

**THE RELATIONSHIP BETWEEN UNITED NATIONS
CONVENTION ON THE LAW OF THE SEA AND THE IMO
CONVENTIONS**

Anna Mihneva - Natova
The United Nations and The Nippon Foundation of Japan Fellow 2005

CONTENTS

Acknowledgements.....	3
Disclaimer.....	4
Abbreviations.....	5
INTRODUCTION	6
I. Background and goals of the negotiating process of the Law of the Sea Convention.....	6
II. The system of the Conventions adopted by IMO.....	8
III. The relationship between the standard setting in the Law of the Sea Convention and the standard setting in maritime safety Conventions of IMO.....	10
IV. The relationship between environmental provisions of the Law of the Sea Convention and IMO Marine Pollution Conventions	14
- Comprehensive framework.....	15
- Pollution from vessels.....	15
- Pollution by dumping	17
- International co-operation	18
- Enforcement.....	20
V. The relevant articles of the Law of the Sea Convention regulating liability for pollution damage and the provisions of the Liability Conventions of IMO	22
VI. The relevant provisions of the Law of the Sea Convention and the provisions of the IMO Conventions intended to encourage and facilitate maritime transport	24
- Duty to render assistance	24
- Search and rescue services	25
- Illicit acts	26
- Terrorism	26
VII. Contemporary challenges	28
- United States adherence to the Law of the Sea Convention	28
i. United States Senate Treaty process.....	28
ii. Senate action on the Law of the Sea Convention	28
iii. Why should United States of America should adhere to the Law of the Sea Convention?.....	29
- European maritime safety policy	29
i. Overview.....	29
ii. Promoting safety at sea	30
The ERIKA- I and ERIKA- II packages of measures.....	30
The Prestige accident	32
Stringent measures to guarantee the safety of maritime transport.....	33
CONCLUSIONS.....	33
Annex I List of IMO Conventions /their status as at 31 October 2005/.....	35
Annex II Provisions of the Law of the Sea Convention relevant to the Conventions of IMO (table).....	49
Bibliography	68

AKNOWLEDGEMENTS

This paper could not have achieved without the assistance of a number of individuals, who encouraged me to apply for the UN - Nippon Foundation of Japan Scholarship, provided advice and recommendations, worked with me and who inspired me to do my research on the topic.

Recognition is due to the Center for Oceans Law and Policy at the Law School of the University of Virginia and its wonderful, supportive staff. I would like to extend my special thanks to Professor John N. Moore for his continued guidance; Donna D. Ganoë, Myron H. Nordquist, Sara Johnson, Kay Wood and many other colleagues and friends for their cooperation and efforts in making my research phase easier and pleasant.

I wish to record my deep appreciation for the continued and invaluable support of the Nippon Foundation of Japan and the Division of Ocean Affairs and the Law of the Sea, of the Office of Legal Affairs of the United Nations Secretariat, which facilitated this fellowship programme.

Special thanks to Genka Beleva, Katya Todorova and Krassimira Beshkova, who supported the idea to pursue this fellowship programme.

DISCLAIMER

The views expressed herein are those of the author and do not necessarily reflect the views of the United Nations, the Nippon Foundation of Japan or that of the Ministry of Foreign Affairs of Bulgaria.

Abbreviations

CLC	International Convention on Civil Liability for Oil Pollution Damage, 1969-1992
COLREG 1972	Convention on the International Regulations for Preventing Collisions at Sea, 1972
Commission	European Commission
Community	European Community
EEZ	Exclusive Economic Zone
EU	European Union
FAL	Convention on Facilitation of International Maritime Traffic, 1965
Fund Convention	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971-92
IMCO	Inter-Governmental Maritime Consultative Organization (now IMO)
IMO	International Maritime Organization (formerly IMCO)
IMO Study	Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization, Study by the Secretariat of IMO, doc.LEG/MISC 1 (1986)
INMARSAT	International Maritime Satellite Organization
IOPC	International Oil Pollution Compensation Fund
INTERVENTION 1969	International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969
ISPS Code	International Ship and Port Facility Security Code
LC	London Convention (informal title of London Dumping Convention as of 1992)
LDC	London Dumping Convention
LOAD LINES 1966	International Convention on Load Lines, 1966
LOS Bull	Law of the Sea Bulletin (United Nations, Office for Ocean Affairs and the Law of the Sea)
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978
MEPC	Marine Environment Protection Committee of IMO
MSC	Maritime Safety Committee of IMO
OPRC Convention	International Convention on Oil Pollution Preparedness, Response and Co-operation
SAR	International Convention on Maritime Search and Rescue, 1979
SOLAS	International Convention for the Safety of Life at Sea
STCW 1978	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978
SUA Convention and Protocol	Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988 and the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf, 1988
TSS	Traffic Separation Schemes
UNCLOS	Third United Nations Conference on the Law of the Sea (1973-1982)

“The ocean, like the air, is the common birthright of mankind.”

Thomas Jefferson

Introduction

This paper is intended to provide a comprehensive overview of the work which was done during the six month research program at the Center for Oceans Law and Policy of the University of Virginia, Charlottesville, U.S.A, 15 March – 15 September 2005. The research program was supervised by professor John Norton Moore, Director of the University’s Center for Oceans Law and Policy, and the Center for National Security Law.

The topic of my research deals with the relationship between the 1982 Law of the Sea Convention (hereinafter refer as the Law of the Sea Convention) and the IMO Conventions. The research on the above-mentioned topic covers in details the following:

- I. Background and goals of the negotiating process of the Law of the Sea Convention*
- II. The system of the Conventions adopted by IMO*
- III. The relationship between the standard setting in the Law of the Sea Convention and the standard setting adopted by IMO and comparative analysis between the relevant provisions*
- IV. Contemporary challenges*

This paper includes comments and concepts of relevance in assessing the general legal framework relating the Law of the Sea Convention to the work of IMO and its Conventions. The study is focused only on the rules and standards contained in IMO Conventions and protocols. The resolutions of the IMO Assembly, the Maritime Safety Committee (MSC) and the Maritime Environment Protection Committee (MEPC), which incorporate recommendations on the implementation of technical rules and standards, are not included in this study. The paper also provides a detailed analysis of the relationship between the Law of the Sea Convention and various IMO Conventions and some views on contemporary challenges for European policy and the adherence of USA to the Law of the Sea Convention.

I. Background and Goals of the Negotiating Process of the Law of the Sea Convention

This part of the research focuses on two main questions:

- Why is IMO recognized as the only international organization responsible for establishing and adopting measures at the international level?
- Why did the drafters want the single settings of standards?

An intense treaty making activity was in progress at IMO well before the Third United Nations Conference on the Law of the Sea (UNCLOS) started its deliberations in 1973. By the end of these deliberations most of the main IMO treaties had been adopted

and some of them were considered as “generally accepted”. Since 1973 the Secretariat of IMO (formerly IMCO¹) actively contributed to the work of UNCLOS in order to ensure that the elaboration of IMO instruments conformed with the basic principles guiding the elaboration of the Law of the Sea Convention, 1982².

Overlapping or potential conflict between IMO’s work and that of UNCLOS have been avoided by the inclusion in several IMO conventions of provisions which state specifically that their text does not prejudice the codification and development of the law of the sea by UNCLOS or any present or future claims and legal views of any State concerning the law of the sea and the nature and extent of coastal and flag State jurisdiction. The task of the negotiators was to prepare a new comprehensive legal order for the oceans which will accommodate and reconcile the many and varied interests in the oceans.

The IMO is explicitly recognized in only one provision of the Law of the Sea Convention as the legitimate international forum in which states are expected to develop new international standards and regulations or revise existing rules on these subjects (Article 2 of Annex VIII). Several provisions of the Law of the Sea Convention refer to the “competent international organization” in connection with the adoption of international shipping rules and standards in matters concerning maritime safety, efficiency of navigation and the prevention and control of marine pollution from vessels and by dumping.

There were strong reasons why such control should be international through the International Maritime Organization rather than through unilateral coastal state claims to control navigation through straits or in broad ocean areas beyond the territorial sea³. These include:

- a system permitting over 130 sets of potentially conflicting coastal state standards for ship construction, operation, manning and equipment would be grossly inefficient and in some cases would make ship operation impossible regardless of the individual reasonableness of such standards;
- a system providing jurisdiction to set and change standards in over 130 coastal nations would undermine needed stability of expectations over the considerable life of ship and reduce flexibility of ships to interchange voyages and routes through time, thus reducing economic efficiency of the world’s fleet;
- coastal state standard setting, unlike international agreement, does not permit all concerned states to participate in the decisions affecting them. That is, in a real sense undemocratic, and it could encourage extreme and inefficient solutions resulting from imbalance in the decision process;
- standard setting through a single international institution such as IMCO can permit more rapid response on a global basis to innovative technological change offering more effective protection of the environment, lower costs, or both;

¹ Inter-Governmental Maritime Consultative Organization (now IMO)

² The official text of the Convention (together with the Final Act of UNCLOS, introductory material on the Convention and the Conference, and a used index) is published in *The law of the Sea. United Nations Convention on the Law of the Sea* (UN Publication, Sales N.E.83.V.5)

³ John N.Moore, *Protection of Navigation Freedom and the Problem of Vessel Source Pollution*, published in *New Trends in Maritime Navigation* by Ocean Association of Japan, 1980

- standard setting through a single international institution such as IMCO can more effectively impose needed environmental protection on a global basis;
- coastal state standards impose greater risk of political discrimination and invidious economic advantage or disadvantage. Similarly, for these reasons they also pose greater risks of political tension and conflict;
- more than half of all coastal nations are totally zone-locked by a 200-mile zone. That is, they have no access to any ocean without traversing the 200-mile zone of one or more neighbouring states. Such states would seriously impair their “oceans access independence” if 200-mile zones were to contain jurisdiction capable of regulating navigation as opposed to resources;
- coastal state control over vessel-source pollution could through a “demonstration effect” encourage other forms of control over navigational freedom thus seriously impairing a fundamental balance in ocean law and encouraging “creeping territoriality” on the community common interest in the oceans; and
- there are equally effective lower cost policy options for dealing with vessel-source pollution through international agreement (IMCO), and strengthened flag and port state approach.

It was generally understood during the negotiations that IMO is “the competent international organization” with regard to the safety of navigation and routeing systems; the design, construction, equipment and manning of vessels; the prevention, reduction and control of vessel-source pollution of the marine environment; and dumping at sea⁴. The expression "competent international organization", when used in the singular in the Law of the Sea Convention, applies exclusively to IMO.

Bearing in mind the global mandate of IMO as a specialized agency within the United Nations system established by the Convention on the International Maritime Organization⁵, the drafters of the Law of the Sea Convention recognized the efficiency of potentially higher standards adopted within IMO. The wide acceptance and uncontested legitimacy of IMO’s mandate is indicated by the universality of the Organization. Members of IMO are 166 sovereign states representing all regions of the world. All of these members may participate in the meetings of the IMO bodies responsible for drafting and adopting safety and anti-pollution rules and standards. All States are invited to participate in the IMO conferences for adopting new IMO Conventions which are normally adopted by consensus.

II. The System of the Conventions Adopted by IMO

All conventions which were adopted under the auspices of the IMO could be divided into four main categories.

The first group of conventions consists of the conventions which promote safety at sea :

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

⁴ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc.LEG/MISC 1 (1986)

⁵ Convention on Maritime Organization, 1948 (1984 edition). Sales numbers:Reprint: IMO-017A, ISBN 92-801-5001-4; IMO-018C

- Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT (amended) 1978)
- Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS PROT (HSSC) 1988)
- International Convention on Load Lines, 1966 (LOAD LINES 1966)
- Protocol of 1988 relating to the International Convention on Load Lines, 1966 (LL PROT 1988)
- Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG)
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW (amended) 1978)
- International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995 (STCW-F)
- Torremolinos International Convention for the Safety of Fishing Vessels, 1977 (SFV 1977)
- Torremolinos Protocol of 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 (SFV PROT 1993)
- International Convention on Maritime Search and Rescue, 1979 (SAR 1979)

The second category of treaties embraces conventions relating to the field of combating and preventing marine pollution. Conventions in this category are:

- International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto (MARPOL (amended) 73/78)
- International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 (INTERVENTION 1969) as modified by the Protocol 1973
- International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC 1990)
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as amended (LC (amended) 1972)
- Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1996 (LC PROT 1996)
- Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances 2000 (OPRC/HNS PROT 2000)

The regime concerning marine pollution has been significantly enriched by the third category of conventions, those concerning liability. These are:

- International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC 1969) as modified by the Protocol of 1992

- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 as modified by the Protocols of 1976, 1992, 2000, 2003
- Convention relating to Civil Liability of Maritime Carriage of Nuclear Material, 1971 (NUCLEAR 1971)
- International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (BUNKERS Convention)
- Convention on Limitation and Compensation in Connection with Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS Convention)

The fourth category includes conventions intended to encourage and facilitate maritime trade. In this context one should mention

- Convention on Facilitation of International Maritime Traffic, 1965 (FAL)
- International Convention on Tonnage Measurement, 1969 (TONNAGE Convention)
- Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988 (SUA) as amended by the Protocol of 2005
- Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms located on the Continental Shelf (SUA PROT 1988)
- International Convention on Salvage, 1989 (SALVAGE 1989)

III. The Relationship between the Standard Setting in the Law of the Sea Convention and the Standard Setting in Maritime Safety Conventions of IMO

This part of the research is focused on comparative analysis between the relevant provisions of the Law of the Sea Convention and provisions of some of the IMO Conventions relating to maritime safety.

Several provisions of the Law of the Sea Convention set up the jurisdictional framework for the adoption and implementation of safety rules and standards. As mentioned in the introduction, IMO's global mandate to adopt international regulations in this regard is acknowledged whenever reference is made to the competent organization through which those regulations are adopted.

The Law of the Sea Convention frequently refers to the obligation to act in conformity with rules concerning safety at sea. For example, Article 39(2)(a) refers to the matters that ships in transit passage shall comply with "...generally accepted international regulations, procedures and practices for safety at sea". According to Article 21(2) coastal States may issue laws and regulations relating to innocent passage in the territorial sea, however, such laws and regulations shall not apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to "generally accepted international rules and standards...". Paragraph 2 is categorical, and serves to protect the integrity of global maritime navigation. The expression "generally accepted international rules and standards" is not specified, but obviously it can be understood in the light of the explicit language of Article 211(5): "generally accepted international rules and standards established through the competent international organization or general diplomatic conference". Therefore, Article 21(2) of the Law of the Sea Convention is of paramount importance for the implementation of IMO

Conventions containing such rules and standards because it sets a clear limit to the jurisdiction of the coastal State. Regulations imposing either additional or more stringent requirements than those regulated in the relevant IMO Conventions could potentially violate the rules of innocent passage regulated by the Law of the Sea Convention.

