1989 – How It Came To Be' (1990) 39 *International and Comparative Law Quarterly* 530, 535

LOF 2011 contract. Also, there are Procedural Rules which grant powers to Lloyds Arbitrators in addition to powers under the *Arbitration Act 1996*.

The primary objective of the formal terms of LOF 2011 is to establish essential terms of contract so that no time need be lost in emergencies. It is not intended to cover all aspects of the salvage operation, in particular, calculation of the salvage reward.¹⁴⁷ While the form of agreement clearly states that the Salvage Agreement is subject to the concept of 'No Cure – No Pay', the terms provide for arbitration in London to decide on salvage reward and special compensation in accordance with the Lloyds Standard Salvage and Arbitration Clauses and the Procedural Rules (paragraph I) and for the arbitration and agreement to be governed by English law (paragraph J).

The essential details of the subject of salvage are to be inserted into agreement. These details include the name of the salvage contractors, the property to be salvaged, any agreed place of safety, the agreed currency of the arbitral award and security, the date and place of the agreement and whether the SCOPIC clause is to be inserted (by deleting either of the words yes or no). The agreement is then signed by or on behalf of the contractors and the master of the vessel or any other person signing on or behalf of the property.

The basic duties of the contractor are "to use their best endeavours" to save the property and take it to a place of safety. If this place is not agreed then the contractor will decide the place of safety (paragraph A). The contractor must also "use their best endeavours to prevent or minimise damage to the environment" (paragraph B). If the word 'no' is not deleted in relation to incorporation of the SCOPIC clause, then the clause is not incorporated but if the word "no" is deleted this will indicate intention to incorporate but will not necessarily constitute the written notice of incorporation which is required under clause 2 of the SCOPIC clause (paragraph C).

Once the agreement is made, paragraph D then provides that, subject to the *1989 Salvage Convention* as incorporated into English law, any remuneration will be based on the principle of 'no cure-no pay' and will not be diminished by any payment of special compensation or under the SCOPIC clause.

The duties of the property owners are set out in paragraph F and consist of the duty to allow the contractors to make reasonable use of the vessel's machinery gear and equipment free of charge; to provide all relevant information the contractors reasonably require without delay; to cooperate with the contractors in obtaining entry into a place of safety either as agreed or as determined by the contractor. Also as soon as possible after the signing of the agreement, the

owners of the vessel must notify the owners of the other property who must provide security promptly on successful conclusion of the salvage operations (Important Notice 1).

The agreement is concluded where the property is in safe condition in a place of safety (paragraph H) but can be terminated earlier by either party in writing if there is no longer any reasonable prospect of a useful result in accordance with Article 12 or 13 of the *1989 Salvage Convention* (paragraph G).

Finally, the master or other person signing the agreement on behalf of the respective owners bind the owners to due performance of their obligations under the agreement (paragraph K).

The mechanics of the arbitration are set out fully in the Lloyd's Standard Salvage and Arbitration Clauses and the Procedural Rules which are incorporated into the agreement. These clauses and rules will not be separately examined in this Chapter but should be fully understood by all parties to an arbitration.

(5) SCOPIC Clause

The salvage industry expressed dissatisfaction with the way in which Article 14 special compensation operated under the *1989 Salvage Convention*. These problems included the lack of certainty as to when the provisions of Article 14 would apply, overall control when they apply and the difficulty and costs involved with determining the amount of the special compensation. The International Salvage Union (ISU) proposed that where LOF was used a new clause should be inserted which replaced Article 14 with a more workable solution. This was developed and agreed in 1999 and known as 'Special Compensation P and I Club Clause' (SCOPIC).

The main provisions of the SCOPIC clause are:

- (1) Where invoked, the clause replaces the method of assessment of special compensation in Article 14(1)-14(4) (sub-clause 1);
- (2) The contractor can invoke the clause and insert it into the LOF by giving written notice to the owners of the vessel (sub-clause 2);
- (3) The clause can be invoked in any circumstances regardless of whether or not there is a 'threat to the environment' (which is required under Article 14);
- (4) Remuneration under the clause commences only after written notice of inclusion is given and any services rendered prior to written notice are payable not under Article 14 but only under Article 13;

- (5) Security must be given to the contractor within two days of invoking the clause (sub-clause 3). Failure to do so will entitle the contractor to withdraw from the clause and revert to claiming special compensation under Article 14 (sub-clause 4);
- (6) Remuneration is based on time and materials with a bonus in all cases of 25% (sub-clause 5);
- (7) Salvage services not covered by the clause continue to be assessed under Article 13 and SCOPIC remuneration would be paid only where and to the extent where it exceeds the Article 13 salvage reward (sub-clause 6);
- (8) If the Article 13 award exceeded the SCOPIC remuneration, the Article 13 award is to be reduced by 25% of the difference between the two (sub-clause 7);
- (9) The contractor can terminate the services under the clause on written notice if he reasonably anticipates that the costs will exceed the value of the property being salvaged and the SCOPIC remuneration and the owner can terminate at any time on giving five days' notice (sub-clause 9);
- (10) The duties of the contractor are the same as in the main LOF (sub-clause 10).

