

REPUBLIC OF TURKEY
ANKARA UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF MARITIME TRANSPORTATION
LAW AND POLITICS

EVOLUTION OF MARITIME SAFETY TO MARITIME SECURITY

Master's Thesis

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I state that all the information in my master's thesis titled "EVOLUTION OF MARITIME SAFETY TO MARITIME SECURITY (Ankara 2021)", which I prepared under the supervision of Prof. Dr. Hakan KARAN, was collected and presented in accordance with academic rules and ethical behavior principles, I fully indicated the information I received from other sources in the text and in the bibliography, I declare that I have acted in accordance with the ethical rules, and I will accept any legal consequences in case the contrary arises.

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ABBREVIATIONS

ARAS	: Armed Robbery Against Ships
BCN	: Nuclear weapons and other nuclear explosive devices
CLC	: International Convention on Civil Liability
CMAA	: Customs Cooperation and Mutual Assistance Agreement
COLREG	: Convention on the International Regulations for Preventing Collisions at Sea
CSI	: Container Security Initiative
C-TPAT	: Customs-Trade Partnership Against Terrorism
EC	: The European Commission
ed	: Edition, edited
EEA	: European Environment Agency
EMSA	: European Maritime Safety Agency
ENMOD	: Environmental Modification Convention
EU	: European Union
FAO	: Food and Agricultural Organization
GISIS	: Global Integrated Shipping Information System
IACS	: International Association of Classification Societies
IBC	: Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
ILO	: International Labour Organization
IMO	: International Maritime Organisation
IMCO	: Inter-Governmental Maritime Consultative Organization
IMLI	: International Maritime Law Institute
IOPP	: International Oil Pollution Prevention Certificate

Iss	: Issue
ISM	: International Safety Management Code
ISPS	: International Ship and Port Facility Security
ITUC	: International Trade Union Confederation
LITR	: Long Identification and Tracking System
LLMC	: Convention on Limitation of Liability for Maritime Claims
MAIB	: Marine Accident Investigations Branch
MAIIF	: International Forum of Maritime Accident Investigators
MARPOL	: International Convention for the Prevention of Pollution from Ships
MOU	: Memorandum of Understanding
MSC	: Maritime Safety Committee
MPEC	: Committee on Environmental Protection
NATO	: North Atlantic Treaty Organization
OECD	: Organisation for Economic Co-operation and Development
OPA	: Oil Pollution Act
p	: Page
PCASP	: Privately Contracted Armed Security Personnel
PLF	: Palestine Liberation Front
RIPAM	: International Regulations for Preventing Collisions at Sea
SOLAS	: International Convention for the Safety of Life at Sea
SOPEP	: Shipboard Oil Pollution Emergency Plan
STCW	: International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
SUA	: Convention for the Suppression of Unlawful Acts
TWA	: Trans World Airlines
UN	: United Nations
UNCLOS	: United Nations Conventions on the Law of the Sea

UNCTAD : United Nations Conference on Trade and Development
UNEP : United Nations Environmental Program
UNSC : United Nations Security Council
USCG : US Coast Guard
UTA : Union de Transports Aériens
VMS : Vessel Monitoring System
Vol : Volume
WCO : World Customs Organization
WTC : World Trade Centre





INTRODUCTION

Despite the perception of improvement, the star that shines over maritime security might not be as bright as it seems. A series of accidents, including the *Amoco Cadiz* incident in 1978 and the *Erika* on the French coast in 1999, has proved that maritime safety regulations might not be as sophisticated as it was once thought. In order to understand and analyse the new legislation its evolution through the years must first be examined, and then the new definition evaluated. The goal of this thesis is to establish a logical path that helps in understanding the development and evolution of maritime safety and maritime security over time.

The first part of the thesis starts with analysing maritime safety, with section scrutinising the emergence of the maritime safety regulatory framework and the legitimacy of the different levels involved therein. Having examined the process of developing maritime safety regulations, it is necessary to study, in the second section of this first part, the overall maritime safety framework, namely the different areas of maritime safety and the measures already taken in these areas in order to obtain a more global vision of the very broad field of maritime safety.