The generally accepted international rules and/or standards in Articles 21(2) are basically contained in the SOLAS and LOAD LINES Conventions⁶.

SOLAS Convention regulates minimum standards for the construction, equipment and operation of ships, referring to subjects such as subdivision and stability, machinery and electrical installations, fire protection, detection and extinction (chapter II-2), life-saving appliances and arrangements and radiocommunication (chapter IV). Regulations provide for surveys of various types of ships (oil carriers, gas and chemical tankers, passenger ships, ro-ro ferries, etc.), the issuing of documents certifying that the ships meet the required conditions, and the obligation to carry adequate equipment and nautical publications. The Convention has been amended from time to time, most extensively by protocols of 1978 and 1988. In recent years amendments have become more frequent, partly in response to developments in technology and partly in response to major shipping casualties, such as Herald of Free Enterprise (1987) and the Estonia (1994), both roll-on, roll-off (ro-ro) ferries. The December 2002 amendments to the 1974 SOLAS Convention set a series of measures to strengthen maritime security and prevent and suppress acts of terrorism against shipping. Among other things, these amendments create a new SOLAS chapter dealing specifically with maritime security, which in turn contains the mandatory requirement for ships to comply with the new International Ship and Port Facility Security Code (ISPS Code).

LOAD LINES 1966 determines the minimum freeboard to which a ship may be loaded, including the freeboard of tankers, taking into account the potential hazards present in different climate zones and seasons.

Under the Law of the Sea Convention ships exercising their right of innocent passage through the territorial sea or their right of transit passage through straits must observe "generally accepted international regulations relating to the prevention of collisions at sea" (Articles 21(4), 39(2)). Such regulations for the prevention of collisions at sea are contained in COLREG. Within the general framework established by the provisions of the Law of the Sea Convention, COLREG applies to the high seas, the EEZ, the territorial sea and straits used for international navigation. Regulations concerning sea lanes, traffic separation schemes as referred to in Article 22 (1) and (2) of the Law of the Sea Convention are found in SOLAS and COLREG.

The establishment of the sea lanes and traffic separation schemes serves to promote the safety of navigation. In the case of sea lanes, IMO's relevant provisions are contained in SOLAS regulation V/8, amended in 1995. SOLAS regulation V/8(j) (V/10 in the text as amended by MSC in 2000) states that "all adopted ships' routing systems and actions taken to enforce compliance with those systems shall be consistent with international law, including the relevant provisions of the 1982 United Nations Convention on the Law of the Sea". Bearing in mind the terms of Article 22(3)(a) of the Law of the Sea Convention, regulation V/8 establishes that ships' routing systems "are recommended for use by, and may be made mandatory for, all ships, certain categories of

⁶ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc. LEG/MISC 2 (1997)

ships or ships carrying certain cargoes, when adopted and implemented in accordance with the guidelines and criteria developed by the Organization" (IMO). Paragraph (d) of regulation V/8 (V/10 in the text as amended by MSC 73 in 2000) acknowledges that the initiation of action for establishing a ships' routeing system is the responsibility of the Governments or Government concerned, which should take into account the guidelines and criteria developed by IMO.

Provisions on traffic separation schemes (TSS) are contained in COLREG, rules 1(d) and 10. These provisions define, respectively, the competence of IMO to adopt TSS and the main technical regulations to be followed in this regard. These regulations effectively institute restrictions on navigation in order to ensure safety.

While SOLAS Convention, Chapter V, Regulation 8 recognizes IMO as the only international body competent to prescribe traffic separation schemes, coastal States also have some competence in this area. The Law of the Sea Convention provides that in its territorial sea a coastal State may enact regulations relating to the navigation of foreign vessels exercising their right of innocent passage (Article 21), and adds that a coastal State prescribing a traffic separation scheme in its territorial sea must take into account any IMO recommendations and such factors as the special characteristics of particular ships and the density of traffic (Article 22).

In the same way as the coastal State has authority within the territorial sea, States bordering straits are entitled to designate sea lanes and traffic separation schemes or, as appropriate, substitute them in order to promote the safe passage of ships in straits used for international navigation (Article 41(1) and (2) of the Law of the Sea Convention). While in the case of the territorial sea coastal States are simply required to "take into account" the recommendations of IMO, the implementation of these regulations is made mandatory in the case of States bordering straits. In accordance with the Law of the Sea Convention, sea lanes and traffic separation schemes in straits used for international navigation "shall conform to generally accepted international regulations" (Article 41(3)) and must be referred to the IMO "with a view of their adoption" before being prescribed by the coastal State (Article 41 (4)). IMO regulations to be considered in this regard are contained in SOLAS (regulation V/8) for routeing measures other than TSS, COLREG 1972 (rules 1(d) and 10) for TSS.

In straits subject to the regime of transit passage, the Law of the Sea Convention provides that the coastal State's competence is more limited. States bordering straits may enforce TSS and regulations establishing sea lanes only after they have been formally adopted by IMO. However, IMO is empowered to adopt them only if agreed with the States concerned (Article 41(4)). Sea lanes and TSS established under Article 41 are mandatory for ships in transit passage (Article 41(7))⁷. Article 35(c) of the Law of the Sea Convention establishes that its provisions for straits used for international navigation do not affect "the legal regime in straits in which passage is regulated in whole or in part by long-standing international conventions in force specifically relating to such straits". This provision should be borne in mind in connection with paragraph (k) of SOLAS regulation V/8:

Nothing in this regulation nor its associated guidelines
and criteria shall prejudice the rights and duties of

⁷ See United Nations Convention on the Law of the Sea 1982 : A Commentary, Center for Oceans Law and Policy. University of Virginia School of Law, Vol. II, p. 356-366

Governments under international law or the legal regime of international straits.

With respect to sea lanes and traffic separation schemes through the waters of two or more States bordering straits, the States concerned are required to co-operate in formulating proposals in consultation with "the competent international organization" (IMO) (Article 41(5)). SOLAS regulation V/8(f) requires States to formulate joint proposals on the basis of an agreement between them which would be disseminated to the Governments concerned. It is also worth emphasizing that in the case of straits which are excluded from the regime of transit passage by virtue of Article 38 of the Law of the Sea Convention, or straits which lie between a part of the high seas or an EEZ and the territorial sea of a foreign state, the regime of innocent passage applies (Article 45).

Paragraph 4 of Article 41 has a parallel in Article 53 (9) of the Law of the Sea Convention. On the designation or substitution of sea lanes or the prescription or substitution of traffic separation schemes in connection with archipelagic sea-lanes passage. Several paragraphs in Article 53 of the Law of the Sea Convention regulate the right of archipelagic States to establish sea lanes and TSS, and refer to the role of IMO in this connection⁸:

- Archipelagic States may designate sea lanes suitable for the continuous and expeditious passage of foreign ships through their archipelagic waters and the adjacent territorial sea, and prescribe traffic separation schemes for the purpose of safety of navigation through narrow channels in such sea lanes (paragraphs 1 and 6).
- As in the case of transit passage in straits used for international navigation, sea lanes and TSS within archipelagic waters must conform to "generally accepted international regulations" (paragraph 8).
- Archipelagic States must submit the proposals - including those for substituting sea lanes and TSS - to the "competent international organization" (IMO) for adoption. Proposals may be adopted by IMO only upon agreement with the archipelagic State concerned. Only after adoption by IMO may sea lanes or TSS be designated, prescribed or substituted (paragraph 9).
- Clear indication of the sea lanes and TSS must be provided on charts, to which due publicity must be given (paragraph 10)
- Established sea lanes and traffic separation schemes must be respected by ships during passage through archipelagic sea lanes (paragraph 11).

Reference and conformity with "generally accepted international regulations, procedures and practices" can be also found in Articles 94 of the Law of the Sea Convention. This Article sets out the duties of the flag State with regard to ships flying its flag, with particular reference to "ensure safety at sea", taking into account the applicable international instruments. Examples are the following IMO Conventions- SOLAS, Load lines, COLREG, STSW and STSW-F. Chapter V, Regulation 13, of the Annex to SOLAS requires each Contracting State to maintain (or adopt) measures for the purpose of ensuring that all ships flying its flag are "sufficiently and efficiency manned," from the

⁸ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc. LEG/MISC 4 (2004)

point of view of safety of life at sea. SOLAS imposes a general obligation on flag States to ensure, for the purpose of safety of life at sea, the appropriate manning of the ship. Thus, ships must be provided with an appropriate certificate as evidence of the minimum required safe manning (see regulation V/14).

Paragraph 7 of Article 94 of the Law of the Sea Convention provides that the flag State has the duty to conduct an investigation into every marine casualty or incident of navigation on the high seas involving a ship flying its flag. This duty applies if the casualty has caused loss of life or serious personal injury, or serious damage to ships, installations, or the marine environment. The investigation is to be held by, or before, suitably qualified persons. The Law of the Sea Convention requires the flag State and the other State involved to cooperate in conducting the investigation. Provisions on penal jurisdiction in matters of collision or any other incident of navigation are contained in Article 97 of the Convention. By virtue of Article 58(2) of the Convention, Articles 94(7) and 97 apply also to marine casualties in the EEZ.

The relationship between above provisions of the Law of the Sea Convention with the provisions of some IMO Conventions is contained in SOLAS (regulation I/21), LOAD LINES (Article 23), and MARPOL (Article 12). These provisions set the obligation of the flag State to conduct an investigation of any casualty occurring to any of its ships.

The general obligations established by the Law of the Sea Convention regarding compliance with IMO rules and standards should be assessed with reference to the specific operative features of each treaty. In principle, it seems beyond discussion that in many cases the Law of the Sea Convention contains general obligations to apply rules and standards contained in IMO Conventions. But after asserting this principle, distinctions must be made: the language of the Law of the Sea Convention is general, and as such, is of a restricted operative character. In this regard, an assertion of paramount importance contained in the IMO Study⁹ should be mentioned: "The Law of the Sea Convention is acknowledged to be an 'umbrella convention' because most of its provisions, being of general kind, can be implemented only through specific operative regulations in other international treaties". This assertion implies that IMO rules and standards are very precise technical provisions which cannot be considered as binding among States unless they are parties to the treaties where they are contained. The provisions of the Law of the Sea Convention relating to maritime safety aim at the effective implementation of substantive safety rules, but in the end they remain basically provisions which regulate the features and extent of state jurisdiction but not the enforcement of measures regulated in IMO conventions.

IV. The Relationship between Environmental Provisions of the Law of the Sea Convention and IMO Marine Pollution Conventions

This part of the research analyses the relevant provisions of the Law of the Sea Convention and their relationship with the provisions of some of the IMO Conventions relating to the protection of the marine environment and in particular the provisions related to pollution from vessels and by dumping. The provisions dealing with the two

⁹See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc.LEG/MISC 2 (1997)

other sources of pollution : pollution from sea-bed activities and land based sources, are not subjects of this paper.

Comprehensive framework

The provisions on the protection and preservation of the marine environment constitute a substantial component of the Convention on the Law of the Sea. Indeed, the Law of the Sea Convention, which has been termed the most important and comprehensive international environmental agreement in existence¹⁰, has had a fascinating symbiotic relationship with the development of international environmental law adopted within the International Maritime Organization. In its work on environmental protection, IMO is one of the unsung heroes of our time. It has been towing steadily to tackle ship-source pollution since the late 1960s, with but a minimum of international publicity, relatively unknown outside the maritime field.¹¹

The essence of the established international legal regime is concentrated in Part XII of the Law of the Sea Convention. Article 192 sets forth the general obligation of States to protect and preserve the marine environment. The general obligation under Article 192 is augmented by the more specific measures to be undertaken by states – individually or jointly – to prevent, reduce and control pollution of the marine environment from any given source.

Pollution from vessels

The Law of the Sea Convention lays down in considerable detail the extent to which states have rights or duties to take protective measures as regards ship-source pollution. Separate rules exist for flag states, coastal states and port states. While the obligations of flag states are the same irrespective of the sea area concerned, coastal states' rights depend on whether the (foreign) ship is in the internal waters, territorial sea, exclusive economic zone of the coastal state or in the high seas. The regime for vessel-source pollution is among the most detailed set of provisions in the Law of the Sea Convention, and involves a very delicate balance between coastal and maritime interests, which is different for each maritime zone.

Article 211(1) of the Law of the sea Convention lays down a general obligation for States, acting through the competent international organization (IMO) or general diplomatic conference, to establish international rules and standards regarding vessel-sourced pollution, and to re-examine them from time to time as necessary. The expression “competent international organization” appears frequently in Part XII, in Articles 211,217,218,220 and 223. The need for global solutions in shipping is very clearly recognized in the Law of the Sea Convention, which, on the one hand, lays down the internationally agreed technical rules as the minimum standards for all flag states who

¹⁰ See, for example the statement that the LOS Convention is “the strongest comprehensive global environmental treaty negotiated to date” in “United States Interests in the Law of the Sea Convention”. A report of the Panel on the Law of Oceans Uses, Bernard Oxman, Rapporteur; reproduced in (1994) 88 American Journal of international Law 167-178 and 169.

¹¹ Louise de La Fayette, “The Marine Environment Protection Committee: The Conjunction of the Law of the Sea and International Environmental Law”, The International Journal of Marine and Coastal Law, Vol.16,N 2, Kluwer Law International, 2001

wish to have ships flying their flag and, on the other hand, uses the same standards as the maximum level for regulation by coastal states who wish to protect their coasts and coastal waters. Thus, the Law of the Sea Convention does not create any new technical or pollution rules for shipping, but simply refers to standards which have been agreed upon within the IMO.

IMO, as the competent international organization, adopted several conventions which exclusively regulate antipollution measures, irrespective of whether the introduction of polluting substances into the sea is the result of an accident involving a ship or from the operational discharges from vessels. In general, States have accepted the prominent role of the IMO in a very disciplined manner. It is interesting to note that for example coastal States have made few efforts to depart from the global regime which is contained in IMO Conventions on pollution prevention. The main IMO treaty in this area is MARPOL. The MARPOL Convention was adopted in 1973 and is intended to deal with all forms of international pollution of the sea from ships, other than dumping. Detailed pollution standards are set out in six technical annexes. These are concerned with oil (Annex I), noxious liquid substances in bulk (Annex II), harmful substances carried by sea in packaged forms (Annex III), sewage (Annex IV), garbage (Annex V), and air pollution (Annex VI, added in 1997). The acceptance of Annexes I and II is obligatory for all contracting parties, but acceptance of the remaining annexes is optional.

Article 2(2) and (3) of MARPOL includes a definition of "harmful substances" which is entirely compatible with the definition of "pollution of the marine environment" included in Article 1(4) of the Law of the Sea Convention. Both definitions refer to the introduction of substances into the marine environment which results or can result in hazards to human health, harm to resources and hindrance to legitimate uses of the sea. While the definition included in the Law of the sea Convention applies to all sources of marine pollution, MARPOL deals only with pollution from vessels and accordingly includes a definition of "discharges" from ships. In principle, MARPOL deals with operational discharges of harmful substances, namely, those discharges related to the normal operation of ships¹².