Part V – Conclusion

The law of salvage has had a long and, at times, complicated history. The codification of the law in the two main conventions, the *1910 Brussels Convention* and the *1989 Salvage Convention*, settled many of the outstanding issues but also created more, especially for the salvage industry.

The *1989 Salvage Convention*, born as it was out of a crisis situation for the salvage industry, attempted to resolve and provide for new trends in the law, particularly in protection of the marine environment. Salvors were concerned that the 'no cure – no pay' rule was creating a situation where it was not profitable for them to seek to salvage vessels with cargoes that had the potential to severely damage the environment. This was particularly true where coastal States were destroying the vessel and cargo, as in the *Torrey Canyon*, or refusing to grant a place of refuge to vessels that had the potential to pollute their coastlines and internal waters.

While attempts were made in Articles 13(b) and 14 of the *1989 Salvage Convention* to address the concerns of the salvage industry and to make it financially attractive for salvors to salvage ships with dangerous cargoes and to protect the environment, these soon proved to be inadequate. It was the industry itself which attempted to resolve the inadequacies of the *1989 Salvage Convention* through the LOF and the SCOPIC clause. While these documents are more flexible and more quickly adaptable to new circumstances than the cumbersome nature

of international conventions, it is still the case that they detract from the need for an international remedy for an international problem particularly in the protection of the environment.

Proposals for enhancing the fund from which salvage reward can be claimed, such as liability salvage and, more recently, environmental salvage, have not met with much international support but do reflect the fact that it is important for solutions to problems with international conventions dealing with international problems should be dealt with on an international level. Industry initiatives while useful in the practical aspects of the salvage operations, detract from the need for an international approach.

The law of salvage will continue to evolve and change since it is now intimately connected with the protection of the environment. Environmental pressures are only going to increase and it is necessary that the law of salvage keeps pace.

8. INSURANCE

1. Introduction to insurance

1.1 Insurance operates to transfer risks from one entity to another in order to mitigate the financial consequences of things that go wrong. The definition of risks that can be transferred is critical to how well the entity's balance sheet and broader interests are protected. Insurers set terms and conditions in relation to the risks that are 'carried', including charging a 'premium' for the risk transfer. An entity who buys insurance protection is typically known as an 'insured'.

The term 'underwriter' is often used to mean 'insurer', although it refers specifically to someone who is involved in setting the terms for the risk transfer.

1.2 There are different insurance options available globally and locally to port companies. These include:

1.2.1 *International/global Insurers*

These are multinational corporations with offices in many locations around the world which may have annual turnover of many billions of dollars. They are usually structured as shareholder companies, seeking to generate profits through the insurance cycle to fund dividends. These global companies are often multi-line insurers, meaning they write insurance business for a wide variety of risks, such as household, motor and life insurance, as well as ports and terminals.

1.2.2 *Mutual Insurers*

These are marine industry specialists whose Board of Directors are drawn from the port or shipping industry. They are non-profit making, aiming to match claims and other expenditure with premium and investment income, while maintaining appropriate levels of capital solvency.

1.2.3 *Local Insurers*

Local markets can be multi-line, operating in the same way as international markets, but only writing business in one country or on a limited regional basis.

1.2.4 *Government/state insurance*

Some governments have an insurance offering which is available for state-owned assets and enterprises, such as schools, hospitals and port authorities. These insurance arrangements are often backed by private reinsurers.

1.2.5 *Captives*

Captives are wholly owned by the insured and are run as independent insurance companies, in that their administration is separate to that of the owning business. They buy reinsurance

and maintain their own policy documents with deductibles, policy limits and wordings. Captives are usually set up as a vehicle for tax minimisation.

1.2.6 Self insurance

Where a company does not buy insurance or takes a very large retention of risk itself it is regarded as self-insurance.

1.3 Every insurance entity will carry out a risk assessment encompassing the activities and responsibilities of any given port, and its legal/jurisdictional exposure. This will be used to determine and negotiate the terms under which the risks may be transferred to the insurer, including special provisions, financial amounts that may remain the responsibility of the port (such as deductibles, excesses and limits) and the premium cost.

2. Roles & responsibilities in the insurance market

Insurance is a part of the financial services industry. It involves a relatively complex set of financial instruments and transactions. and is what sits behind a policy document issued to a port.