The second part treats the concept of security, having appeared only recently, cannot be treated as broadly as the concept of safety, but two main ideas which are the subject of the following two sections can be identified. Inevitably, the first section deals with the appearance of the concept of maritime safety with a first sub-section allowing us to “set the scene”. Before going further into the study of security, it is important to know the ins and outs, namely, the historical and economic contexts in which this concept developed. Then the security measures recently taken by international authorities and by the US, a country hit hard by terrorism and that has set itself up as the standard-bearer of the maritime security movement, are studied. Unfortunately, and just as for maritime safety, the steps taken were in response to a disaster that marked the spirits.

Thus, while maritime safety tends to prevent risks of natural origin (storms, typhoons), caused by maritime navigation (collisions, groundings, fires) or caused by human error, maritime security focuses on protection against practices criminals whose sea can be the scene. These criminal practices can take vastly different shapes and forms. These

practices are manifested in particular through drug trafficking, issue of illegal immigrants, also acts of piracy, armed robbery, and terrorism.

Moreover, although the operating modes are substantially the same, the maritime piracy should not, however, be confused with armed robbery at sea, a phenomenon that also has a direct impact on international maritime transport. While piracy only takes place on the high seas, armed robbery most often occurs near coasts, in anchorage areas, or near ports, in fact in all places where the ship is vulnerable due to its absence or virtual absence of speed, and therefore not at the high sea.

Finally, it has been realized that piracy and terrorism are no longer as different as they are seemed to be, and there may be remarkably close ties between them. While terrorism is a more recent phenomenon than piracy, the examples that demonstrate the reality of it abound.

The final section of this part is on the chain of maritime safety, a chain made up of all the actors involved, such as governmental and private ones. In fact, as previously specified, a number of texts exist regulating maritime navigation that have as their object maritime safety, but the actors in this safety chain are the guarantors of the implementation of these texts. Just like new legislation, being the product of reaction, the first difficulties in implementation of these responsibilities were very soon felt as to be dealt with in the second section. These difficulties appear both on a diplomatic level and in terms of the logistics of implementing the means to ensure compliance with the new regulation.

The thesis uses both inductive and deductive methodology. To understand the impact that various marine accidents have on international law and international legislation, the inductive methodology is used. Then the deductive methodology is used to understand the present shortcomings of maritime safety and maritime security.

The study is primarily based on books and articles witnessing various disasters. It additionally examines statistics regarding these disasters such as death tolls and environmental impacts, the analysis of international conventions and the scientific question born from these tragedies and how they were addressed at the international scene.

I. EVOLUTION OF MARITIME SAFETY

It is first advisable to analyse the process of drawing up regulation in the field of maritime safety before studying to whom the task of drafting it can or must be allocated. Understanding the path of the emergence of regulation in the maritime safety sector requires two considerations: The first consists in noting how awareness emerges regarding the necessity of regulation in this area, and the second relates to the barrier between this awareness and the political will to develop regulations.

A) AGAINST TECHNICAL ERRORS TO SAVE LIFE AND PROTECT THE MARINE ENVIRONMENT

From antiquity¹ to the twentieth century, the first concern was that of safeguarding goods focusing on the development of local regulations especially in terms of freeboard and the appearance of the first classification societies² as well as the insurance system. However, the first challenges of the normative framework in terms of maritime safety were the safeguard of human life at sea; the environmental aspect became of primary concern only in recent years. Accident investigations played a significant role in improving maritime safety and in particular in the determination of the overwhelming factors leading to maritime accidents, which are technical and human factors. Maritime safety cannot be considered without addressing the causes of maritime insecurity. The accidents that lead to the creation of important framework and regulations are therefore studied first together with the different areas of human and technical factors in the accidents as the grounds of the regulations.

1- To Save Life at Sea

The concept and notion of maritime safety has been developing since the early 20th Century³ influenced by events such as the sinking of the *Titanic* in 1912, the *Amoco Cadiz* incident in 1978, and the destruction of the New York Twin Towers. It was the sinking

¹ “Lex Rhodia: The Ancient Ancestor of Maritime Law - 800 BC”, <http://www.duhaime.org/LawMuseum/LawArticle-383/Lex-Rhodia-The-Ancient-Ancestor-of-Maritime-Law--800-BC.aspx> (13.07.2020).

² Lloyd’s Register, “A Brief History”, <https://www.lr.org/en/who-we-are/brief-history/> (03.07.2020).