MARPOL also includes regulations relating to the inspection of foreign ships voluntarily in port to ensure that they comply with antipollution rules and standards and to prevent the ship from sailing if these requirements are not met. Provisions on the investigation of foreign vessel contained in Article 5 of MARPOL should be compared with the regulations included in Article 226 of the Law of the Sea Convention. This apparent overlapping of provisions can be solved with an interpretation of both Part XII of the Law of the Sea Convention and MARPOL. Both treaties aim at the protection of the marine environment by means of ensuring that antipollution measures are properly implemented. However, the Law of the Sea Convention focuses more on measures to be taken to prevent and penalize discharges in ocean spaces while in the case of MARPOL violations are not only related to illegal discharges but also to the non-compliance with the preventative measures on board irrespective of whether discharges take or not place.

It shouldn't be forgotten that the Law of the Sea Convention distinguishes different types of sanctions to be imposed with respect to violations of applicable laws and international rules and standards relating to vessel-source pollution committed by

¹² See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc. LEG/MISC 3 (2003)

foreign vessels. If the violation is committed beyond the territorial sea, monetary penalties only may be imposed (article 230(1)). As an exception, non-monetary penalties are allowed in cases of violations committed by foreign vessels in the territorial sea causing a "wilful and serious act of pollution" (article 230(2)). In other words, there must be an act of wilful misconduct in the territorial sea, resulting in the introduction into marine environment of a polluting substances to authorize the imposition of a prison sentence. Violations to MARPOL rules resulting in substandard navigation without both wilful misconduct and polluting discharges can only be sanctioned with monetary penalty.

Pollution by dumping

The Law of the Sea Convention includes a definition of "dumping" in Article 1(5). Article 210 contains regulations specifically related to the prevention, reduction and control of pollution by dumping. The obligation for States to adopt laws and regulations and to take the additional measures that may be needed to prevent, reduce and control pollution of the marine environment by dumping is contained in paragraphs 1 and 2. In accordance with paragraph 6 such laws, regulations and measures shall be no less effective in preventing, reducing and controlling such pollution than the "global rules and standards".

In this connection, Article 210(4) imposes upon States the obligation to endeavour to establish global and regional rules and standards and recommended practices and procedures to prevent, reduce and control pollution by dumping. Such provisions should be adopted through "competent international organizations or diplomatic conference". The reference in the plural to international organizations indicates that in this case the task of IMO at global level can be complemented by regulatory activities undertaken under the sponsorship of other organizations. Cooperation between IMO and other organizations has been implemented, especially in connection with the adoption of regional agreements¹³.

The international global and regional framework which has been established in this regard consists of several treaties and agreements. At a global level, antipollution measures are contained in the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention, 1972), as periodically amended by decisions of its Contracting Parties. In 1996 the Contracting Parties to the London Convention adopted the Protocol to the Convention on the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter, (1996 LC Protocol) which comprehensively and substantially amends the parent convention. Eventually, the 1996 Protocol will replace the Convention.

Article 216(1)(b) of the Law of the Sea Convention requires the flag State to enforce with regard to vessels flying its flag or vessels or aircraft or its registry the laws and regulations adopted in accordance with the Convention and applicable international rules and standards adopted through the competent international organizations or diplomatic conference for the prevention, reduction and control of pollution of the marine environment by dumping. The London Convention (Article VII(1)(a)) requires each Contracting Party to apply the measures required to implement the Convention to vessels

¹³ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc. LEG/MISC 4 (2004)

and aircraft registered in its territory or flying its flag.

The application of the London Convention to all sea areas is established by way of interpretation of the definition of "sea" included in Article 1 of the Convention, which makes the global rules and standards therein contained applicable to all marine waters other than the internal waters of States. Bearing in mind decisions which had already been taken and implemented by Contracting Parties, the 1996 Protocol extends the concept specifically to include the sea-bed and the subsoil thereof, to the exclusion of sub-seabed repositories accessed only from land.

According to the Law of the Sea Convention (Article 210(5)), dumping within the territorial sea and the EEZ or onto the continental shelf shall not be carried out without the express prior approval of the coastal State. The coastal State is required by Article 216(1) of the Law of the sea Convention to enforce laws and regulations adopted in accordance with the Convention and applicable international rules and standards established through the competent international organizations or diplomatic conference for the prevention, reduction and control of pollution of the marine environment by dumping. The Eleventh Consultative Meeting of Contracting Parties agreed that a Party could apply the London Convention 1972 not only in its territorial waters, as specifically stated in this Convention, but also in the EEZ. The London Convention contains specific regulations establishing the conditions which coastal States should follow in the granting of permits for dumping in their jurisdictional waters. Annex 1 to the Convention includes a list of substances the dumping of which is entirely forbidden. Substances which are part of the list contained in Annex II require a prior special permit from the coastal State. The dumping of all other substances not listed in either Annex I or II requires a prior general permit. This system is decisively reversed by the 1996 LC Protocol which establishes a general prohibition for dumping of all wastes and other matter, except for those belonging to one of the seven categories listed in Annex 1 to the Protocol, namely, dredged material, sewage sludge, fish waste or material resulting from industrial fish processing operations, vessels and platforms or other man-made structures, inert, inorganic geological material, organic material of natural origin and bulky items comprising unarmful materials. These wastes or other matter may be considered for dumping provided they do not contain levels of radioactivity greater than de minimis (exempt) concentrations as defined by the IAEA.

International co-operation

The Law of the Sea Convention does not specify the content of the rules and standards against marine pollution. The respective clauses are open ones which are to be filled by legal substance. Only Article 197 of the Law of the Sea Convention gives a clear indications as to how this is to be achieved as far as the protection against marine pollution is concerned¹⁴. This provision obliges States to cooperate directly or through international organizations "in formulating and elaborating international rules, standards and recommended practices and procedures consistent with the Convention, for the protection and preservation of the marine environment ... " This means the Law of the Sea Convention relies upon the development of international environmental law

¹⁴ Rudiger Wolfrum, IMO Interface with the Law of the Sea Convention, Current Maritime Issues and the International Maritime Organization, 1999

undertaken multilaterally either directly amongst States or within an international organization. Article 198 of the Law of the Sea Convention, also formulates the duty of a State, which becomes aware of existing or imminent pollution likely to cause damage, to immediately notify other States, which it deems likely to be affected by such damage and as well as competent international organizations. The provision does not indicate how the notification to other States should be made and this is obviously a matter dependent upon all the circumstances. As regards the competent organizations, the obligation to notify does not depend on the notifying State's being a member of that organization. Article 199 provides that the affected States shall co-operate with the competent international organizations, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. States are further required jointly to develop and promote contingency plans for responding to marine pollution incidents. At IMO, the requirement of Article 199 of the Law of the Sea Convention for states to co-operate in contingency planning and emergency response has been addressed primarily by the 1990 OPRC Convention.

The OPRC Convention provides a global framework for international co-operation in combating major oil pollution incidents or threats of marine pollution. In Article 3(1)(a), OPRC Convention establishes that each Party shall require that ships entitled to fly its flag have on board a shipboard oil pollution emergency plan.

In accordance with Article 5(1)(c) and 3 of OPRC Convention, Parties are required to inform all States concerned and IMO in cases of major oil pollution incidents. Provisions concerning reports on incidents involving harmful substances are also contained in MARPOL, Article 8 and Protocol I. Article 8 establishes the obligation for States to report without delay to other States likely to be affected by pollution incidents involving harmful substances. In accordance with Article I of Protocol I, the master or other person being in charge of any ship involved in an incident involving discharges or probable discharges of harmful substances should report the particulars of such incident without delay and to the fullest extent possible. Discharges include not only those resulting from maritime casualties but also those occurring during the operation of the ship of oil or noxious liquid substances in excess of the quantity or instantaneous rate permitted under MARPOL. Article V(1) of the Protocol establishes that reports should be made "by the fastest telecommunications channels available with the highest possible priority to the nearest coastal State."

Under Article 4 of OPRC, the flag State is responsible for requiring masters to report without delay to the nearest coastal State any event on their ship involving a discharge or probable discharge of oil.

Parties to OPRC are required to provide assistance to others in the event of a pollution emergency and provision is made for the reimbursement of any assistance provided.

Article 7 of OPRC further develops the main principles of international co-operation in pollution response. Paragraph 3 provides that, in accordance with applicable international agreements, each Party shall take the necessary legal or administrative measures to facilitate the arrival and utilization in and departure from its territory of ships, aircraft and other modes of transport engaged in responding to an oil pollution incident or transporting personnel, cargoes, materials and equipment required to deal with such an incident.

Enforcement

In connection with the enforcement of applicable antipollution measures, the Law of the Sea Convention and IMO Conventions contain regulations devoted to the establishment of international rules and standards with respect to the rights and duties of the flag State, the port State where the foreign vessel is admitted, and the coastal State. The provisions of the Law of the Sea Convention regarding enforcement measures, particularly in respect of vessel source of pollution, are marked by their detailed character. Section 7 of part XII of the Law of the Sea Convention contains several provisions which regulate the enforcement powers of both port and coastal States vis-à-vis flag States in connection with the institution of proceedings against foreign ships¹⁵.

The obligation for flag States to adopt and enforce antipollution laws and regulations in compliance with international rules and standards adopted by IMO is included in Articles 211(2) and 217 of the Law of the Sea Convention. The Law of the Sea Convention makes no change in the traditional competence of flag States to prescribe their legislation for their vessels which “at least have the same effect as that of generally accepted international rules and standards established through international organization or diplomatic conference”. There is no definition of “generally accepted international rules”, although Article 211(7) provides that they include inter alia those relating to notification of accidents likely to cause marine pollution. Presumably “generally accepted international rules” include the first two annexes to the MARPOL Convention, which are now widely ratified.

The legislative competence of coastal States has been reduced by the Law of the Sea Convention in respect of the kind of pollution regulations which may be adopted, but increased in respect of the geographical area to which such regulations may be applied. In the territorial sea the coastal State may prescribe pollution regulations for foreign vessels in innocent passage, provided such regulations do not 'apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards' (Art. 21(2) of the Law of the Sea Convention). Furthermore, such regulations must be duly publicised, must be non-discriminatory and must not hamper the innocent passage of foreign vessels (Arts 21(3), 24, 211(4) of the Law of the Sea Convention). Where the territorial sea consists of straits subject to the regime of transit passage, the coastal State's legislative competence is even more restricted. Here pollution regulations may be adopted only if they give 'effect to applicable international regulations regarding the discharge of oil, oily wastes and other noxious substances in the strait' (Art. 42(1) of the Law of the Sea Convention). Such regulations must be nondiscriminatory, must not hamper transit passage and must be duly publicised by the strait State (Art. 42(2), (3) of the Law of the Sea Convention). While the Law of the Sea Convention has restricted the scope of coastal States' legislative competence in their territorial sea, it has increased the geographical scope of their legislative competence by giving them certain powers to legislate for marine pollution from foreign vessels in their EEZ. Under Article 211(5) a coastal State may adopt pollution legislation for its EEZ which conforms and gives effect to “generally accepted international rules and standards established through the competent international organization or general

¹⁵ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc. LEG/MISC 4 (2004)

diplomatic conference". Where these rules are considered inadequate to provide sufficient ecological protection for certain areas of the EEZ, the coastal State may adopt regulations implementing international rules and standards or navigational practices which the IMO has made applicable to special areas, or it may adopt additional regulations of its own, provided that these do not impose design, construction, manning or equipment standards on foreign vessels other than generally accepted international rules and standards. In each case, certain procedural requirements are laid down. These include consultation with the IMO and obtaining its approval, and giving at least fifteen months' notice of the entry into force of the coastal State's regulations (Article 211(6) of the Law of the Sea Convention).

As far as port State jurisdiction, several provisions of the Law of the Sea Convention refer to the jurisdictional powers of States over foreign vessels, which are voluntarily within its port or at an offshore terminal. These provisions should be considered together with MARPOL regulations relating to the exercise of port State control.

Article 219 of the Law of the Sea Convention (Measures relating to seaworthiness of vessels to avoid pollution) establishes that port States shall, as far as practicable, take administrative measures to prevent the sailing of a vessel which has been found to be in violation of "applicable international rules and standards relating to seaworthiness of vessels and thereby threatens damage to the marine environment". The concept of seaworthiness should be understood not only as embracing provisions concerning the design, construction, manning, equipment and maintenance of vessels regulated in IMO safety treaties but also those contained in MARPOL. Bearing in mind the principle of no more favourable treatment contained in Article 5(4) of MARPOL, port States which are parties to this Convention are entitled to request compliance with preventive antipollution measures therein, also from ships flying the flag of non-parties.

In accordance with Article 217(3) of the Law of the Sea Convention compliance with antipollution rules and standards shall be attested by certificates required by and issued pursuant to international rules and standards established through the competent international organization (IMO) or general diplomatic conference. Article 217(3) establishes that these certificates shall be accepted by other States as evidence of the condition of the vessels and shall be regarded as having the same force as certificates issued by them, unless there are clear grounds for believing that the condition of the vessel does not correspond substantially with the particulars of the certificates. Further rules on the investigation of foreign vessels voluntarily in port are contained in Article 226. These regulations reproduce the basic features relating to the inspection of certificates and ships contained in MARPOL, Article 5. Paragraph 2 of this Article refers to the inspection of certificates regulated in the technical annexes of this Convention.

Both the Law of the Sea Convention (Article 219) and MARPOL (Article 5(2)) establish the basic principles governing the detention in port of foreign vessels: port States must ensure that vessels shall not sail until they can proceed to sea without representing an unreasonable threat of damage to the marine environment (Article 226(1)(c)). However, ships can be granted permission to leave port in order to proceed to the nearest appropriate repair yard. These measures can be taken without prejudice of the right of the port State to impose penalties in accordance with their national law for violation of antipollution rules and standards, even if this violation consists solely in the non-observance of preventive measures without any illegal discharge having taken place.

The Law of the Sea Convention provisions for measures to be taken by port States

in the event of discharge in violation of international rules and standards are contained in Article 218. Paragraph 1 of this Article expressly authorizes port States to institute proceedings in respect of foreign ships voluntarily in their ports in cases where illegal discharges have occurred outside the internal waters, territorial sea or EEZ of the port State. Paragraphs 2, 3 and 4 regulate situations involving requests to the port State from the flag State as well as coastal States regarding discharge violations of applicable international rules and standards. Violations by a foreign ship voluntarily in port which have been committed within the territorial sea or EEZ of a State are dealt with in Article 220 of the Convention. In both cases the State in the port of which the vessel is voluntarily should apply MARPOL rules and standards.