2.1 Brokers

It is common in commercial insurance for brokers to act as intermediaries between buyers of insurance (the insureds) and underwriters (the insurers). Under most laws, the brokers act for the insureds and owe a duty of care to them to assist in the identification of the risks that need to be insured and the most appropriate insurer(s) to provide effective cover.

As intermediaries, brokers do not carry the insurance risk themselves. They are likely to be involved in collecting premium, passing it on to the insurer on behalf of the insured. When there is a claim the broker may arrange payment to the insured from the underwriter of the policy.

Brokers can range from multinational broking houses with offices in many countries to local or suburban brokers. There are also specialist marine brokers, including brokers which deal with particularly technical risks, such as P&I (protection and indemnity), Hull and Machinery, and ports and terminals.

2.1.1 Broker activities may be divided in the following ways:

- *Placing*: Placing brokers negotiate client renewals rather than providing day-to-day services to clients. They can also be instructed to develop alternative insurance programmes or conditions.

- *Service*: Service brokers deal with underwriting and claims queries on behalf of their clients. If sufficiently specialised in this area they can ~~They sometimes~~ provide claim statistics and analysis
- *Claims*: Claims brokers handle claims on behalf of the insured. This may include giving claims advice, negotiating claim settlements and liaising with underwriters to obtain funds to pay the claim.

2.1.2 In a broad sense, brokers can be described as either 'wholesale' or 'retail'. Wholesale brokers operate in specialist insurance markets. They receive instructions from retail brokers who deal directly with the insured. The London insurance market has a large wholesale element, whereas most other insurance markets are not of sufficient size or specialism to warrant it. Retail brokers are able to access national and international insurance markets, but may prefer to rely on the specialism offered by wholesale brokers.

2.1.3 Brokers derive income from fees and/or commission based on a percentage of premium. Fees are usually paid by the insured, whereas commission is paid by the insurer. Legislation regulating what the broker has to declare to the insured as commission and/or fees varies between different jurisdictions.

2.1.4 Brokers may be asked to tender for their services, which can involve the use of insurance consultants or internal insurance expertise. The tendering process can be by blind tender or sealed bid, and may involve underwriter tendering at the same time.

2.2 Fronting

In a number of jurisdictions, obtaining an underwriting licence is a prerequisite to writing insurance business. Where no local ports and terminals specialist insurance is available, a locally licensed underwriter may agree to issue a policy document, collect premium and pay claims, and be reinsured by an overseas specialist insurer. The local insurer is known as a fronting insurer.

2.3 Coinsurance & Reinsurance

In much the same way as an insured entity transfers risk to an insurer, so insurance companies will typically share the risk with other insurers in order to protect its own balance sheet and provide greater financial security to insureds.

There are various ways in which this can be done, whether by sharing specific parts of an individual risk ('facultative reinsurance'), sharing part of all aspects of the risk ('coinsurance') or laying off risks above certain retentions ('reinsurance'). Such arrangements can be extremely complex.

2.4 Insurance Regulators & Supervisors

Governmental authorities are involved in overseeing the insurance industry in order to ensure that buyers of insurance are protected, avoid commercial and financial impropriety and ensure that insurers are sufficiently solvent to pay claims. Different jurisdictions have different approaches to the regulation of financial services and varying requirements with regard to solvency and transparency.

There is increasing convergence for insurance supervision, under the auspices of the International Association of Insurance Supervisors (IAIS), which covers more than 200 jurisdictions in nearly 140 countries. IAIS exists to:

- Promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders; and to
- Contribute to global financial stability.

2.5 Rating agencies

Rating agencies such as Standard & Poor's, AM Best or Moody's are independent companies which assess financial service business, including insurers, for their solvency and operational systems, and provide a rating based on their assessment. They provide credit assessment on entities (business, companies, governments) and in the context of insurance provide a benchmark for insurance buyers of the financial strength of insurance companies.

3. Risk exposure

3.1 Port models

Port services can be structured in a number of ways, as below. Each model will have a differing risk profile reflecting the nature of obligations to port users, whether customers (such as ship owners), third party contractors (such as hauliers or maintenance engineers) or the general public.

3.1.1 Landlord ports

Ports which own the freehold of the land on which the port is built, but lease out their facilities to operational entities like stevedoring companies, are called Landlord Ports. These ports will often be responsible for marine services such as port safety (harbourmaster, pilotage, channel marking) and channel depths. As a result a landlord port is exposed to marine operations risk that can lead to occasional but high value damage claims.