³ “A Historical Review of Maritime Safety”, <https://blog.worldwidemetric.com/trade-talk/a-historical-review-of-maritime-safety/> (18.06.2020).

of the Titanic in 1912 that initiated the “International Convention for the Safety of Life at Sea” (“SOLAS”)⁴. Indeed, the first SOLAS was adopted in 1914 at a Conference organized by the United Kingdom (UK) and attended by thirteen countries. The aim of the Conference was to put on paper several requirements concerning navigation safety for merchant ships, the installation of watertight and fire-resistant bulkheads, the fight against fires on board merchant ships and life-saving equipment, as well as a regulation on the requirement for radiotelegraph equipment on board ships capable of carrying more than fifty people. Unfortunately, only five countries were able to ratify this treaty due to the onset of the First World War.

At the second conference in 1929, 18 countries were present. This version of SOLAS included a section on shipbuilding, improved firefighting, life-saving equipment and wireless telegraphy.

The third Convention, in 1948, only addressed technological improvements. The content remained unchanged although it went into much more detail and covered a larger part of the ships.

The fourth SOLAS conference took place in 1960 and its outcome represents a substantial update in view of existing technological innovations. It was the first major test for the International Maritime Organisation (IMO).

Today, the SOLAS contains four maritime security and maritime safety measures:

First, is the “International Ship and Port Facility Security (ISPS) Code”, second, “the Vessel Monitoring System (VMS)”, third is the Long Identification and Tracking System (LITR), Fourth is the Security, Safety and Health in Ports a joint with the ILO, which supplements the ISPS Code. It is widely considered as the most significant of all international treaties regarding safety and security at sea.

Although the first SOLAS held in London in 1914⁵, it was based on the elements retained by these first investigations. These measures remained long dormant following the tragic

⁵ International Conference for Safety of Life at Sea, <https://www.britannica.com/topic/International-Conference-for-Safety-of-Life-at-Sea> (17.06.2020).

events of the First World War. Accordingly, the importance of accident investigation was not questioned even after the *Titanic* accident, and the investigations were carried each case at its own.

Measures taken to improve maritime safety are for the most part the result of an analysis carried out to determine the circumstances of an accident. This analysis is performed during an investigation known as the accident investigation:⁶ an *ad hoc* committee until recently, it is now a requirement⁷ for all flag states where a ship is involved in a major accident.

The first major “accident investigation”⁸ following a disaster was due to the sinking of the *Titanic*. It was conducted by the Senatorial Commission of the US in 1912. At the same time of this accident investigation in the US, another investigation took place at London, at British Ministry of Commerce. The US Commission specifically investigated the number of boats, rafts, life-saving appliances and other equipment for passenger safety, and followed the recommendations made by the senatorial commission taken up in order to establish new regulations. However, the appearance of the national investigation bodies has been a great improvement in efficiency and especially the speed of reaction the great progress in response to the investigation of such disasters achieved following establishment of the IMO. So, since the *Titanic* disaster, the interest of accident investigation cannot be questioned. However, there was no real framework, the investigations being carried out piecemeal and the body responsible for conducting the investigation constituted on a case-by-case basis.

Thus, due to the international aspect of maritime transport⁹ and its rapid evolution, there is no doubt that competence for the control and regulation of this environment can only

⁶ European Maritime Safety Agency, <http://www.emsa.europa.eu/implementation-tasks/accident-investigation.html> (08.06.2020).

⁷ Hosanee, M.: “A Critical Analysis of Flag State Duties as Laid Down under Article 94 of UNCLOS”, The United Nations-Nippon Foundation Fellowship Programme 2009 – 2010, https://www.un.org/Depts/los/nippon/unnff_programme_home/fellows_pages/fellows_papers/hosanee_0910_mauritius.pdf (19.05.2020).

⁸ US Senate: “Titanic Disaster Hearings: The Official Transcripts of the 1912 Senate Investigation”, April 19, 1912, New York City, USA, <https://www.senate.gov/reference/referenceitem/titanic.htm> (08.06.2020).