Action to be taken in the event of violations of regulations on discharges are contained in Article 6(2) of MARPOL. This provision establishes that ships to which the Convention apply may, in any port of a Party, be subject to inspection by officers appointed or authorized by that Party "for the purposes of verifying whether the ship has discharged any harmful substances in violation of the provisions of the regulations". Other provisions in the same Article deal with communications with the Administration of the flag State and other States affected by the violation, as well as the rules governing institution of proceedings. Certainly MARPOL 73/78 provides an excellent legal basis for bringing about a continued improvement. The new generation of tankers that will enter service from now on should be better protected against accidents and operational pollution than those in use today. But no matter how good the ships are, much will still be dependent on the way they are managed and on the competence of those who sail on them. The responsibilities for this rest with Governments, shipowners and operators and the crews themselves.

This examination shows that several provisions of the Law of the Sea Convention reflect principles compatible with those already included in IMO Conventions design to protect the marine environment from pollution from vessels and by dumping. However, the international community should seek to bring into force those conventions that are not yet in force and to increase number of ratifications of all conventions¹⁶. There is also a significant need to improve the implementation of, and compliance with existing international antipollution rules.

V. The Relevant Articles of the Law of the Sea Convention regulating Liability for Pollution Damage and the Provisions of the Liability Conventions of IMO

This part of the research examines the legal regime of the responsibility and liability for pollution damage in the Law of the Sea Convention and its relationship with the rules providing by the Liability Conventions of IMO.

Part XII of the Law of the Sea Convention includes a number of framework provisions designed to safeguard the marine environment from pollution caused by "sea-bed activities subject to national jurisdiction"¹⁷. Article 235 of the Law of the Sea Convention incorporates corresponding provisions on "Responsibility and Liability". Like the rules governing prevention and enforcement, those dealing with the responsibility and liability are drafted in very general terms and simply provide a

¹⁶ See Summary of the Status of the conventions on the website of IMO : www.imo.org/Conventions

¹⁷ UN Convention, Art. 208

framework for more detailed development in other more specialized treaties.

Article 235 (1) confirms the responsibility of States for the fulfillment their international obligations concerning the protection and preservation of the marine environment. Paragraph 2 requires States to ensure that the recourse is available in accordance with their legal systems for compensation for pollution damage caused by natural or juridical persons under their jurisdiction. Finally, Paragraph 3 provides a general safeguard provision to accommodate later development of international law relating to responsibility and liability for the assessment of and compensation for damage and the settlement of the related disputes, as well as, development of the criteria and procedures for payment of adequate compensation, such as compulsory insurance or compensation funds.

These provisions should be considered in connection with the conventions adopted by IMO prior to, and after the adoption of, the Law of the Sea Convention in the field of liability and compensation for damage related to the carriage of oil and other hazardous and noxious substances by sea.

The 1969 Civil Liability Convention establishes a system of strict liability for the shipowner and the obligation to contract compulsory third-party liability insurance to cover for limits of compensation for damage caused by spill of heavy crude oils transported as cargo.

The 1971 Fund Convention regulates the constitution and functioning of an international fund in charge of providing compensation (the IOPC Fund) additional to that paid by the shipowner under the Civil Liability Convention whenever this compensation proves to be insufficient. The fund also pays compensation in some cases where the compensation to be paid by the shipowner is not available.

Both the Civil Liability and the Fund Conventions were amended by the Protocols of 1992 which entirely supersede the original parent treaties and increase the limits of compensation. The original treaties, as amended, are now widely known as the 1992 Civil Liability Convention and the 1992 Fund Convention, respectively.

The CLC 69 and 71 Fund Convention applied to damage occurring in the territorial sea of States Parties. The Protocols of 1992 extend the scope to cover damage occurring in the EEZ.

The IMO Legal Committee, at its 82nd session in 2000, considered a request to increase the limitation amounts set out in the 1992 Protocol to the 1969 Civil Liability Convention (1992 CLC) and the compensation limits set out in the 1992 Protocol to the 1971 International Oil Pollution Compensation Fund Convention (1992 Fund Convention). Utilising the tacit acceptance procedure for the first time, the Committee adopted two resolutions amending the 1992 Protocols by increasing the limits in each of them by 50.37%. The amendments entered into force on 1 November 2003.

In May 2003 a Conference of Parties to the 1992 Fund Convention adopted a Protocol establishing an International Oil Pollution Compensation Supplementary Fund, 2003. This supplementary scheme seeks to ensure that victims of oil pollution damage are compensated in full for their loss or damage and alleviate the difficulties faced by victims in cases where there is a risk that amount of compensation available under the 1992 Liability and 1992 Fund Conventions will be insufficient to pay established claims in full. The accession to the supplementary scheme is open only to the Contracting States to the 1992 Fund Convention. Following ratification by Spain, on 3 December 2004, the entry into force conditions of the 2003 Protocol have been met (ratification by at least eight

States, which have received a combined total of 450 million tons of contributing oil). The new Fund will enter into force three months after Spain's ratification, i.e. on 3 March 2005.

The HNS Convention regulates the strict liability of the shipowner and the obligation to contract compulsory third party liability insurance to cover for limits of compensation for damage caused by accidental spills of hazardous and noxious substances other than heavy crude oil and bunker fuel oil carried as cargo. The same treaty also regulates the constitution and functioning of an HNS Fund similar to the IOPC Fund. This treaty is not yet in force.

The HNS Convention has a geographical scope of application similar to the 1992 Civil Liability and Fund Conventions in respect of pollution damage. Accordingly, it regulates compensation for pollution damage occurred within the territorial sea and the EEZ. Damage other than pollution damage, for instance death and injury incurred on board as a result of explosions involving HNS substances, has a universal scope of application. In such cases, compensation is regulated regardless of the sea zone where the incident at the source of the damage took place.

In March 2001, IMO adopted a new International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 which will establish a liability and compensation regime for spills of oil carried as fuel in ships' bunkers. The convention is modeled on the 1992 International Convention on Civil Liability for Oil Pollution Damage.

VI. The relevant provisions of the Law of the Sea Convention and the provisions of the IMO Conventions intended to encourage and facilitate maritime transport

The scope of this part of the research is focused on the specific articles of the Law of the Sea Convention which refer to facilitation of the maritime transport and their relationship with the legal regime incorporated in several IMO Conventions.

Duty to render assistance

On the high seas and in the EEZ, as appropriate and in accordance with Article 98 of the Law of the Sea Convention, every State must require the master of a ship flying its flag, in so far as he can do so without danger to the ship, the crew, or the passengers, to:

- render assistance to any person found at sea in danger of being lost (paragraph 1(a));
- proceed to the rescue of persons in distress, when necessary (paragraph 1(b)); and
- after a collision, render assistance to the other ship, its crew and its passengers (paragraph 1(c)).

The obligations to render assistance and to proceed to the rescue of persons in distress is contained in two IMO Conventions. SOLAS stipulates the general obligation of the master of a ship to proceed, where necessary, with all speed to the assistance of a ship, aircraft, or survival craft in distress (regulation V/10, re-numbered as V/33 in the amendments adopted in 2000). The 1989 International Convention on Salvage lays down

in Article 10 the duty of a ship's master to render assistance to any person at sea in danger of being lost. It further requires States Parties to adopt the necessary measures to enforce this duty¹⁸.

Under Articles 18(2), 45 and 52 of the Law of the Sea Convention a ship may stop and anchor in the territorial sea of another State if it is necessary for the purpose of rendering assistance to persons or aircraft in danger or distress. Ships in transit passage through straits used for international navigation or in passage through archipelagic sea lanes are allowed to stop in cases of distress (Articles 39(1)(c) and 54).

Search and rescue services

The Law of the Sea Convention requires coastal States to promote, through regional co-operation if necessary, the establishment, operation, and maintenance of a search and rescue service for safety at sea (Article 98(2)). SOLAS regulation V/15 (renumbered as V/7 in the amendments adopted in 2000) obliges State Parties to undertake the necessary arrangements for coast watching and the rescue of persons in distress around its coasts.

A specific legal framework for the obligations relating to search and rescue is established in the International Convention on Maritime Search and Rescue, 1979 (SAR). This Convention requires States Parties to establish services for search and rescue of persons in distress, although these are limited to the area around the coasts (rule 2.1.1). For this purpose, SAR includes regulations on the establishment of search and rescue regions within which the coastal State is responsible for the provision of search and rescue services. Parties to SAR are required to co-ordinate their search and rescue services with those of neighbouring States. Unless otherwise agreed between the States concerned, parties should authorize immediate entry into their territorial sea or territory of rescue units of other parties solely for the purpose of searching for the position of maritime casualties and rescuing the survivors of such casualties. In such cases the State requesting entry must transmit to the coastal State full details of the projected mission and the need for it (SAR, chapters 3, 3.1.2 and 3.1.3). SAR regulation 2.1.7 contains a proviso of paramount importance: the delimitation of search and rescue regions "shall not prejudice the delimitation of any boundary between States."

Following the entry into force of the SAR Convention, the world's seas were divided into 13 SAR regions. In most of them, provisional SAR plans have been developed in line with the requirements of the Convention. At present, provisional SAR plans have still to be completed in the Western South Atlantic, Eastern North Pacific, Eastern South Pacific and Mediterranean and Black Seas regions. It should be noted that Article 39(3) concerning the requirement for aircraft to monitor the "appropriate international distress radio frequency" also has relevance to the search and rescue matters that fall within the competence of IMO.

In May 2004 the MSC adopted amendments to the SOLAS and SAR Conventions concerning the treatment of persons rescued at sea, and/or asylum seekers, refugees and stowaways. The amendments, due to enter into force on 1 January 2006, include:

¹⁸ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc. LEG/MISC 4 (2004)

- SOLAS – chapter V (*Safety of Navigation*) – to add a definition of search and rescue services; to set an obligation to provide assistance, regardless of nationality or status of persons in distress, and mandate co-ordination and co-operation between States to assist the ship’s master in delivering persons rescued at sea to a place of safety; and to add a new regulation concerning master’s discretion.
- SAR – Annex to the Convention – addition of a new paragraph to chapter 2 (*Organization and co-ordination*) relating to definition of persons in distress, new paragraphs to chapter 3 (*Co-operation between States*) relating to assistance to the master in delivering persons rescued at sea to a place of safety, and a new paragraph to chapter 4 (*Operating procedures*) relating to rescue co-ordination centres’ initiation of the process of identifying the most appropriate places to disembark persons found in distress at sea.

Illicit Acts

The Law of the Sea Convention (Article 108) imposes upon States the duty to co-operate in the suppression of illicit drug-trafficking engaged in by ships on the high seas. Article 58(2) makes this obligation applicable to the EEZ. The problem of drug-trafficking has been considered by IMO within the scope of the amendments introduced in 1990 to the 1965 Convention on Facilitation of International Maritime Traffic (FAL). The standards and recommended practices adopted by FAL are addressed to the public authorities of the Contracting Governments but are applicable only within the jurisdiction of the port State. Measures to suppress illicit traffic in narcotic drugs and psychotropic substances on the high seas and in the exclusive economic zone are addressed in article 108 of the Law of the Sea Convention.

Terrorism

A variety of acts of terrorism have also threatened the safety of ships and the security of their passengers and crews. IMO has addressed the request of the General Assembly of the United Nations to contribute to the progressive elimination of international terrorism. The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988 and the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf, 1988 (SUA Convention and Protocol) deal with unlawful acts that fall outside the crime of piracy as defined in article 101 of the Law of the Sea Convention.

The terrorist attacks of 11 September 2001 on the United States of America prompted a concerted response from IMO, reflected in IMO Assembly resolution A.924(22) on *Review of Measures and Procedures to Prevent Acts of Terrorism which Threaten the Security of Passengers and Crews and the Safety of Ships*. In the resolution the Assembly request the revision of legal and technical measures and considers new ones to prevent and suppress terrorism against ships and to improve security aboard and ashore, in order to reduce the risk to passengers, crews and port personnel on board ships and in port areas and to the vessels and their cargoes.

In response to resolution A.924(22) the Legal Committee of IMO began a comprehensive review of the SUA treaties. In addition to the amendments to SUA treaties a completely new regulatory safety regime designed to prevent ships and their cargoes becoming the targets of terrorist activities was considered and adopted at a diplomatic conference in December 2002. The new measures are centred around a proposed International Ship and Port Facility Security Code. The Code provides the framework for co-operation between governments, government agencies, local administrations and the shipping and port industries to detect security threats and take preventive measures against security incidents affecting ships or port facilities used in international trade.

The most far-reaching of these amendments consists in the introduction of a new SOLAS chapter XI regulating implementation of the International Ship and Port Facility Security Code (ISPS Code). The Code contains detailed security-related requirements for governments, port authorities and shipping companies in a mandatory section (Part A), together with a series of guidelines on how to meet these requirements in a second, non-mandatory section (Part B). Maritime administrations are required to set security levels and ensure the provision of security-level information for ships entitled to fly their flag. Prior to entering a port, or while in a port within the territory of a Contracting Government, a ship shall comply with the requirements for the security level set by that Contracting Government if that security level is higher than the security level set by the Administration for that ship. The role of the master in exercising his professional judgment over decisions necessary to maintain the security of the ship is explicitly confirmed with the proviso that the master shall not be constrained by the company managing the ship, the charterer or any other person.

The new SOLAS regulations require all ships to be provided with a ship security alert system. When activated, the ship security alert system must initiate and transmit a ship-to-shore security alert to a competent authority designated by the Administration, identifying the ship and its location and indicating that the security of the ship is under threat or has been compromised. The system will not raise any alarm on board the ship. The ship security alert system must be capable of being activated from the navigation bridge and at least one other location.

The new regulations also cover requirements for port facilities, obliging Contracting Governments to ensure, *inter alia*, that port facility security assessments are carried out and that port facility security plans are developed, implemented and reviewed in accordance with the ISPS Code. Other regulations cover the provision of information to IMO, the control of ships in port, (including measures such as the delay, detention, restriction of operations – including movement within the port – or expulsion of a ship from port) and the specific responsibility of companies.

The amendments came into force on 1 July 2004.

As far as the amendments of SUA Convention and Protocol, 1988 it should be noted that they were adopted by the Diplomatic Conference on the Revision of the SUA Treaties held from 10 to 14 October 2005. The amendments were adopted in the form of Protocols to the SUA treaties.

Even though every new standard adopted by IMO represents a step forward, it is virtually worthless without proper implementation. And, in this particular context, there is no doubt that the mere existence of the new regulatory maritime security regime will provide no guarantee that acts of terrorism against shipping may be prevented and

suppressed. It is the wide, effective and uniform implementation of the new measures that will ensure shipping does not become the soft underbelly of the international transport system¹⁹.

VII. Contemporary challenges

This part of the research is focused on the process of the United States adherence to the Law of the Sea Convention as one of the contemporary challenges and the new developments in the European maritime policy.

United States Adherence to the Law of the Sea Convention

According to the United States Constitution, the President “shall have Power, by and with the advice and consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur”. The function of the Senate, as viewed by the framers of the Constitution, is to both protect the rights of the States and to serve as a check against the President in taking excessive or undesirable treaty actions.