3.1.2 Tool ports

Pure Landlord ports will typically provide a licence or concession to investors to construct the necessary infrastructure, such as road/rail links, berths, yard area and general utilities (cabling, trunking, drainage et cetera) and/or superstructure, being warehouses, sub-stations and cranes. In other models, some or this entire infrastructure will be set in place and maintained by the port authority. Where this is the case, the port may be known as a 'Tool port'.

3.1.3 *Service ports*

It is possible that a port authority chooses to provide broader operational services to customers, most typically stevedoring. Port companies that stevedore are called Service Ports.

3.2 **Contractual obligations**

The way in which a port is structured legally will fundamentally impact the relationship and obligations between any stakeholders. There will be a range of contracts or similar enforcing legal documents that set out the way in which assets are handled or transferred, and the obligations of each stakeholder.

The stakeholders need to gain a thorough understanding of the way in which these obligations arise and are handled, particularly in relation to any warranties, in order to ensure that an insurer appropriately assesses the risks and formulates terms that sufficiently protect the port and terminal entities.

3.3 **Policy terms**

3.3.1 *Limits*: A policy limit is the pre-agreed maximum to which payment is capped under an insurance policy.

3.3.2 *Deductibles/excesses*: are the parts of a claim which fall below the minimum amount covered under the policy.

3.3.3 *Insureds*: The beneficiaries under the policy are generally called insureds or assureds.

3.3.4 *Rates/premiums*: Rating is the financial benchmark set by the underwriter based on the type of risk presented. Premiums are calculated based on turnover or cargo throughput of a port using the rating, in conjunction with turnover or throughput.

3.4 **Insurance coverages**

Insurers segregate different exposures into 'products' or 'lines of business', partly to maintain better understanding of similar risks but also to comply with regulatory requirements. The main classes of business that are relevant to ports and terminals are set out below.

3.4.1 *Liability cover*

The precise scope of this type of cover will differ. The main aspects covered will be:

- *Customer liabilities*: this applies to damage to cargoes and customer ships, frequently arising under contract.
- *Third-party liabilities*: this applies to damage to other people's property and bodily injuries, usually in tort or under statute.
- *Errors and omissions*: might include such things as incorrect hydrographic survey services to another port
- *Fines and duty*: may be incurred for such things as occupational health and safety prosecutions
- *Costs*: investigation and defence costs relating to resolving a claim

3.4.2 *Property cover*

Property cover applies to 'first-party' losses to asset values. This encompasses real property, for example wharfs, jetties and buildings, and handling equipment, such as quay cranes and forklifts.

Handling equipment is generally insured on the basis of market value or replacement cost. It is important for declared values to be kept up-to-date to avoid under or over-insurance.

3.4.3 *Business interruption*

Business interruption cover is insurance for loss of profit or increased costs of working due to an accident. The extent of cover purchased will vary depending on the size of the operation and the risk exposures generated by the port or terminal.

3.4.4 *Directors and officers*

Directors and officers cover is for claims against the port or terminal's board for board negligence.

3.4.5 *P&I, Hull & Machinery*

Ports may have or be responsible for port craft such as tugs, work boats and pilot boats. P & I insurance provides cover for damage done by those craft to others, for example personal injury caused to third parties. This is liability insurance.

Hull & Machinery cover is first-party property insurance for the declared value of those craft.

3.4.6 *Construction cover*

Construction work (other than incidental maintenance) generally requires separate insurance under the terms of the construction contract from specialist construction insurance markets. This includes first-party property insurance during the construction project as well as liability. The contractor should have its own insurance cover, which is where most of the risk will lie.

3.4.7 *Workers compensation/Employers' Liability*

Workers compensation insurance for employees is compulsory in a number of jurisdictions. Some jurisdictions provide compensation through state-run schemes. These can include an obligation to rehabilitate injured workers.

3.4.8 Group and Global programs

While ports generally are separate entities based on specific geographic boundaries, there are instances where their activities are coordinated on a broader basis, either within a country or by reason of ownership structures. In such circumstances, port and terminal operators may seek to place their liability and property cover in programs which cover their port and terminal operations, either in part or entirely.

4. Specialist topics: operation of liability insurance

The variety and complexity of port and terminal models and operations cannot easily be summarised. The following points are raised as issues that may need to be considered, but are not intended to be exhaustive.

4.1 Channel depths

Claims can arise where misrepresentation about water depths occurs which leads to ships grounding/touching channel bottom causing damage to the ship. These claims can involve significant amounts.

4.2 Navigational aids

Exposure to liability claims can arise when ships ground due to insufficient channel marking. Claims for personal injuries often occur where a pleasure craft hits navigational aid infrastructure.

4.3 Marinas

Due to the significant throughput of the general public, marina owners/operators will be particularly vulnerable to slip and trip (personal injury) liability claims.