⁹ UNCTAD: “Review of Maritime Transport”, 2019, https://unctad.org/en/Publications_Library/r_zmt2019en.pdf (16.06.2020).

be achieved on an international basis. So, the sinking of the *Titanic* led to the first international conference on maritime safety.¹⁰ At the end of the 1940s, each maritime nation had its own maritime legislation in such a way as the national standards to be different and sometimes contradictory to each other. This situation was very damaging to maritime safety. Accordingly, it became quite logical that an international institution was required in order to pool the concerns of states in matters of maritime transport. In 1948, the IMO was set up, initially as The Inter-Governmental Maritime Consultative Organization “IMCO” and which later became the “IMO” in 1982.¹¹

Following the force of its founding Convention 10 years later, in 1958, the IMO became a United Nations (UN) agency specialized in the field of maritime navigation. The purpose of the Organization is contained in “Article 1(A) of the Convention” is to supply a means of cooperation between governments in the context of anything affecting international maritime trade. The first consultative organization of the UN, the IMO took advantage of the *Torrey Canyon* oil spill in 1967¹² to escape its confines to technical issues and develop its influence in legal areas, finally setting up a legal committee very shortly after. With its headquarters in London, the Organization now has 174 member states, all of which are represented in the Assembly, which meets once every two years. A Council made up of 32 member governments and elected by the assembly plays the role of governing body between assembly sessions.

In terms of the IMO’s internal organization, a step was taken in the 1970s with the adoption of the amendment of tacit acceptance:¹³ Despite what was done previously, a resolution is automatically accepted at a date decided unless it has been expressly rejected by various States. The deadline for the entry into¹⁴ force of the latest SOLAS amendments has therefore been reduced to 18 months. In comparison, measures in response to the

¹⁰ US Coast Guard: International Conventions and Conferences on Marine Safety, 1951 Washington DC, USA, <https://books.google.com.tr/books?id=Xs5QAQAAMAAJ&pg> (15.03.2020).

¹¹ IMO: “Brief History of IMO”, <http://www.imo.org/en/about/HistoryOfIMO/Pages/Default.aspx> (04.03.2020).

¹² Cowan, E.: *Oil and Water; The Torrey Canyon Disaster*, Philadelphia and New York 1968, p.72.

¹³ IMO: “Brief History of IMO”, <http://www.imo.org/en/About/HistoryOfIMO/Pages/Default.aspx> (18.05.2020).

¹⁴ Rajeev, J.: “How an IMO Convention Enters into Force and How it is Amended?”, MySeaTime, <https://www.myseatime.com/blog/detail/imo-conventionamendments#:~:text=The%20convention%20will%20enter%20into,states%20during%20the%20adoption%20process.> (19.05.2020).

Titanic disaster did not come into force until 1933, almost 20 years following the disaster and only after a second convention was adopted in 1929.

2-To Protect the Marine Environment

The *Amoco Cadiz*¹⁵ oil spill was a major tragedy that helped structure a response to prevent¹⁶ such incidents. The grounding of the American oil tanker *the Exxon Valdez*¹⁷ off the coast of Alaska in 1989 pushed the US to adopt the Oil Pollution Act 1990,¹⁸ a national regulation the main features of which were taken up by the IMO in 1992 with a modification¹⁹ of the “International Convention for the Prevention of Pollution from Ships (MARPOL)”²⁰ and which mainly concerns the exclusion of single hull tankers. A series of incidents followed: the “*Haven*” in 1991,²¹ the “*Aegean Sea*” in 1992,²² and finally the “*Braer*” in 1993,²³ leading to the EC proposing a common policy for maritime safety.²⁴ The sinking of the “*Estonia*” in the Baltic Sea in 1994²⁵ causing 852 deaths led to modifications of the SOLAS²⁶ by the IMO and the establishment of regional standards

¹⁵ Maritime Knowledge Editors: “Amoco Cadiz oil spill: The Largest Loss of Marine Life Ever”, Safety4sea, 08/ 10/2019, <https://safety4sea.com/cm-amoco-cadiz-oil-spill-the-largest-loss-of-marine-life-ever/> (18.03.2020).

¹⁶ Bonnieux F. / Rainelli P.: “Learning from the Amoco Cadiz Oil Spill: Damage Valuation and Court's Ruling”, *Industrial & Environmental Crisis Quarterly*, Rennes 1993, p. 169.

¹⁷ *Exxon Valdez* crashes, causing one of the worst oil spills in history.

¹⁸ US Environmental Protection Agency: Summary of the Oil Pollution Act, 33 U.S.C. §2701 et seq. (1990), <https://www.epa.gov/laws-regulations/summary-oil-pollution-act>, (15.04. 2020).

¹⁹ IMO, “MARPOL Amendments Come into Effect, IMO News”, No. 2, London 1995, p. 2.