Senate Action on the Law of the Sea Convention

When the 1982 United Nations Convention on the Law of the Sea was submitted to the U.S. Senate for its advice and consent, the President's transmittal letter noted: "Early adherence by the United States to the Convention and the Agreement is important to maintain a stable legal regime for all uses of the sea."

In an effort to make the Convention palatable to not only the United States but to the other major industrialized nations, the George H.W. Bush administration spearheaded a negotiating initiative that resulted in the 1994 Implementing Agreement that addressed initial concerns with the Law of the Sea Convention, particularly those voiced by President Ronald Reagan, who nonetheless stated that the United States should become a party to the Law of the Sea Convention.

The Republican George W. Bush administration has strongly supported the treaty from the outset and through its ambassador to the United Nations declared in November 2001, "...that the administration of President George W. Bush supports accession of the United States to the Convention."

In October 2003, the Republican-majority Senate Foreign Relations Committee held hearings on the Law of the Sea Convention and invited testimony from more than a dozen witnesses and had numerous other supporting documents submitted for the record. In the end, the committee voted 19-0 to send the Convention to the full Senate for ratification.

In 2004, the Chairman of the Joint Chiefs of Staff, General Richard Myers, called the United Nations Convention on the Law of the Sea a "top national-security priority." In its September 2004 report to the President and the Congress, the U.S. Commission on

¹⁹ Hartmut Hesse and Nicolaos L. Charalambous, *New Security Measures for the International Shipping Community* Maritime Safety Division, International Maritime Organization, *WMU Journal of Maritime Affairs*, 2004, Vol. 3, No.2, 123–138

Oceans Policy recommended "The United States of America immediately accede to the United Nations Law of the Sea Convention. Time is of the essence if the United States is to maintain its leadership role in ocean and coastal activities."

The December 2004 presidential response to the Oceans Policy Commission report stated "As a matter of national security, economic self-interest, and international leadership, the Bush administration is strongly committed to U.S. accession to the U.N. Convention on the Law of the Sea."

Senate advice and consent to the 1982 Law of the Sea Convention is strongly in the national interest of the United States. Ratification of the Convention will restore United States oceans leadership, protect United States oceans interests, and enhance United States foreign policy.

Why should United States of America should adhere to the Law of the Sea Convention?

At present the Law of the Sea Convention is in force; and with 148 States parties it is one of the most widely adhered conventions in the world. Parties include all permanent members of the Security Council but the United States, and all members of NATO but the United States and Turkey. According to professor John Norton Moore²⁰ "The Convention unequivocally and overwhelmingly meets United States national interests indeed, it is in many respects a product of those interests". Professor Moore briefly explored reasons for United States adherence to the Law of the Sea Convention in his testimony before the Senate Foreign Relations Committee, (October,14, 2003). He summarized the most important reasons, supporting United States adherence to the Law of the Sea Convention, under three powerful ones. Reasons rooted in restoring U.S. oceans leadership, protecting U.S. oceans interests, and enhancing U.S. foreign policy.

European Maritime Safety Policy

Overview

The enlargement of the European Union (EU) to 25 Member States has made it a major maritime power: EU-15's share of the world fleet rose from 16% to 25% after enlargement (28% for the European Economic Area). It is therefore essential that strict rules should be imposed in order to ensure the exemplary quality of European flags. Whilst many flag States and owners are meeting their international obligations, their efforts are constantly undermined by those who do not play the game according to the rules. When operators break the rules on safety and environmental protection, they put crews and the environment at risk and in addition they benefit from unfair competition.

This is a sad reality, despite the existence of a well developed framework of international rules for safety at sea and for the protection of the marine environment,

²⁰ John Norton Moore is the Walter L. Brown Professor of Law at the University of Virginia School of Law and Director of the Center for Oceans Law and Policy and the Center for National Security Law. He formerly served as the Chairman of the National Security Council Interagency Task Force on the Law of the Sea, which formulated United States international oceans policy for the law of the sea negotiations, he headed D/LOS, the office which coordinated both State Department and Interagency Policy on the law of the sea, and he served in the international negotiation as a Deputy Special Representative of the President and a United States Ambassador to the Third United Nations Conference on the Law of the Sea.

most of them laid down in the Law of the Sea Convention and the Conventions developed within the IMO.

Considering the existing loopholes in the IMO Conventions, the important degree of discretion left to flag States and the existing possibilities to derogate from safety rules for ships in international voyages, the European Community became involved in maritime safety.

With the strategic importance of shipping to the EU economy - 2 billions tonnes of freight are loaded and unloaded in EU ports every year - and the increase of the maritime traffic going through EU waters - every year 1 billion tonnes of oil are transiting through EU ports and EU waters – the EU is constantly developing and intensifying its maritime safety policy which the aim to eradicate substandard shipping essentially through a convergent application of internationally agreed rules.

Although at Community level a few legislative decisions were taken in the period 1978-1992, maritime safety policy actually started in 1993 with the adoption of the Commission's first communication on maritime safety: "A Common Policy on Safe Seas".

This breakthrough was a reaction to accidents at sea which occurred in 1992 and 1993 with the oil tankers "Aegean Sea" which ran aground outside La Coruña harbour (Spain) on 3 December 1992 and "Brear" which grounded off the Shetland Island on 5 January 1993. In addition, the change from the unanimity to the qualified majority rule for maritime decision making on 1 November 1993 also provided an appropriate incentive to develop a comprehensive action on maritime safety.

In the framework of the first communication and the implementation of the detailed action programme attached to it, several important legislative acts were proposed and adopted within 5 years. They are still the core of EU's maritime safety policy.

However, as new disasters occurred in European waters, additional actions focussing on specific shortcomings had to be initiated. After the "Estonia" tragedy, a Ro-Ro passenger ferry which sunk on 28 September 1994, the Community adopted a comprehensive set of rules for the protection of passengers and crew sailing on ferries operating to and from European ports, as well safety standards for passenger ships operating on domestic voyages within the Community.

In the meantime, EU's new maritime strategy gave particular attention to «Quality Shipping». A Charter on «Quality shipping» signed by key players of the maritime sector and the «EQUASIS» system are concrete results of the efforts to promote quality.

Promoting Safety at Sea

The ERIKA- I and ERIKA- II packages of measures

Following the "Erika" accident off the Spanish Atlantic coast in December 1999 which caused exceptional high cost damages to the environment, fisheries and tourism, the European Commission prepared measures in record time designed to increase maritime safety. On 21 March 2000, the Commission adopted a first set of proposals (the Erika I package) which was followed by a second set of measures in December 2000 (the Erika II package). The Erika I package provides an immediate response to shortcomings highlighted by the Erika accident. Under the new measures, the inspection regime has been substantially reinforced in order to increase the number of ships subjected to

expanded inspections and to ensure that ships which have been inspected and declared substandard on several occasions be blacklisted and refused access to EU ports. The first such list was published in the Official Journal on 25 July 2003. A second followed on 30 September 2004 listing all ships that were refused access to Community ports between 1 November 2003 and 31 August 2004. At the same time, as requested by the Commission, the European Maritime Safety Agency publishes on its website a regularly updated list of ships refused access to EU ports.

The adoption of Directive 2001/105/EC²¹ strengthened the existing Directive 94/57/EC²² on classification societies which conduct structural safety checks on ships on behalf of flag States. The quality requirements for classification societies have been raised. Authorisation to operate within the EU is conditional on meeting these requirements. The performance of classification societies is also strictly monitored, and failure to meet the standards could result in penalties, i.e. temporary or permanent withdrawal of their Community authorisation.

The adoption of Regulation (EC) N°417/2002²³, set a timetable for phasing out single-hull oil tankers worldwide. Double-hull tankers offer better protection for the environment in the event of an accident. For this reason, the IMO had decided that all oil tankers built from 1996 on should have a double hull. Since the Erika disaster was not caused by the lack of a double hull, one might ask why many delegations, including that of France, were proposing the accelerated phase-out of single hulls as a remedy. The answer is that the phasing-out of single-hulled tankers is simply a convenient means of forcing older tankers out of service. Not surprisingly, statistics show that old tankers have been involved in more accidents and cause more pollution than new tankers. While many shipowners insist that old ships are safe if properly maintained, there is no doubt that old ships deteriorate with age and are therefore more like to have defects and deficiencies, especially corrosion and structural failure.

However, the gradual replacement of single-hull by double-hull tankers was spread over a very long period, ending in 2026. The EU pushed for a faster phase-out and secured international acceptance for its position. All proposals have been adopted by the European Parliament and the Council on 19 December 2001 and entered into force on 22 July 2003.

The Erika II package completed the first package with three essential measures aiming at drastically improving maritime safety in European waters. Regulation (EC)²⁴

²¹ Directive 2001/105/EC of the European Parliament and of the Council of 19 December 2001 amending Council Directive 94/57/EC on common rules and standards for ship inspection and survey organizations and for the relevant activities of maritime administrations, *Official Journal L 019*, 22/01/2002 P. 0009 – 0016

²² Directive 94/57/EC, Council Directive 94/57/EC of 22 November 1994 on common rules and standards for ship inspection and survey organizations and for the relevant activities of maritime administrations, *Official Journal L 319*, 12/12/1994 P. 0020 - 0027

²³ Regulation (EC) N°417/2002 of the European Parliament and of the Council of 18 February 2002 on the accelerated phasing-in of double hull or equivalent design requirements for single hull oil tankers and repealing Council Regulation (EC) No 2978/94, *Official Journal L 064*, 07/03/2002 P. 0001 - 0005

²⁴ Regulation (EC) 1406/2002 of the European Parliament and of the Council of 18 February 2002 on the accelerated phasing-in of double hull or equivalent design requirements for single hull oil tankers and repealing Council Regulation (EC) No 2978/94, *Official Journal L 064*, 07/03/2002 P. 0001 - 0005

establishing a European Maritime Safety Agency responsible for improving enforcement of the EU rules on maritime safety entered into force in August 2002.

With the adoption Directive 2002/59/EC which entered into force on 5 February 2005 a surveillance and information system to improve vessel monitoring in European waters has been established. Ships sailing in EU waters have to be fitted with identification systems which automatically communicate with the coastal authorities, as well as voyage data recorders (black boxes) to facilitate accident investigation. The directive improves the procedures for exchanging data on dangerous cargoes and allows the competent authorities to prevent ships from setting sail in very bad weather. It also requires each maritime Member State to draw up contingency plans for accommodating ships in distress in places of refuge.

The Commission also proposed within the Erika II package a mechanism to improve compensation for victims of oil spills (COPE Fund) and, in particular, raise the upper limits on the amounts payable in the event of major oil spills in European waters to €1 billion from the current ceiling of €236 million. The Council of Ministers has not yet seen fit to adopt this proposal and Member States preferred to refer the discussion to the IMO in order to obtain an agreement applicable worldwide. As a result, a Protocol to the Fund Convention, modelled on Europe's COPE Fund, was adopted in May 2003 to create a supplementary fund. In future, the amount available for compensation for victims in the States covered by this new Fund will be €872 million for each accident occurring after the Protocol enters into force. The Protocol entered into force in 2005.

The Prestige accident

Three years after the "Erika" accident, the "Prestige", a single hull tanker, sprang a leak off the Galicia coast polluting the Spanish and the French coasts with heavy fuel oil. The European Commission reacted rapidly to the accident by adopting a communication on improving safety at sea on 3 December 2002, which included the following main points:

On 20 December 2002 the Commission submitted to the European Parliament and the Council a proposal for a regulation to ban immediately the carriage of heavy fuel oil in single-hull tankers; speed up the timetable for phasing out single-hull oil tankers flying the flag of an EU Member State or operating in European ports; and tighten up the technical inspections for single-hull tankers over 15 years old entering EU ports. With the entry into force of Regulation (EC) N° 1726/2003²⁵ on 21 October 2003 single-hull tankers carrying heavy fuel oil are no longer allowed to enter or leave ports in the Member States.

As pointed out in the previous section, after months of intensive negotiations at the IMO, similar measures have been adopted with the amendment to MARPOL 73/78 which entered into force on 5 April 2005.

Finally, following the Commission's proposal on 5 March 2003, the European parliament and the Council adopted on 12 July 2005 Directive 2005/35/EC on ship-source pollution and on the introduction of sanctions, including criminal sanctions for pollution offences. A complementary Framework Decision was adopted to strengthen the

²⁵ Regulation (EC) N° 1726/2003 of the European Parliament and of the Council of 22 July 2003 amending Regulation (EC) No 417/2002 on the accelerated phasing-in of double-hull or equivalent design requirements for single-hull oil tankers, *Official Journal L 249*, 01/10/2003 P. 0001 - 0004

criminal law framework for the enforcement of the law against ship-source pollution. The Directive establishes that marine pollution by ships is an infringement. Sanctions will be applicable to any party - including the master, the owner, the operator, the charterer of a ship or the classification society - who has been found to have caused or contributed to illegal pollution intentionally or by means of serious negligence. The Framework Decision provides that in the most serious cases these infringements will have to be regarded as criminal offences, subject to criminal penalties.

The regime introduced with the Directive tackles discharges in all sea areas including the high seas and is enforceable for all ships calling to EU ports irrespective of their flag. It provides for cooperation between port State authorities, which will make it possible for proceedings to be initiated in the next port of call. Furthermore, it aims at enhancing cooperation among Member States to detect illegal discharges and to develop methods to identify a discharge as originating from a particular ship. The European Maritime Safety Agency will assist the Commission and Member States to that end.

Stringent measures to guarantee the safety of maritime transport

The European Union acted immediately following the Erika and Prestige accidents to set up a “defensive” mechanism to protect Europe against the risks of accidents and pollution. On 21 March 2000, the Commission adopted a first set of proposals (the Erika I package) which was followed by a second set of measures in December 2000 (the Erika II package). Today the Commission is proposing the third maritime safety package, aimed at restoring conditions for healthy and sustainable competition for those operators who comply with international rules. The third maritime safety package²⁶ contains 7 proposals structured around two major themes:

- Improved accident and pollution prevention
- Dealing with the aftermath of accidents

CONCLUSIONS

The Law of the Sea Convention is acknowledged to be an "umbrella convention" because most of its provisions, being of a general kind, can be implemented only through specific operative regulations in other international agreements. This feature is reflected in several provisions in the Law of the Sea Convention which require that States "take account of", "conform to", "give effect to" or "implement" the relevant international rules and standards developed by or through the "competent international organization" (IMO). These are variously referred to as "applicable international rules and standards", "internationally agreed rules, standards, and recommended practices and procedures", "generally accepted international rules and standards", "generally accepted international regulations", "applicable international instruments" or "generally accepted international regulations, procedures and practices". These provisions clearly establish an obligation for States Parties to the Law of the Sea convention to apply IMO rules and standards. The specific form of such application relies to a great extent on the interpretation given by

²⁶ More detailed information on the contents of the third maritime safety package can be found on the website of the Directorate-General for Energy and Transport at the following address: http://europa.eu.int/comm/transport/maritime/safety/2005_package_3_en.htm

Parties to UNCLOS to the expressions "take account of", "conform to", "give effect to" or "implement" IMO provisions²⁷.