4.4 Anchorages

Management of anchorages may expose ports to claims if damage to a ship is shown to arise from or be exacerbated by deficient communication between a port and ship.

4.5 VTS (Vessel Traffic Services)

Ports can be exposed to liability as a result of problems in the communication between port control and ships.

4.6 Place of refuge

Where a ship is in distress there may be general obligations, or a specific order from an authority, placed on a port to provide services. There are particular risks that arise in these circumstances, such as the ship sinking or blocking a berth.

Poor handling of a ship in distress can expose a port's general liability policy, whereas a blocked berth could give rise of a business interruption claim.

4.7 Pilotage and tugs

Pilots in almost all jurisdictions enjoy statutory immunity. In effect the pilot becomes part of the ship's bridge team whilst on board the ship. However, if the pilot is an employee of the port authority it may remain vicariously liable for any negligence on the part of the pilot.

Efforts have been made in litigation to circumvent the pilot's statutory immunity. If successful this would also lead to a claim under the port's liability insurance.

4.8 ISPS and port security

The International Ship and Port Facility Security Code (ISPS) has had the effect of reducing unauthorised third-party access to ports. Apart from improving general security, improved access controls have also reduced the risk exposure of port authorities to personal injury claims.

4.9 Cyber risks

All entities are increasingly reliant on computer technology and connectivity. It is important to maintain appropriate safeguards in relation to systems, networks and personnel. Ports and terminals should identify the scope of responsibilities they have to the broad port community and mitigate the specific risks that might arise.

4.10 Dredging

Dredging may be a common activity or more specifically related to a development project. It will be necessary to consider a variety of risk exposures that may arise. The dredge itself will be covered by P&I for marine liability exposures, such as a pollution event caused by the dredge. Specialist cover can be obtained for liability risks for the operation of the dredging tool itself. Capital work is rarely done by the port itself. In general this task with the sub-contracted obligations passed on the dredging contractor.

There may also be exposure in relation to the design of channel or bunded area, if done negligently by the port. Any resultant claim may be covered by port liability cover.

4.11 Environmental risks

Port authorities will need to consider many environmental risks, most of which will be set out in their particular jurisdiction. In some instances, ports may be the nominated control agency for environmental emergency response or clean-up, for example in relation to a bunker spillage. These specific activities may also give rise to exposure, for example if the emergency response is done poorly (too slowly or insufficient deployment).

4.12 NAABSA (Not Always Afloat But Safely Aground)

In some locations, particularly tidal river based ports, the berth may only be accessed whilst the water levels are high. When the level lowers, ships at the berth may rest on the riverbed. In order to avoid unwarranted and expensive claims for damage to ships' bottoms, it is important to maintain the condition of the riverbed and carry out regular surveys.

5. Interface to Maritime Conventions

Ports and terminals will be familiar that there are a large number of national and international laws and regulations applicable to their activities. Inevitably, these will change over time. The obligations arising will usually be insured within a general liability cover. Below is a small selection of laws that are not directly applicable to ports and terminals, but may have impact.

5.1 Convention for the Limitation of Liability for Marine Claims (LLMC)

The LLMC convention allows shipowners to limit their liability based on the GRT (gross registered tonnage) of an individual ship.

If a ship damages port infrastructure a large claim for recovery against the shipowner by the port may be limited, meaning that a full recovery is not achieved. This exposes the port's property policy to unrecovered losses.

If damage has been caused primarily by a ship, limitation of liability by the shipowner can expose the port to being brought in to litigation for contributory negligence to recover the shortfall of a claim against the shipowner. This will expose a port's liability policy.

5.2 Bunker Convention

A number of countries have adopted this convention which requires shipowners to maintain compulsory insurance and allows claims to be brought directly against the shipowners insurer. However, any claims are limited to the amount of the LLMC convention (see above).

5.3 Wreck removal

Shipowners are under an obligation to deal with and remove wrecks. In most jurisdictions, shipowners must have P&I cover to underwrite the cost of wreck removal. If a shipowner does

not undertake wreck removal because, for example, they are no longer trading, most port liability policies provide coverage for the cost of wreck removal.

5.4 Hague Visby (and similar carriage of cargo regimes)

Hague Visby calculates the shipowner's liability for damage to cargo in relation to the weight of the cargo or the number of packages under international law. In many jurisdictions, the usual contractual/bill of lading conditions extend certain protection and limits to ports and terminals where they are carrying out stevedoring activities. In the event that a cargo claim is maintained directly against the port/terminal, it may be that the potential recovery against the shipowner will be limited by the maritime conventions.