²⁰ International Convention for the Prevention of Pollution from Ships (MARPOL) Adoption: 1973 (Convention), 1978 (1978 Protocol), 1997 (Protocol - Annex VI); Entry into force: 2 October 1983 (Annexes I and II), [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx) (19.03.2020), Turkey, Enter into Force, 04/02/2014, Resmi Gazete, 11/09/2013.

²¹ Maritime Knowledge, “MT Haven: The Worst Oil Spill Ever in the Mediterranean”, April 2019, https://safety4sea.com/cm-mt-haven-the-worst-oil-spill-ever-in-the-mediterranean_Z2NVrtIjDx (08.06.2020).

²² Sociedade Galega de Historia Natural: “The Aegean Sea Catastrophe”, December 2017, <https://sghn.org/the-aegean-sea-catastrophe/> (08.06.2020).

²³ “Braer: The Huge Oil Spill That Shetland Survived”, *BBC News*, 5 January 2018, <https://www.bbc.com/news/uk-scotland-42577914> (04.06.2020).

²⁴ EU Actions on Safety and Environment Protection.

²⁵ Wilson, D.: *The Hole: Another Look at the Sinking of the Estonia Ferry on September 28, 1994*, CreateSpace Independent Publishing Platform, Scotts Valley 2013, p. 65.

²⁶ International Convention for the Safety of Life at Sea (SOLAS), 1974, Adoption: 1 November 1974; Entry into force: 25 May 1980, [http://www.mar.ist.utl.pt/mventura/Projecto-Navios-I/IMO-Conventions%20\(copies\)/SOLAS.pdf](http://www.mar.ist.utl.pt/mventura/Projecto-Navios-I/IMO-Conventions%20(copies)/SOLAS.pdf) (14.12.2020). Turkey, Enter into Force, 03/12/2013, Resmi Gazete, 27/06/2013.

set by the Stockholm Conference that concern the stability of ferries after damage in the Baltic and North Sea regions.

The *Amoco Cadiz* incident revealed many issues within maritime safety related not only to the response to such incidents but also to problems within the legislation of maritime safety. Investigation revealed that the French Navy²⁷ was involved²⁸ in this event because it was relatively powerless in such situations. In addition, of the three ocean-going tugs assigned to the area where the incident occurred, only the *Malabar*²⁹ was available but it was ten hours away. A second tug was under maintenance and a third was on a mission off Newfoundland. The navy's tugboats, however, are designed to assist nuclear submarines and only move 9,000³⁰ tonnes.

With the aim of understanding the legislative complexity in terms of maritime safety and fragile relations between the various regulatory bodies, it is necessary to study the regulations in the field of double hull tankers, which perfectly represents the issues³¹ together with the events following the *Prestige* disaster. The analysis of this case also allows the transition between the study of the regulatory initiative and of compliance with these regulations.

It is possible to distinguish two very distinct periods in terms of combating oil pollution³²: The first is entirely dominated by the IMO³³ and consists mainly in fighting operational

²⁷ Conan, G. / D'Ozouville, L. / Marchand, M.: *Amoco Cadiz - Preliminary Observations of the Oil Spill Impact on the Marine Environment*, June 1978, Paris, France.

²⁸ National Oceanic and Atmospheric Administration, "The Amoco Cadiz Oil Spill: A Preliminary Scientific Report", 1978 Washington DC, USA, https://www.oil-spill-info.com/Publications/1978_NOAA-EPA_Amoco_Cadiz_Report_4_Beach_Processes.pdf, (08.04.2020).

²⁹ Bellier, P. / Massart, G.: "The Amoco Cadiz Oil Spill Cleanup Operations - an Overview of the Organisation, Control and Evaluation of the Cleanup Techniques Employed." *Proceedings of the 1979 Oil Spill Conference*, 141-146. API Publication No. 4308. American Petroleum Institute, 1979, Washington, DC, USA.

³⁰ Paxton, J.: *The Statesman's Year-Book*, Palgrave Macmillan, London 1983, p. 72.

³¹ DHT.: "Double Hull Tankers, Inc. Takes Delivery of Second Suezmax Tanker", <https://www.dhtankers.com/double-hull-tankers-inc-takes-delivery-of-second-suezmax-tanker/> (18.06.2020).

³² Hill, C.: *Maritime Law*, LLP 6th Ed., London, 2003, part 11, p. 424.