The fact that Parties to the Law of the Sea Convention should apply IMO rules and standards should be seen as a paramount incentive for them to become Parties to the IMO treaties containing those rules and standards. The Law of the Sea Convention urges all States to cooperate on a global basis in formulating rules and standards and take measures for the same purpose. This has already become a significant factor in the strengthening of international standards which are already adopted and which are in a process of adoption in IMO Conventions.

Wider understanding of the Law of the Sea Convention will bring yet wider application and stability oceans order.

In short, the Convention is an unprecedented attempt by the international community to regulate all aspects of uses of the ocean, and thus bring a guidance for future harmonious development of the international rules and standards drafted and adopted in the Conventions of IMO.

²⁷ See generally Bernard H.Oxman, Complementary Agreements and Compulsory Jurisdiction, *American Journal of International Law*, vol.95,N. 2(2001), p.277

Annex I

LIST OF IMO CONVENTIONS

As at 31 October 2005

The table, which can be found on the IMO website (www.imo.org), provides data for each instrument on the number of States which have signed or accepted, including the number of Member States which have not yet deposited the necessary instruments in each case.

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

Entry into force:	25 May 1980
1981 amendments (MSC.1(XLV)) (subdivision, machinery and electrical installations, fire protection, radio-communications, navigation, carriage of grain)	1 September 1984
1983 amendments (MSC.6(48)) (subdivision, electrical installation, fire protection, life-saving appliances, radiocommunications, carriage of dangerous goods, IBC and IGC Codes)	1 July 1986
1988 amendments (MSC.11(55)) (ro-ro passenger ship door indicators and television surveillance)	22 October 1989
1988 amendments (MSC.12(56)) (passenger ship damage stability)	29 April 1990
1988 amendments (GMDSS) (Conference resolution 1)	1 February 1992
1989 amendments (MSC.13(57)) (subdivision, fire protection, radio-communications, navigation)	1 February 1992
1990 amendments (MSC.19(58)) (cargo ship subdivision and damage stability)	1 February 1992
1991 amendments (MSC.22(59)) (fire protection, life-saving appliances, navigation, carriage of cargoes, (Grain Code), carriage of dangerous goods)	1 January 1994

1992 amendments (MSC.24(60)) (existing passenger ship fire protection)	1 October 1994
1992 amendments (MSC.26(60)) (existing ro-ro passenger ship damage stability)	1 October 1994
1992 amendments (MSC.27(61)) (fire protection, life-saving appliances radiocommunications)	1 October 1994
1994 amendments (MSC.31(63))	
Annex 1 (ship reporting systems, emergency towing arrangements on tankers)	1 January 1996
Annex 2 (protection of fuel lines, navigation bridge visibility)	1 July 1998
1994 amendments (Conference resolution 1)	
Annex 1 (new chapter X - Safety measures for high speed craft, (HSC Code), new chapter XI - Special measures to enhance maritime safety)	1 January 1996
Annex 2 (new chapter IX - Management for the safe operation of ships, (ISM Code))	1 July 1998
1994 amendments (MSC.42(64)) (cargo information, loading, stowage and securing)	1 July 1996
1995 amendments (MSC.46(65)) (ships' routing)	1 January 1997
1995 amendments (Conference resolution 1) (ro-ro passenger ship safety)	1 July 1997
1996 amendments (MSC.47(66)) (construction, subdivision and stability, life-saving appliances, (LSA Code), carriage of cargoes, authorization of recognized organizations)	1 July 1998
1996 amendments (MSC.57(67)) (construction; machinery and electrical installations; fire protection, fire detection and fire extinction (FTP Code); carriage of dangerous goods)	1 July 1998
1997 amendments (MSC.65(68))	1 July 1999

(passenger ship subdivision and stability;
vessel traffic services)

1997 amendments (Conference resolution 1) (new chapter XII on bulk carrier safety)	1 July 1999
1998 amendments (MSC.69(69)) (construction; radiocommunications; carriage of cargoes; carriage of dangerous goods)	1 July 2002
1999 (chapter VII) amendments (MSC.87(71))	1 January 2001
2000 (chapter III) amendments (MSC.91(72)) (life-saving appliances and arrangements, form of certificates)	1 January 2002
2000 (chapters II-1, II-2, V, IX and X) amendments (MSC.99(73))	1 July 2002
2001 (chapter VII) amendments (MSC.117(74))	1 January 2003
2002 (chapters IV, V, VI and VII and appendix to the Annex) amendments (MSC.123(75))	1 January 2004
2002 (chapter V, new chapter XI, chapter XI-2) amendments to the Annex (Conference resolution 1)	[1 July 2004]
2002 (chapter II-1) amendments (MSC.134(76))	[1 July 2004]
2003 (chapter V) amendments (MSC.142(77))	[1 July 2006]

(2) Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT (amended) 1978)

Entry into force:	1 May 1981
1981 amendments (steering gear) (MSC.2(XLV))	1 September 1984
1988 amendments (GMDSS) (Conference resolution)	1 February 1992

(3) Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 (SOLAS PROT (HSSC) 1988)

Entry into force:	3 February 2000
2000 amendments (MSC.92(72))	1 January 2002

2000 amendments (to the Annex) (MSC.100(73))	1 July 2002
2002 amendments (MSC.124(75))	1 January 2004
(4) Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG (amended) 1972)	
Entry into force:	15 July 1977
1981 amendments (general) (A.464(XII))	1 June 1983
1987 amendments (general) (A.626(15))	19 November 1989
1989 amendments (general) (A.678(16))	19 April 1991
1993 amendments (general) (A.736(18))	4 November 1995
2001 amendments (general) (A.910(22))	29 November 2003
(5)(a) International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto (MARPOL (amended) 73/78)	
Entry into force:	2 October 1983
Annex I	2 October 1983
Annex II	6 April 1987
Annex III	1 July 1992
Annex IV	27 September 2003
Annex V	31 December 1988
1984 (Annex I) amendments (MEPC.14(20)) (extensive amendments to Annex I which had been agreed over the years)	7 January 1986
1985 (Annex II) amendments (MEPC.16(22)) (extensive amendments to Annex II in preparation for its implementation - pumping, piping, control, etc. (IBC and BCH Codes))	6 April 1987
1985 (Protocol I) amendments (MEPC.21(22)) (Reporting Protocol)	6 April 1987
1987 (Annex I) amendments (MEPC.29(25)) (designation of the Gulf of Aden as a special area)	1 April 1989
1989 (Annex II) amendments (MEPC.34(27)) (lists of chemicals)	13 October 1990

1989 (Annex V) amendments (MEPC.36(28)) (designation of the North Sea as a special area)	18 February 1991
1990 (Annexes I and II) amendments (MEPC.39(29)) (harmonized system of survey and certification)	3 February 2000
1990 (Annexes I and V) amendments (MEPC.42(30)) (designation of the Antarctic area as a special area)	17 March 1992
1991 (Annex I) amendments (MEPC.47(31)) (new regulation 26 (Shipboard Oil Pollution Emergency Plan) and other amendments)	4 April 1993
1991 (Annex V) amendments (MEPC.48(31)) (designation of the Wider Caribbean area as a special area)	4 April 1993
1992 (Annex I) amendments (MEPC.51(32)) (discharge criteria)	6 July 1993
1992 (Annex I) amendments (MEPC.52(32)) (oil tanker design)	6 July 1993
1992 (Annex II) amendments (MEPC.57(33)) (lists of chemicals and the designation of the Antarctic area as a special area)	1 July 1994
1992 (Annex III) amendments (MEPC.58(33)) (total revision of Annex III with the IMDG Code as vehicle of implementation)	28 February 1994
1994 (Annexes I, II, III and V) amendments (Conference resolutions 1-3) (Port State control on operational requirements)	3 March 1996
1995 (Annex V) amendments (MEPC.65(37)) (guidelines for garbage management plans)	1 July 1997
1996 (Protocol I) amendments (MEPC.68(38)) (Reporting Protocol)	1 January 1998
1997 (Annex I) amendments (MEPC.75(40)) (designation of North West European waters as a special area; new regulation 25A)	1 February 1999
1999 (Annexes I and II) amendments (MEPC.78(43)) (amendments to regulations 13G and 26 and IOPP Certificate of Annex I and addition	1 January 2001

of new regulation 16 to Annex II)	
2000 (Annex III) amendments (MEPC.84(44)) (deletion of clause relating to tainting of sea food)	1 January 2002
2000 (Annex V) amendments (MEPC.89(45)) (amendments to regulations 1, 3, 5 and 9 to the Record of Garbage Discharge)	1 March 2002
2001 (Annex I) amendments (MEPC.95(46)) amendments to regulation 13G of Annex I)	1 September 2002
2002 amendments to the Condition Assessment Scheme (MEPC.99(48))	1 March 2004
2003 amendments to the Condition Assessment Scheme (MEPC.112(50))	[5 April 2005]
2003 amendments to the Annex (regulation 13G, addition of new regulation 13H and consequential amendments to the Supplement to the IOPP Certificate of Annex 1) (MEPC.111(50))	[5 April 2005]
(6) Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL PROT 1997) (Annex VI on the prevention of air pollution from ships)	
Entry into force:	19 May 2005
(7) Convention on Facilitation of International Maritime Traffic, 1965, as amended (FAL (amended) 1965)	
Entry into force:	5 March 1967
(a) Amendment to the Convention:	
1973 amendment (amendment procedure)	2 June 1984
(b) Amendments to the Annex:	
1969 amendments (cruise ships)	12 August 1971
1977 amendments 31 July 1978 (sick/injured/transit persons, scientific services/relief work)	
1986 amendments (ADP/EDI)	1 October 1986

1987 amendments (FAL.1(17)) (upgrading of recommendations)	1 January 1989
1990 amendments (FAL.2(19)) (drug trafficking)	1 September 1991
1992 amendments (FAL.3(21)) (restructuring of Annex, EDP/EDI, specialized equipment)	1 September 1993
1993 amendments (FAL.4(22)) (general)	1 September 1994
1996 amendments (FAL.5(24)) (general/pre-import information/ pre-arrival clearance)	1 May 1997
1999 amendments (FAL.6(27)) (definitions and general provisions/ arrival, stay, departure of ship/persons/ clearance of cargo, passengers, crew and baggage/arrival, stay and departure of cargo/ clearance of cargo)	1 January 2001
2002 amendments (FAL.7(29)) (definitions and general provisions/ arrival, stay, departure of ship/ stowaways)	1 May 2003
(8) International Convention on Load Lines, 1966 (LL 1966)	
Entry into force:	21 July 1968
1971 amendments (general) (A.231(VII))	not yet in force
1975 amendment (article 29) (A.319(IX))	not yet in force
1979 amendment (seasonal area) (A.411(XI))	not yet in force
1983 amendments (seasonal area) (A.513(13))	not yet in force
1995 amendment (seasonal area) (A.784(19))	not yet in force
(9) Protocol of 1988 relating to the International Convention on Load Lines, 1966 (LL PROT (HSSC) 1988)	
Entry into force:	3 February 2000
2003 (Annex B) amendments (MSC.143(77))	[1 July 2006]

- (10) International Convention on Tonnage Measurement of Ships, 1969
(TONNAGE 1969)
- Entry into force: 18 July 1982
- (11) International Convention relating to Intervention on the High Seas in Cases of Oil
Pollution Casualties, 1969 (INTERVENTION 1969)
- Entry into force: 6 May 1975
- (12) Protocol relating to Intervention on the High Seas in Cases of Pollution by
Substances other than Oil, 1973, as amended
(INTERVENTION PROT (amended) 1973)
- Entry into force: 30 March 1983
- 1991 amendments (list of substances) (MEPC.49(31)) 24 July 1992
- 1996 amendments (list of substances) (MEPC.72(38)) 19 December 1997
- 2002 amendments (lists of substances) (MEPC.100(48)) 22 June 2004
- (13) International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC
1969)
- Entry into force: 19 June 1975
- (14) Protocol to the International Convention on Civil Liability for Oil Pollution
Damage, 1969 (CLC PROT 1976)
- Entry into force: 8 April 1981
- (15) Protocol of 1992 to amend the International Convention on Civil Liability for
Oil Pollution Damage, 1969 (CLC PROT 1992)
- Entry into force: 30 May 1996
- 2000 amendments (LEG.1(82)) 1 November 2003
(amendments of limitation amounts)
- (16) Special Trade Passenger Ships Agreement, 1971 (STP 1971)
- Entry into force: 2 January 1974
- (17) Protocol on Space Requirements for Special Trade Passenger Ships, 1973
(SPACE STP 1973)
- Entry into force: 2 June 1977

(18) Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, 1971 (NUCLEAR 1971)

Entry into force: 15 July 1975

(19) International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 (FUND 1971)

Entry into force: 16 October 1978

(20) Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 (FUND PROT 1976)

Entry into force: 22 November 1994

(21) Protocol of 1992 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 (FUND PROT 1992)

Entry into force: 30 May 1996

2000 amendments (LEG.2(82))
(amendments of limits of compensation) 1 November 2003

(22) International Convention for Safe Containers, 1972, as amended (CSC (amended) 1972)

Entry into force: 6 September 1977

(a) Amendments to the Convention and Annexes:

1993 amendments: (A.737(18))
(SI units) not yet in force

(b) Amendments to the Annexes:

1981 amendments
(transitional arrangements for plating) 1 December 1981

1983 amendments (MSC.3(48))
(re-examination intervals) 1 January 1984

1991 amendments (MSC.20(59))
(modified containers/tank containers) 1 January 1993

(23) Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974 (PAL 1974)

Entry into force: 28 April 1987

(24) Protocol to the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974 (PAL PROT 1976)

Entry into force: 30 April 1989

(25) Protocol of 1990 to amend the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974 (PAL PROT 1990)

Not yet in force

(26) Convention on the International Maritime Satellite Organization (INMARSAT), as amended (INMARSAT C (amended))

Entry into force: 16 July 1979

1985 amendments
(aeronautical-satellite communications) 13 October 1989

1989 amendments
(land mobile-satellite communications) 26 June 1997

1994 amendments
(change of title, Council composition) not yet in force

1998 amendments
(restructuring of the Organization) 31 July 2001

(27) Operating Agreement on the International Maritime Satellite Organization (INMARSAT), as amended (INMARSAT OA (amended))

Entry into force: 16 July 1979

1985 amendments
(aeronautical-satellite communications) 13 October 1989

1989 amendments
(land mobile-satellite communications) 26 June 1997

1994 amendments
(change of title, Council composition) not yet in force

1998 amendments
(restructuring of the Organization) 31 July 2001

(28) Convention on Limitation of Liability for Maritime Claims, 1976
(LLMC 1976)