6. Conclusion

Insurance in broad terms is a fixed cost. However the amount of premium that a port pays can vary according to the port's appetite to retain risk itself. For example a higher insurance excess on claims, resulting in a greater retention by the insured of claim payments when a loss arises, all other things being equal, will usually lead to lower premiums

Also risk profile, which is a function of the geographical features of a port and its approaches, the level of commercial activity through the port, its financial resources and capital invested and the quality and ability of its management, will be reflected in the premium required.

Insurance is not a magic pudding that is replenished freely each time after consumption, It is part of the financial services industry along with banking and finance. It operates as a financial instrument that transfers risk from a port to the insurance company, for reward.

Insurance assists with cash flow, and avoids port's having to fund catastrophically large payments that would otherwise put pressure on its viability. It provides claims handling assistance and expertise and can help manage port senior management's reputations where knowledgeable and expert insurers are retained. And finally a port's customer can require it. In short, it is sensible for ports to think about risk strategies in combination with insurance strategies.

VIII ADVICES, PRESENTATIONS, OPINIONS

1. APPLICABILITY OF SOLAS CONVENTION TO PORTS AND SHORE BASED TERMINALS

(a) Background

The Safety of Life at Sea Convention (SOLAS Convention) in its successive forms is generally regarded as the most important of all international treaties concerning the safety of merchant ships. The current SOLAS Convention (1974 as amended) includes Articles setting out general obligations, amendment procedure and so on, followed by an Annex divided into 12 Chapters. The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety, while on international voyages. These standards are set out in the Regulations contained in the Annex to SOLAS. The exceptions to these regulations (except for Chapter V - Safety of navigation which applies to all ships on international voyages), are set out in Regulation 3 which excludes the following from the requirements of SOLAS- ships of war and troopships; cargo ships of less than 500 gross tonnage; ships not propelled by mechanical means; wooden ships of primitive build; pleasure yachts not engaged in trade; fishing vessels.

Included in the 12 chapters of the Annex two are relevant to current discussions:

- Chapter XI-2 which enshrines the International Ship and Port Facilities Security Code (ISPS Code).
- Chapter 6 which 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).

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 under port State control.

(b) Does SOLAS apply to port and port facilities?

(1) Rules of Interpretation

In relation to interpretation of conventions such as SOLAS, Article 31(1) of the Vienna Convention on the Law of Treaties, 1969, clearly states that

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.

The first thing to note is that both the wording of SOLAS and the Annex specifically refer to safety of life at sea. This is clear not only from the wording of the Convention itself but also from the first desideratum of the Convention which states:

BEING DESIROUS of promoting safety of life at sea by establishing in a common agreement uniform principles and rules directed thereto,

Second, SOLAS deals with safety of life at sea on ships. Article II of the Convention describes the applicability of the Convention:

Article II

Application

The present Convention shall apply to ships entitled to fly the flag of States the Governments of which are Contracting Governments.

Similarly, all chapters of the Annex, except for Chapter XI-2 (as to which – see below), concern themselves only with ships and their equipment.

The clear conclusion from the restriction to ships is that SOLAS was not intended to apply to anything other than ships and their equipment.

In light of Article 31(1) of the Vienna Convention, it can be strongly argued that SOLAS does not apply to ports and port facilities since there is no ambiguity as to the application of SOLAS and the object and purpose of SOLAS is the protection of life at sea. SOLAS must therefore be interpreted in accordance with its ordinary meaning to apply only to specific ships while on international voyages since this is the clear wording of the application of the Convention and such an interpretation is consistent with the object and purpose of it.

(2) Chapter XI-2 Exception

The one exception to this otherwise solid argument (and in my view an aberration) is the importation of the International Ship and Port Facility Security Code (ISPS Code) into SOLAS as Chapter XI-2. Any argument against using SOLAS for any other regulatory function in a port must squarely address this exception.

The ISPS Code is a comprehensive set of measures to enhance the security of ships and port facilities, developed in response to the perceived threats to ships and port facilities in the wake of the 9/11 attacks in the United States. In essence, the Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case. The purpose of the Code is to provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. The objectives are to be achieved by the designation of appropriate security officers/personnel on each ship, in each port facility and in each shipping company to prepare and to put into effect the security plans that will be approved for each ship and port facility.

The essential point for the current argument is that the ISPS Code applies not only to ships but also to port facilities. As the ISPS Code applies to both ships and shore facilities this is the first time SOLAS has been used in relation to ports and port facilities. From the point of view of security on board ships there can be no argument that this is a proper application of the SOLAS Convention. On the above analysis, the use of SOLAS to port facilities must be questionable.

The main problem with applying the ISPS Code, and thereby applying SOLAS, to port facilities is that it could be used as a precedent to ground an argument that other regulations, such as weighing of containers, could be applied to ports and port facilities.