³³ International Convention for the Prevention of Pollution from Ships (MARPOL) Adoption: 1973 (Convention), 1978 (1978 Protocol), 1997 (Protocol -Annex VI); Entry into force: 2 October 1983 (Annexes I and II), [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx) (21.06.2020).

pollution. The second, and the more interestingly for our study, questions the IMO monopoly³⁴ in the development of maritime safety regulations.

The first period extends up to the accident of the *Exxon Valdez*.³⁵ The increasingly large but amazingly simple tankers,³⁶ from a design point of view, consisted, in terms of cargo, only of cargo tanks. The tanks ballasted with seawater are a section of the tanks previously loaded with oil. This quantity being significant, a large part is directly discharged into the sea before arrival at the port of loading.

Under the aegis of the IMO, the elaboration of the MARPOL imposed the ruling that ships must only use clean ballast, tanks of the ship intended only for ballasting and whose distribution had been the subject of strain calculations during the construction of the ship.³⁷ Under these conditions, the ballast water³⁸ was no longer soiled and operational pollution reducer.

The other operation causing pollution was the discharge of tank wash water. Indeed, it is essential to wash tanks after unloading either to prepare the tanks for the next loading or to remove some of the residue. This oil-contaminated wash water was discharged directly into the sea. Still under the MARPOL, the IMO introduced technical measures to eliminate this pollution.³⁹ A particle calculator contained in the discharges has since been compulsory on the discharge circuit into the sea after compulsory discharge, hence the appearance of retention, called slops. This computer prohibits unloading⁴⁰ by action on

³⁴ Kenton, W.: "International Maritime Organization (IMO)", *Investopedia*, [https://www.investopedia.com/terms/i/internationalmaritimeorganization.asp#:~:text=The%20International%20Maritime%20Organization%20\(IMO\)%20is%20a%20specialized%20agency%20of,prevent%20marine%20pollution%20from%20ships](https://www.investopedia.com/terms/i/internationalmaritimeorganization.asp#:~:text=The%20International%20Maritime%20Organization%20(IMO)%20is%20a%20specialized%20agency%20of,prevent%20marine%20pollution%20from%20ships) (24.05. 2020).

³⁵ Shaw, D. G. / Bader, H. R.: *Environmental Science in a Legal Context: The Exxon Valdez Experience*, Ambio, 7th ed., Stockholm 1996, p. 430.

³⁶ Leahy, S.: "Exxon Valdez Changed the Oil Industry Forever - But New Threats Emerge", *National Geographic*, <https://www.nationalgeographic.com/environment/2019/03/oil-spills-30-years-after-exxon-valdez/> (14.06.2020).

³⁷ IMO: "Construction Requirements for Oil Tankers - Double Hulls", <http://www.imo.org/en/OurWork/Environment/PollutionPrevention/OilPollution/Pages/constructionrequirements.aspx> (18.06.2020).

³⁸ IMO: "Ballast Water Management", 2017, Part IV, London 2017, p. 103.

³⁹ Raunek, K.: "MARPOL (The International Convention for Prevention of Marine Pollution For Ships): The Ultimate Guide", *Marine Insight*, <https://www.marineinsight.com/maritime-law/marpol-convention-shipment/> (07.05.2020).

⁴⁰ MARPOL, Annex I- Regulations for the Prevention of Pollution by Oil, Chapter 3 - Requirements for Machinery Spaces of All Ships, Part C - Control of Operational Discharge of Oil, Regulation 15 - Control of Discharge of Oil http://www.marpoltraining.com/MMSKOREAN/MARPOL/Annex_I/r15.htm (14.06.2020).

the sea discharge valve if the hydrocarbon content in the sea water discharged is greater than 15 ppm (parts per million).

Concerning the risk of the ship breaking, the IMO has imposed the use of a loading computer, approved by technical services⁴¹ (classification society), which must verify before each loading that the stresses on the structure of the ship are lower than the limits previously established by calculations during the ship's development. Vessels that comply with the MARPOL receive from the flag state the International Oil Pollution Prevention Certificate (IOPP),⁴² essential for all navigation. These measures established during international conventions under the aegis of the IMO aimed to reduce oil pollution⁴³ and only the IMO, of course under the pressure of coastal states victims of pollution, generated these measures.