Entry into force: 1 December 1986

(29) Protocol of 1996 to amend the Convention on Limitation of Liability for
Maritime Claims, 1976 (LLMC PROT 1996)

Entry into force: 13 May 2004

(30) Torremolinos Protocol of 1993 relating to the Torremolinos International
Convention for the Safety of Fishing Vessels, 1977 (SFV PROT 1993)

Not yet in force

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

Entry into force: 28 April 1984

1991 amendments (GMDSS and trials) (MSC.21(59)) 1 December 1992

1994 amendments (MSC.33(63))
(special training requirements
for personnel on tankers) 1 January 1996

1995 amendments (Conference resolution 1)
(revised Annex to Convention, (STCW Code)) 1 February 1997

1997 amendments (MSC.66(68))
(training and qualification requirements for
personnel on passenger ships) 1 January 1999

(32) International Convention on Standards of Training, Certification and
Watchkeeping for Fishing Vessel Personnel, 1995 (STCW-F)

Not yet in force

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

Entry into force: 22 June 1985

1998 amendments (MSC.70(69))
(revised Annex) 1 January 2000

(34) Convention for the Suppression of Unlawful Acts against the Safety of Maritime
Navigation (SUA 1988)

Entry into force: 1 March 1992

(35) Protocol of 2005 for the amendment of the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation

Not yet in force

(36) Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms located on the Continental Shelf (SUA PROT 1988)

Entry into force: 1 March 1992

(37) Protocol of 2005 for the amendment of the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms located on the Continental Shelf

Not yet in force

(38) International Convention on Salvage, 1989 (SALVAGE 1989)

Entry into force: 14 July 1996

(39) International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC 1990)

Entry into force: 13 May 1995

(40) International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS 1996)

Not yet in force

(41) Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as amended (LC (amended) 1972)

Entry into force: 30 August 1975

(a) Amendments to the Convention:

1978 amendments: (LDC.6(III))
(concerning procedures for the settlement of disputes) not yet in force

(b) Amendments to the Annexes:

1978 amendments (LDC.5(III))
(concerning the control of incineration of wastes and other matter at sea) 11 March 1979

1980 amendments (LDC.12(V)) (concerning the prohibition of dumping at sea of crude oil and oily substances and mixtures)	11 March 1981
1989 amendments (LDC.37(12)) (concerning characteristics and composition of matter to be dumped at sea)	19 May 1990
1993 amendments (LC.49(16)) (concerning phasing out sea disposal of industrial waste)	20 February 1994
1993 amendments (LC.50(16)) (concerning incineration at sea)	20 February 1994
1993 amendments (LC.51(16)) (concerning disposal at sea of radioactive wastes and other radioactive matter)	20 February 1994
(42) 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (LC PROT 1996)	
Not yet in force	
(43) 2000 Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances (OPRC/HNS PROT 2000)	
Not yet in force	
(44) 2000 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971	
Entry into force:	27 June 2001
(45) International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001	
Not yet in force	
(46) International Convention on the Control of Harmful Anti-Fouling Substances on Ships, 2001	
Not yet in force	
(47) Protocol of 2002 to the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974	

Not yet in force

(48) Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992

Not yet in force

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

Not yet in force

ANNEX II

PROVISIONS OF THE LAW OF THE SEA CONVENTION RELEVANT TO THE CONVENTIONS OF IMO²⁸

Articles of UNCLOS	Subject-Matter	Specific provisions on the subject-matter	Relationship between UNCLOS and IMO instruments	Relevant IMO instruments	Comments/recommendations
--------------------	----------------	---	---	--------------------------	--------------------------

INNOCENT PASSAGE IN THE TERRITORIAL SEA
(rules applicable to all ships)

21	Laws and regulations of the coastal State relating to innocent passage	<p>Paragraph 1: Matters concerning which the coastal State is entitled to adopt laws and regulations including safety of navigation, regulation of maritime traffic, protection of navigational aids and facilities, prevention of marine pollution</p> <p>(also article 211(4))</p> <p>Paragraph 2: Laws and regulations on design, construction, manning or equipment</p> <p>Paragraph 4: Laws and regulations on prevention of collisions</p>	<p>Reference to "rules of international law"</p> <p>Reference to "generally accepted international rules or standards"</p> <p>Reference to "generally accepted international regulations relating to the prevention of collisions at sea"</p>	<p>SOLAS Load Lines COLREG STCW MARPOL</p> <p>SOLAS Load Lines MARPOL STCW</p> <p>COLREG</p>	
22	Sea lanes and traffic separation schemes in the territorial sea	Paragraph 2: Nuclear-powered ships and ships carrying dangerous cargo			

²⁸ See *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization*, Study by the Secretariat of IMO, doc.LEG/MISC 4. The Table is modified by the author.

		<p>Paragraph 3: Duty of coastal States in establishing sea lanes and traffic separation schemes</p> <p>Paragraph 4: Duty to indicate sea lanes and traffic separation schemes on charts and duty of publicity</p>	Reference to the recommendations of the "competent international organization"	SOLAS (regulation V/10) COLREG (rules 1(d) and 10))	<p>IMO is the competent international organization.</p> <p>Additional work may be undertaken as regards PSSA/special area requirements. (See Art 211.)</p>
23	Foreign nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances	Documentary requirements and special precautionary measures	Reference to "international agreements"	SOLAS (chapters VII and VIII)	
24	Duties of the coastal State	Paragraph 2: Publicity in respect of dangers to navigation	IMO's field of competence (safety of navigation) SOLAS V/4		
27	Criminal jurisdiction on board a foreign ship	Criminal activity	Prevention of unlawful acts against the safety of navigation	SUA SUA Protocol	Consider possible roles of IMO in prevention of terrorist acts against ships.

STRAITS USED FOR INTERNATIONAL NAVIGATION
(transit passage)

39	<p>Duties of ships and aircraft during transit passage through straits used for international navigation</p> <p>(applicable also to archipelagic sea lanes passage according to article 54)</p>	<p>Paragraph 2: Compliance with international regulations on safety at sea and prevention and control of pollution from ships</p>	<p>Reference to "generally accepted international regulations, procedures and practices", "including the International Regulations for Preventing Collisions at Sea"</p>	<p>SOLAS COLREG Load Lines STCW MARPOL</p>	
41	<p>Sea lanes and traffic separation schemes in straits used for international navigation</p>	<p>Paragraph 3: Duty of States bordering straits in establishing sea lanes and traffic separation schemes</p> <p>Paragraph 4: Duty to refer proposals concerning sea lanes or traffic separation schemes to the competent international organization</p> <p>Paragraph 5: Duty for States bordering straits to co-operate in formulating proposals for sea lanes or traffic separation schemes</p>	<p>Reference to "generally accepted international regulations"</p> <p>Reference to the "competent international organization"</p> <p>Reference to the "competent international organization"</p>	<p>SOLAS V/8 (renumbered V/10 in 2000 amendments) COLREG (rules 1(d) and 10)</p> <p>SOLAS V/8 (renumbered as V/10 in 2000 amendments) COLREG (rules 1(d) and 10)</p> <p>SOLAS V/8 (renumbered as V/10 in 2000 amendments)</p>	<p>IMO is the competent international organization.</p> <p>IMO is the competent international organization.</p>

		Paragraph 6: Duty to indicate sea lanes and traffic separation schemes on charts and duty of publicity		SOLAS V/8 (renumbered as V/10 in 2000 amendments)	
43	Navigational and safety aids and other improvements and the prevention, reduction and control of pollution	Duty of user States and States bordering straits to co-operate by agreement	IMO's fields of competence (navigational aids and vessel-source pollution)	SOLAS V/14 (renumbered V/13 in 2000 amendments)	
44	Duties of States bordering straits (applicable also to archipelagic sea lanes passage according to article 54)	Publicity in respect of dangers to navigation	IMO's field of competence (safety of navigation)	SOLAS V/2 (renumbered as V/4 in 2000 amendments)	

ARCHIPELAGIC STATES
(archipelagic sea lane passage)

53	Right of archipelagic sea lanes passage	Paragraph 8: Duty of archipelagic States in establishing sea lanes and traffic separation schemes	Reference to "generally accepted international regulations"	SOLAS V/8 (renumbered as V/10 in 2000 amendments) COLREG (rules 1(d) and 10)	
----	---	--	---	--	--

		<p>Paragraph 9: Duty to refer proposals concerning sea lanes or traffic separation schemes to the competent international organization</p> <p>Paragraph 10: Duty to indicate sea lanes and traffic separation schemes on charts and duty of publicity</p>	Reference to the "competent international organization"	<p>SOLAS V/8 (renumbered as V/10 in 2000 amendments) COLREG (rules 1(d) and 10) SOLAS V/8 (renumbered as V/10 in 2000 amendments)</p>	<p>IMO is the competent international organization</p> <p>IMO is the competent international organization.</p>
--	--	---	---	---	--

EXCLUSIVE ECONOMIC ZONE

60	Artificial islands, installations and structures in the EEZ	<p>Paragraph 3: Duty to remove abandoned or disused artificial islands, installations or structures, and duty of publicity with respect to their partial removal</p>	Reference to "generally accepted international standards" established by the "competent international organization"	London Convention (article III, and annex 17)	Notification of partial removal but also of non-removal should be forwarded to IMO.
----	---	--	---	---	---

CONTINENTAL SHELF

80	Artificial islands, installations and structures on the continental shelf				Same as in relation to article 60 of UNCLOS
----	---	--	--	--	---

HIGH SEAS

91 & 92	Nationality of ships and status of ships	Registration of ships	Prevention of unlawful acts against safety of navigation	SUA SUA Protocol Intervention 1969 Intervention Prot 73	
94	Duties of the flag State (applicable also to the EEZ as far as compatible with the EEZ regime according to article 58(2))	<p>Paragraph 1: Flag State jurisdiction with respect to administrative, technical and social matters</p> <p>Paragraph 3: Measures to ensure safety at sea on the following matters:</p> <p>(a) Construction, equipment and seaworthiness of ships</p> <p>(b) Manning of ships</p> <p>Paragraph 4: The above measures shall include the following: (a) Survey of ships and duty to carry charts,</p>	<p>Reference to "generally accepted international regulations, procedures and practices" according to article 94(5)</p> <p>As above</p> <p>Reference to "applicable international instruments"</p> <p>As above</p> <p>As above</p>	<p>SOLAS Load Lines COLREG MARPOL STCW STCW-F</p> <p>SOLAS Load Lines SFV MARPOL</p> <p>STCW STCW-F SOLAS</p> <p>SOLAS</p>	<p>1. The flag State must, as appropriate, comply with non-binding IMO instruments (Res. A.739(18), A.740(18), A.741(18)).</p> <p>2. IMO rules and standards represent the minimum requirements <i>vis-à-vis</i> flag State jurisdiction.</p>

		<p>nautical publications, instruments and equipment</p> <p>(b) Technical qualification of the master, officers, and crew</p> <p>(c) Qualification of the master, officers, and crew in maritime law</p> <p>Paragraph 7: Duty of the flag State to conduct an investigation of any casualty occurring to its ships</p>	<p>Reference to "applicable international regulations"</p> <p>Reference to "generally accepted international regulations, procedures and practices" according to article 94(5)</p> <p>IMO's field of competence</p>	<p>MARPOL</p> <p>SOLAS STCW STCW-F</p> <p>SOLAS STCW STCW-F</p> <p>SOLAS (regulation I/21) Load Lines (article 23) MARPOL art. 6(4) and art. 12</p>	<p>1. The duty to investigate under relevant IMO regulations is limited to the purpose of determining the need for any changes to the pertinent convention.</p>
98	Duty to render assistance	<p>Paragraph 1: Duty of the master to render assistance to persons and ships</p> <p>Paragraph 2: Duty of the coastal State to promote search and rescue services</p>	<p>IMO's field of competence</p> <p>IMO's field of competence</p>	<p>Salvage SOLAS V/33</p> <p>SAR SOLAS V/7</p>	
100	Piracy	Duty of States to co-operate in the repression of piracy	IMO's field of competence (navigational and environmental risk)		
108	Illicit traffic in narcotic drugs or psychotropic substances	Duty of co-operation for the suppression of illicit drug-trafficking	IMO's field of competence (facilitation of maritime traffic)	FAL	1. FAL is applicable only within the jurisdiction of the port State.

THE AREA

142	Rights and legitimate interests of coastal States	Right of coastal States to take proportionate measures beyond the territorial sea to avoid pollution resulting from or caused by any activities in the Area		Intervention Convention 1973 Intervention Protocol	
163	Organs of the Council (International Seabed Authority)	Paragraph 13: Each Commission may consult any competent organ of the United Nations or of its specialized agencies	Reference to the specialized agencies of the United Nations		IMO is a specialized agency of the United Nations.

PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT

197	Co-operation on a global or regional basis	Duty of States to co-operate on a global or regional basis directly or through competent international organization, in elaborating international anti-pollution standards	Reference to "competent international organizations"	OPRC	IMO is a competent international organization.
198	Notification of imminent or actual damage	Duty of States to notify other States and the competent international organizations in cases or imminent or actual damage	Reference to "competent international organizations"	OPRC OPRC PROT 2000	IMO is a competent international organization.

199	Contingency plans against pollution	Duty of affected States and the competent international organizations to co-operate in eliminating the effects of pollution and preventing or minimizing damage	Reference to "competent international organizations"	OPRC OPRC PROT 2000 MARPOL Annex I, reg. 26 & Annex II, Reg. 16	IMO is a competent international organization.
200	Studies, research programmes and exchange of information and data	Duty of States to co-operate through competent international organizations, for the purpose of promoting studies, undertaking programmes of scientific research and encouraging the exchange of information and data	Reference to "competent international organizations"	AFS, 2001	IMO is a competent international organization.
201	Scientific criteria for regulations	Duty of States to co-operate through competent international organizations in establishing appropriate scientific criteria for the formulation of international anti-pollution standards	Reference to "competent international organizations"		IMO is a competent international organization.
202	Scientific and technical assistance to developing States	Duty of States to provide scientific and technical assistance to developing States for the protection and preservation of the marine environment	Reference to "competent international organizations"	IMO convention and specific treaty obligations under MARPOL, London Convention, OPRC, OPRC PROT 2000, STCW	1. IMO is a competent international organization. 2. IMO's programme for technical co-operation and assistance for developing States.
203	Preferential treatment for developing States	Granting of preferential treatment to developing States by international organizations	Reference to "international organizations"		IMO may take these guidelines into account when implementing the duty of technical assistance.