For various reasons this may not be the case. In other words I believe that the use of the ISPS Code must be viewed as a 'one-off'.

The main question about why SOLAS was used to introduce the ISPS Code is why, if there is a convention dealing with measures to protect ships, ship's crews, passengers and cargoes from unlawful acts at sea (SUA) – clearly matters of security – was an amendment patently to do with enhancing security introduced through a convention that obviously deals with safety at sea (SOLAS)?

The answer is fairly pragmatic– in order that the provisions could be implemented quickly. Unlike most conventions which contain a long procedure for amendment SOLAS, 1974 was one of the first to include the 'Tacit Amendment Procedure' where amendments would enter into force on a specific date contained in the amendment, unless a certain specified number of States objected to the provisions. In other words, silence would be deemed to be acceptance. No further action would be required if a State approved of the new measures. The simple answer to the question is SOLAS contains a 'tacit acceptance procedure' whereas the SUA Convention does not. Therefore the proponents of these new security measures felt that SOLAS had to be the vehicle to implement them as soon as possible. Furthermore, the existing

SUA Convention deals with issues that were raised by the *Achille Lauro* hijacking and deals with international cooperation in bringing terrorists to justice, such as expediting extradition, whereas the new SOLAS provisions incorporate the International Ship and Port Security (ISPS) Code and are primarily in response to the events that took place on 11 September 2001. Thus, at the Diplomatic Conference held in December 2002, amendments were made to the existing provisions of SOLAS, accelerating the implementation of the requirement to fit Automatic Identification Systems and adopt new Regulations in Chapter XI-1 of SOLAS 1974 covering marking of the Ship's Identification Number and the carriage of a Continuous Synopsis Record. The provisions of Chapter XI-2 of SOLAS 1974 and the ISPS Code apply to ships and to port facilities. The extension of SOLAS to cover port facilities was agreed on the basis that SOLAS 1974 offered the speediest means of ensuring the necessary measures entered into force and were given effect quickly. However, it was further agreed that the provisions relating to port facilities should relate solely to the ship/port interface.

The next question must be - what is meant by ship/port interface? Here the answer is not as clear.

The ISPS Code itself simply defines it as

the interactions that occur when a ship is directly and immediately affected by actions involving the movement of persons, goods or the provisions of port services to or from the ship.

A similar definition was given by the European Commission to the Council in COM/2003/0229 final as follows:

the interaction that takes place when a ship is affected directly and immediately by activities that involve the movement of people or merchandise or provision of port services to the ship or from this one.

This definition comes to consider how and when we can talk about a ship/port interface, but it does not facilitate the determination of the moment or physical distance that in operational application of the security is always necessary to establish, and even more when the Code establishes, in point 5 of the introduction of the Annex, that "... the provisions relating to port facilities should relate solely to the ship/port interface".

The logical explanation would be that it starts from the figure of the ship as a primary target around which the whole Code is structured, and that the dividing line marking the limit is given by what represents the first line of protection control. While all Port Facility Security Plans are individually prepared, most, if not all, define security zones around facilities which are then subject to increased degrees of security control. It could be argued that it is only at this point that ISPS/SOLAS impinges on the management of port facilities.

The argument against the use of Chapter XI-2 as a precedent for any other use of SOLAS in ports and port facilities is that it is limited to the physical security of the port against terrorist activities, it was inserted into SOLAS for the practical reason that SOLAS had a 'tacit acceptance procedure' and could thereby be implemented quickly and that it is strictly limited to the ship/port interface.

(c) Chapter 6 Responsibilities of Shipper – Another Exception?

Chapter 6 of SOLAS at first reading could imply that the reach of SOLAS is greater than it appears.

Under Regulation 2 of Chapter 6,

- 1** The shipper shall provide the master or his representative with appropriate information on the cargo sufficiently in advance of loading to enable the precautions which may be necessary for proper stowage and safe carriage of the cargo to be put into effect. Such information† shall be confirmed in writing‡ and by appropriate shipping documents prior to loading the cargo on the ship.
- 2** The cargo information shall include:
In the case of general cargo, and of cargo carried in cargo units, a general description of the cargo, the gross mass of the cargo or of the cargo units, and any relevant special properties of the cargo. For the purpose of this regulation the cargo information required in sub-chapter 1.9 of the Code of Safe Practice for Cargo Stowage and Securing, adopted by the Organization by resolution A.714(17), as may be amended, shall be provided.