In 1989, the *Exxon Valdez* accident marked a turning point in the process of drafting texts on oil pollution⁴⁴ and, in a broader context, on maritime safety. The context, the pollution having occurred in an environmentally protected region under the responsibility of the US,⁴⁵ has not had the effect of shaking the structures of the IMO but may at least call into question its monopoly in the development of maritime safety regulations.

Apart from the Maritime Law Conventions adopted under its initiative, the work of the IMO remains fundamental with regard to the creation and updating of international maritime standards. These are measures, of a mainly technical nature, laid down in the various fundamental areas of maritime law, such as maritime safety and the fight against pollution.

⁴¹ IACS: "Classification Societies – What, Why and How?", <http://www.iacs.org.uk/media/3785/iacs-class-what-why-how.pdf> (09.06.2020).

⁴² Wartsila Encyclopedia of Marine Technology, "International Oil Pollution Prevention Certificate (IOPP Certificate)", [https://www.wartsila.com/encyclopedia/term/international-oil-pollution-prevention-certificate-\(ioppcertificate\)#::~text=The%20IOPP%20certificate%20is%20issued,equipment%20required%20under%20the%20convention](https://www.wartsila.com/encyclopedia/term/international-oil-pollution-prevention-certificate-(ioppcertificate)#::~text=The%20IOPP%20certificate%20is%20issued,equipment%20required%20under%20the%20convention). (07.07.2020).

⁴³ Kitack, L.: "The Role of the International Maritime Organization in Preventing the Pollution of the World's Oceans from Ships and Shipping", <https://www.un.org/en/chronicle/article/role-international-maritime-organization-preventing-pollution-worlds-oceans-ships-and-shipping> (16.06.2020).

⁴⁴ Shaw / Bader, 35.

⁴⁴ Leahy, 36.

⁴⁵ Every CRS Report: "Oil Spills: Background and Governance", <https://www.everycrsreport.com/reports/RL33705.html> (16.06.2020).

This work is carried out by specialized IMO committees such as the “Maritime Safety Committee (MSC)” and the “Committee on Environmental Protection (MEPC)”⁴⁶. It is thanks to its specialized committees that the IMO is a very prolific source of maritime regulations, sometimes grouped together in Codes, which bring together the maritime standards to which ships, or ship owners must comply.

The production of these standards is carried out under the treaties promoted by the IMO, of which these specific regulations generally constitute the annexes. This is the case, in matters of maritime safety, with the SOLAS, which dedicates twelve appended Chapters to technical measures. In the area of pollution prevention, the MARPOL⁴⁷ adopted on April 27, 2001 by the MEPC and entered in force on September 1, 2002 has six annexes.

As maritime standards are introduced in the same form of the Convention and with the same normative effect of the treaties to which they are annexed, each amendment of technical measures is therefore subject to the same rules for amending international conventions. The need to carry out a rapid and effective update of these for all the Contracting States, thus keeping uniformity of standards in force, led the IMO to set up an amendment procedure by tacit approval, which will also apply for the revision of the amounts provided for by the Convention on “Limitation of Liability for Maritime Claims (LLMC)”⁴⁸, the “International Convention on Civil Liability (CLC)”⁴⁹ and the “Athens Convention on the carriage of passengers”. By means of this simplified procedure, amendments to the technical part of the Conventions can be adopted more easily, without waiting for consensus from all contracting parties.

As an example, the amendment to Chapter 9 of the SOLAS, which makes the “International Safety Management Code (ISM Code)” adopted by the IMO in November 1993” mandatory, and is fundamental for its impact on ship owners’ obligations and their

⁴⁶ Marine Environment Protection Committee (MEPC): <https://www.imo.org/en/MediaCentre/MeetingSummaries/Pages/MEPC-default.aspx> (19.12.2020).

⁴⁷ IMO, 19.

⁴⁸ Convention on Limitation of Liability for Maritime Claims (LLMC Convention), <https://www.jus.uio.no/english/services/library/treaties/06/607/liabilitymaritimeclaimsconsolidated.xml> (19.12.2020).

⁴⁹ International Convention on Civil Liability for Oil Pollution Damage (CLC), Adoption: 29 November 1969; Entry into force: 19 June 1975; Being replaced by 1992 Protocol: Adoption: 27 November 1992; Entry into force: 30 May 1996 [https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-\(CLC\).aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-(CLC).aspx) (19.12.2020).

liability. An example in the field of pollution is the amendment to Article 13 of Annex I⁵⁰ to the MARPOL, which set an accelerated timetable for the outlawing of tankers that are not double hulled. However, about the adoption of maritime standards, it should be remembered that their implementation is left to the Contracting States.