204 to 206	Monitoring and environmental assistance	Monitoring of the risks or effects of pollution, publication of reports, assessing potential effects of activities	Reference to "competent international organizations"		IMO's participation and contribution to GESAMP.
208 (also article 214 with respect to enforcement)	Pollution from seabed activities and from artificial islands, installations and structures subject to national jurisdiction	Establishment by States, through competent international organizations, of international regulations	Reference to "competent international organizations"	OPRC OPRC PROT 2000	Partly covered in MARPOL 73/78, Annex I, reg. 21. Further regulation of offshore activities is under discussion (but not agreed at this time). Pollution directly arising from exploration/exploitation is however not the direct concern of IMO, the Organization may contribute to the establishment of international regulations.
210	Pollution by dumping	Paragraph 4: Adoption by States, through the competent international organization, of global rules, standards and recommended practices and procedures	Reference to "competent international organizations"	London Convention Resolution of the Consultative Meetings of Contracting Parties, LC Protocol, 1996	1. IMO is a competent international organization. 2. The Consultative Meeting concluded that there were no fundamental inconsistencies between UNCLOS and the London Convention.
211	Pollution from vessels	Paragraph 1: Adoption by States, through the competent international organization, of international rules and standards concerning vessel-source pollution, and promotion of routing systems to minimize marine pollution	Reference to the "competent international organization"	MARPOL SOLAS V/8 (renumbered as V/10 in 2000 amendments) AFS, 2001	IMO is the competent international organization for establishing international rules and standards on vessel-source pollution.

211		<p>Paragraph 2: Duty of flag States to adopt laws and regulations on vessel-source pollution</p> <p>Paragraph 3: Duty of States to give due publicity and to communicate to the competent international organization their particular port entry requirements</p> <p>Paragraph 5: Adoption by coastal States of laws and regulations for the prevention of vessel-source pollution in their EEZ conforming to generally accepted international rules and standards established through the competent international organization</p> <p>Paragraph 6: Particular, clearly defined area for the prevention of vessel-source pollution in the coastal State's EEZ</p>	<p>Reference to "generally accepted international rules and standards established through the competent international organization"</p> <p>Reference to the "competent international organization"</p> <p>Reference to "generally accepted international rules and standards established through the competent international organization"</p>	<p>MARPOL</p> <p>MARPOL</p> <p>MARPOL SOLAS COLREG</p>	<p>1. IMO is the competent international organization. 2. National legislation shall have at least the same effect as MARPOL, which represents the minimum standards for flag States.</p> <p>1. IMO is the competent international organization.</p> <p>IMO is the competent international organization for establishing international rules and standards concerning vessel-source pollution.</p> <p>MEPC 46 (2001) revised the guidelines for designation of Special Areas under MARPOL 73/78 and guidelines for the identification and designation of Particularly Sensitive Sea Areas.</p>
-----	--	---	--	--	--

		<p>Paragraph 6(a) Requirements and procedures to obtain recognition of a particular, clearly defined area</p> <p>Paragraph 6(c) Additional laws and regulations for the particular, clearly defined area on discharges or navigational practices</p> <p>Paragraph 7: International rules and standards under article 211 include those relating to notification to coastal States in cases of incidents or maritime casualties</p>	<p>Reference to "consultations through the competent international organization with any other States concerned"</p> <p>Reference to "generally accepted international rules and standards" on the design, construction, manning or equipment of ships</p> <p>This paragraph complements article 211(1)</p>	<p>SOLAS Load Lines MARPOL STCW</p> <p>MARPOL (article 8) and Protocol I OPRC (article 4)</p>	<p>IMO is the competent international organization.</p> <p>The generally accepted international regulations represent the highest standards.</p> <p>IMO is the competent international organization for establishing international rules and standards concerning prompt notification of coastal States affected by pollution incidents.</p>
212	Pollution from or through the atmosphere	<p>Paragraph 1: National legislation must take into account internationally agreed regulations</p> <p>Paragraph 3: Establishment of global and regional rules, standards through competent international organizations</p>	<p>Reference to "internationally agreed rules, standards and recommended practices and procedures"</p> <p>Reference to "competent international organizations"</p>	MARPOL Annex VI (1997) (with the development of an IMO strategy for the emission of climate gases from ships)	IMO is competent for establishing global rules and standards

216	Enforcement with respect to pollution by dumping	Enforcement of national legislation and applicable international regulations adopted through competent international organizations	Reference to "applicable international rules and standards" established through "competent international organizations"	London Convention	IMO is a competent international organization.
217	Flag State enforcement	<p>Paragraph 1: Duty of flag States to ensure compliance by their vessels with international regulations</p> <p>Paragraph 2: Prohibition of sailing</p> <p>Paragraph 3: Carry and inspection of certificates</p> <p>Paragraph 4: Investigation and institution of proceedings with respect to an alleged violation</p> <p>Paragraph 7: Duty of flag States to inform the competent international organization of the action taken</p>	<p>Reference to the "applicable international rules and standards, established through the competent international organization".</p> <p>Mention of the international rules and standards referred to in paragraph 1 including those of design, construction, equipment and manning of ships.</p> <p>Mention of the international rules and standards mentioned in paragraph 1.</p> <p>Reference to "rules and standards established through the competent international organization"</p> <p>Reference to the "competent international organization"</p>	<p>MARPOL</p> <p>SOLAS Load Lines MARPOL STCW</p> <p>MARPOL</p> <p>MARPOL (article 4)</p> <p>MARPOL (article 4)</p>	<p>1. IMO is the competent international organization for establishing rules and standards on vessel-source pollution.</p> <p>2. The flag State shall enforce MARPOL "as far as applicable".</p> <p>As above.</p> <p>As above.</p> <p>IMO is the competent international organization for establishing rules and standards on vessel-source pollution.</p> <p>IMO is the competent international organization.</p>
218	Port State enforcement	Paragraph 1:	Reference to discharges	MARPOL	1. IMO is the competent

		Investigations and proceedings by the port State against a vessel within its port or offshore terminal with respect to a discharge violation outside its jurisdictional waters.	in violation of "applicable international rules and standards established through the competent international organization"		international organization for establishing international regulations on ships' discharges. 2. The port State may enforce MARPOL "as far as applicable" to that State.
219	Measures relating to seaworthiness of vessels to avoid pollution	Duty of States to take administrative measures on vessels within their port or offshore terminal in violation of seaworthiness standards and thereby threatening pollution damage	Reference to "applicable international rules and standards relating to seaworthiness of vessels"	MARPOL SOLAS Load Lines COLREG STCW	
220	Enforcement by coastal States	Paragraph 1: Institution of proceedings by the coastal State against a vessel within its port or offshore terminal with respect to any violation occurred in its territorial sea or EEZ Paragraph 7: Duty of the coastal State to allow the vessel to proceed if the vessel assures compliance with requirements for bonding or other financial security.	Reference to "applicable international rules and standards for the prevention, reduction and control of pollution from vessels". Reference to the "competent international organization".	MARPOL	The coastal State may enforce MARPOL "as far as applicable" to that State. IMO is the competent international organization.
221	Measures to avoid pollution arising from maritime casualties	Right of States to take proportionate measures beyond the territorial sea to avoid pollution arising from maritime casualties		Intervention Convention 1973 Intervention Protocol	

222	Enforcement with respect to air pollution	Duty of States to adopt laws and regulations to implement applicable international rules and standards established through competent international organizations concerning air-pollution	Reference to "applicable international rules and standards established through competent international organizations"	Annex VI to MARPOL	IMO is a competent international organization.
223	Institution of proceedings	Submission of evidence and attendance of official representatives at the proceedings taken against a vessel	Reference to "competent international organization"		IMO is a competent international organization.
226	Investigation of foreign vessels	Avoidance of unnecessary physical inspection of vessels and limits of such inspection	Reference to "generally accepted international rules and standards" and to "applicable laws and regulations or international rules and standards"	MARPOL	
228	Suspension and restrictions on institution of proceedings	Special suspension and restriction conditions on proceedings to impose penalties	Reference to applicable international rules and standards relating to vessel-source pollution	MARPOL	

230	Monetary penalties and the observance of recognized rights of the accused		Reference to applicable international rules and standards relating to vessel-source pollution	MARPOL	
231	Notification to the flag State and other States concerned			MARPOL article 5(3)	
233	Safeguards with respect to straits used for international navigation	Right of States bordering straits to take enforcement measures against foreign ships which have violated safety and anti-pollution standards, causing or threatening damage to the marine environment of straits.	Reference to "the laws and regulations referred to in article 42, paragraph 1(a) and (b)"		
235	Responsibility and liability	Duty of co-operation for the development of international law on responsibility and liability for the assessment of and compensation for damage and the settlement of disputes		CLC Convention and Protocols Fund Convention and Protocols HNS Convention Bunkers Convention (2001)	
237	Obligations under the conventions on the protection and preservation of the marine environment	Non-prejudice clause and duty of consistency of special conventions with UNCLOS	Reference to the conventions on the protection and preservation of the marine environment	MARPOL London Convention Intervention OPRC CLC FUND HNS	IMO conventions on the protection of the marine environment reflect principles compatible with UNCLOS.

MARINE SCIENTIFIC RESEARCH

242-244	International Co-operation	Promotion of international co-operation, publication and dissemination of information and knowledge	Reference to "competent international organizations"	MARPOL 1996 Protocol to the London Convention	IMO is a competent international organization.
262	Identification markings and warning signals	Duty to place identification markings on installations or equipment and to use adequate warning signals to ensure safety of navigation	Reference to "rules and standards established by competent international organizations"		IMO may be the most appropriate body for developing international rules and standards on warning signals. (Resolutions A.671(16) and A.672(16) on offshore installations have some relevance.)

DEVELOPMENT AND TRANSFER OF MARINE TECHNOLOGY

268	Basic objectives		Reference to "competent international organizations"		The pertinent objectives of the transfer of technology are part of the ITCP.
269 to 272	Measure and arrangement to achieve the basic objectives		Reference to "competent international organizations"		IMO may refer to some of the specific arrangements and measures envisaged in UNCLOS.
275 to 277	National and regional marine scientific and technological centres		Reference to "competent international organizations"		

SETTLEMENT OF DISPUTES

288	Compulsory procedures entailing binding decisions	Jurisdiction of courts or tribunals	Reference to the "interpretation or application of an international agreement related to the purposes of this Convention"	1996 Protocol to the London Convention	The 1996 Protocol to the London Convention is the only IMO convention which permits parties to use the dispute settlement procedures of UNCLOS.
297	Limitations on applicability of section 2 (dealing with compulsory procedures entailing binding decisions)	Paragraph 1(c): Disputes concerning the interpretation or application of UNCLOS arising from an alleged contravention by a coastal State of specified anti-pollution standards shall be subject to the compulsory procedures entailing binding decisions established in section 2	Reference to applicable "international rules and standards for the protection and preservation of the marine environment " which have been established "through a competent international organization"	MARPOL London Convention	In certain cases, IMO anti-pollution standards may be subject to compulsory procedures entailing binding decisions.

FINAL PROVISIONS

311	Relationship to other conventions and international agreements	UNCLOS shall not alter international agreements compatible with the Convention or expressly permitted by the Conventions' provisions		IMO's treaties and other international regulations	
-----	--	--	--	--	--

ANNEXES

Annex VI article 22	Competence of the International Tribunal for the Law of the Sea	Reference of disputes subject to other agreements	Reference to "a treaty or convention already in force and concerning the subject-matter covered by this Convention"	IMO treaties in force related to the purposes of UNCLOS	Parties to the treaty may agree to have recourse to the Tribunal.
Annex VIII article 2	List of experts	List of experts in the field of navigation, including pollution from vessels and by dumping	Reference to the "International Maritime Organization"		

BIBLIOGRAPHY

Bodansky, Daniel, 'Protecting the Marine Environment from Vessel-Source Pollution: UNCLOS III and Beyond', *Ecology Law Quarterly*, 18:4 (1991)

Brown, E., *The International Law of the Sea*, 1994

Bazan-Blanco, Agustin, *IMO interface with the Law of the Sea Convention*, 2000

Capt. Hesse, Hartmut G., *Maritime Security in a Multilateral Context: IMO Activities to Enhance Maritime Security*, *The International Journal of Marine and Coastal Law*, vol. 18, no 3

Center for Oceans Law and Policy, University of Virginia School of Law, *United Nations Convention on the Law of the Sea, 1982, A Commentary*

Center for Oceans Law and Policy, University of Virginia, *Current Maritime Issues and the International Maritime Organization*, 1999

Center for Oceans Law and Policy, University of Virginia, *Legal and Scientific Aspects of Continental Shelf Limits*, 2003

Churchill, R.R. and Lowe, V.A., *The Law of the Sea*, third edition, 1988

Commentary -The 1982 United Nations Convention On The Law Of The Sea And The Agreement On Implementation Of Part Xi , U.S. Department of State Dispatch, 10517693, Feb95 Supplement 1, Vol. 6, Issue 5

De La Fayette, Louise, *The Marine Environment Protection Committee: The Conjunction of the Law of the Sea and International Environmental Law*, *The International Journal of Marine and Coastal Law*, Vol.16,N 2

Edeson, William R., *Law of the Sea Convention: Confusion over the Use of "UNCLOS", and References to other Recent Agreements*. *The International Journal of Marine and Coastal Law*, vol. 15, No 3

Hesse, Hartmut and Charalambous, Nicolaos, *New Security Measures for the International Shipping Community*, *WMU Journal of Maritime Affairs*, 2004, Vol. 3, No.2, 123–138

Marr, Simon, *The Precautionary Principle in the law of the Sea. Modern Decision Making in International Law*, 2003

Molenaar, Erik Jaap, *Coastal State Jurisdiction over Vessel-Source Pollution*, London, Kluwer Law International, 1998

Moore, John N., Protection of Navigation Freedom and the Problem of Vessel Source Pollution, published in *New Trends in Maritime Navigation* by Ocean Association of Japan, 1980

Moore, John Norton and Menefee, S., *Cases and Materials on Oceans Law and Policy, Volume I - IV*, 2005

Oxman, B. and Caron, D. and Buderer C., *Law of the Sea. U.S. Policy Dilemma*, 1983

Oxman, Bernard, "The Duty to Respect Generally Accepted International Standards", *New York University Journal of International Law and Politics*, 24 (1991)

Oxman, Bernard "Complementary Agreements and Compulsory Jurisdiction", *American Journal of International Law*, vol.95,N. 2(2001), p.277

Ringbom, Henrik, Preventing Pollution from Ships - Reflections on the "Adequacy" of Existing Rules, *Reciel*, Vol.8, Issue I, 1999

Scheiber, Harry N., *Law of the Sea. The Common heritage and Emerging Challenges*, 2000

Smith, H., *The Oceans: Key Issues in Marine Affairs*,

Spadi, Fabio, Navigation in Marine Protected Areas: National and International, *Ocean Development and International Law*, 31:285-305, 2000

Wolfrum, Rudiger, *IMO Interface with the Law of the Sea Convention, Current Maritime Issues and the International Maritime Organization*, 1999