As the shipper is not strictly within the ambit of SOLAS as described above, some connection must be made. The connection is the requirement for the master to have this information to make the ship seaworthy. This is not only an obligation under SOLAS but failure to make the ship seaworthy renders the master liable under all the current rules on carriage of goods (Hague, Hague/Visby, Hamburg and Rotterdam). The provision of this information could not be enforced under SOLAS and, indeed, this appears to be the basis of the problem with overweight containers. The proposal of WSC for a regulation to prohibit the master from loading an overweight container would fall within the same justification of providing a seaworthy ship. However, it is doubtful if SOLAS could be used as a basis for a regulation prohibiting the port or port operator from supplying an overweight container for loading. Grant Koch cites the OSHA regulations that prohibit a marine terminal operator from hoisting a container that does not have a clear indication of the gross weight of the container. What Grant does not say is the basis of

the regulation – is it made under SOLAS or is it based on local OH&S or other law. I suspect the latter as, for the reasons given earlier, I cannot see what jurisdiction Chapter 6 of SOLAS would give to regulate the activities of stevedores or other marine terminal operators.

Conclusions

SOLAS does not apply to ports and port facilities since there is no ambiguity as to the application of SOLAS and the object and purpose of SOLAS is the protection of life at sea. In accordance with Article 31(2) of the Vienna Convention on the Law of Treaties, SOLAS must therefore be interpreted in accordance with its ordinary meaning to apply only to specific ships while on international voyages since this is the clear wording of the application of the Convention and such an interpretation is consistent with the object and purpose of it.

In relation to the application of Chapter XI-2 to port facilities, it can be strongly argued that the use of SOLAS to implement the ISPS Code for port facilities was unique for the reasons given above and cannot legitimately be used as a precedent for further use of SOLAS to regulate ports and port facilities.

While Chapter 6 of SOLAS appears to extend the reach of SOLAS to shippers, failure to provide the information including a weight certificate, would be unenforceable without further national regulation such as OSHA regulations in the United States. Any proposal to regulate through the provisions of a SOLAS amendment the activities of stevedores by requiring them not to load a container for which no weight certificate is given would not be a proper use of SOLAS.

The application of SOLAS to ports and port facilities for any other reason, such as the requirement of weighing of containers in the port prior to loading on the ship does not fit with the proper interpretation of SOLAS under international law and the 'tacit acceptance procedure' of SOLAS should not again be abused for such a purpose.

Can SOLAS be used to impose an obligation on Ports to weigh Containers before Loading?

Although not specifically asked to advise on this question, in view of the context of the advice on the application of SOLAS, I also provide some short specific comments (other than the argument that SOLAS Chapter 6 should not apply to port based facilities) why the proposed amendment to SOLAS should not impose an obligation, and therefore a liability, on ports to weigh containers before they are loaded on ships in their ports.

The port, as an integral part of the transport chain, provides services to shippers and carriers either by law or under voluntary contract. With performance of any of these obligations, the port has a liability either under the law of negligence or contract. The fewer legal obligations (through national implementation of SOLAS) and the more contractual rights and obligations is the better position for a port to be in. For example, there is no reason why the ports cannot provide

weighing facilities and offer them to shippers and/or carriers for a fee provided they are under no legal obligation to provide these services.

This raises the question of the relative responsibilities and attendant liabilities that the shipper, carrier and port have in relation to the proper weighing of containers.

The primary responsibility rests with the shipper. It is the shipper who stuffs the container or arranges for it to be done and delivers it to the port for loading on the ship. The shipper therefore is aware or should be aware of the contents of the container and its weight. As to whether a shipper must weigh and provide a certificate of weight depends on the national law of the place of shipment. A port operator can refuse to accept or load a container for which a weight certificate is not provided but this will depend on national laws. This cannot be achieved simply by an amendment to SOLAS.

The carrier has a responsibility to provide a seaworthy ship under both SOLAS and other rules of carriage of goods. An amendment of SOLAS which prohibits a carrier from receiving a container for which there was no weight certificate would be a legitimate use of SOLAS as it would be directly relevant to safety at sea.

The port operator appears to have no responsibility or liability under SOLAS for overweight containers. Again how the port treats overweight containers is a matter for national law. They could regulate to prohibit the loading of an overweight container as in the United States. Further they could refuse to allow containers without weight certificates access to the port as is mooted by Sydney Ports Corporation and Port of Los Angeles or, alternatively offer a weighing service from a commercial, not a legal, viewpoint. The essential point I am making is that ports have a number of alternatives that are outside the scope of SOLAS but are allowable and enforceable under national law. Instead of pointlessly pushing for a questionable amendment to SOLAS to place the responsibility for weighing containers onto port operators, supporting the initiatives of IAPH and WSC for voluntary assumption of the role by the ports on a commercial basis and encouraging national governments to prohibit the dealing with overweight containers would be more beneficial.