Assistance in this phase has been set up since 1992 by the institution of the Sub-Committee on Flag Implementation⁵¹, in favour of all the countries that require it, for the implementation of the standards, thereby ensuring their uniform application. Since the interpretation of maritime law by judicial and administrative authorities largely depends on its implementation in domestic law, when it comes from sources outside the state legal order, the importance of the task entrusted to this sub-committee is obvious. Its institution thus arises in the number of measures taken, now of positive law, to promote the uniform interpretation of maritime law and unification in its application.

Accordingly, the first factor exposed systematically by accident investigations is the technical aspect. The SOLAS mainly affects technical issues, which have direct consequences on security such as the quality of partitions, compartmentalisation, fire systems, ventilation circuits and many other items of equipment such as the radio system, etc.⁵². The technical part of the SOLAS has been fully integrated into the technical specifications for monitoring the shipbuilding of classification societies and included in the technical specifications, which allows inspections of ships by maritime bodies.

The second instrument relating to the technical field is the MARPOL, which deals with the prevention of oil pollution.⁵³ This Convention has undergone many changes in recent

⁵⁰ MARPOL, Annex I - Regulations for the Prevention of Pollution by Oil, Chapter 3 - Requirements for Machinery Spaces of All Ships, Part C - Control of Operational Discharge of Oil, Regulation 15 - Control Of Discharge of Oil, <http://www.marpoltraining.com/MMSKOREAN/MARPOL/AnnexI/r15.htm> (14.06. 2020).

⁵¹ Sub-Committee on Flag State Implementation (FSI), 17th session: 20-24 April 2009, <http://www.imo.org/en/MediaCentre/MeetingSummaries/III/Pages/FSI-17th-Session.aspx> (18.06.2020).

⁵² Geerts, E.: "The Impact Of SOLAS On Ocean Shipping And Data Management", *Talking Logistics*, <https://talkinglogistics.com/2016/02/11/the-impact-of-solas-on-ocean-shipping-anddatamanagement/> (16.05.2020).

⁵³ International Convention for the Prevention of Pollution from Ships (MARPOL) Adoption: 1973 (Convention), 1978 (1978 Protocol), 1997 (Protocol - Annex VI); Entry into force: 2 October 1983 (Annexes I and II), [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx) (19.03.2020).

years following the *Erika*⁵⁴ and the *Prestige*⁵⁵ disasters. Finally, the “International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC)”, somewhat similar to the “MARPOL”, considers the technical aspect of chemical tankers.⁵⁶

Importance of these regulations have been world widely recognized instruments. A breach of one of the technical specifications contained in these texts results in a lot of media attention can affect areas of human life and the environment, nevertheless, other less known conventions or texts govern the world of maritime transport. The results of analysis of different maritime disasters suggests that, today, these texts are very comprehensive and leave few grey areas. However, disasters still occur, often revealing non-compliance with regulations in force by various actors in the safety chain, which is studied below.

B) AGAINST HUMAN ERRORS TO SAVE LIFE AND PROTECT THE MARINE ENVIRONMENT

1- Consequences of Human Error

The second factor is human error,⁵⁷ which is the cause of 75% of maritime accidents, as it was the case, for example, in the *Herald of Free Enterprise*,⁵⁸ the *Exxon Valdez*,⁵⁹ the *Scandinavian Star*,⁶⁰ and the *Braer*⁶¹ among others. In many other cases, the “human factor” had a determining “role” in the management of the crisis and in the actions carried out. It is therefore an important area which was not considered until the 1960s, relatively

⁵⁴ ERIKA, West of France, 1999, <https://www.itopf.org/in-action/case-studies/case-study/erika-west-of-france-1999/> (24.06.2020).

⁵⁵ Maritime Knowledge, “Learn From the Past: Prestige Sinking, One of the Worst Oil Spills in Europe”, *safety4sea*, <https://safety4sea.com/cm-learn-from-the-past-prestige-sinking-one-of-the-worst-oil-spill-sineurope/g> (17.06.2020).

⁵⁶ International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), [http://www.imo.org/en/OurWork/Environment/PollutionPrevention/Chemical Pollution/Pages/IBCCode.aspx](http://www.imo.org/en/OurWork/Environment/PollutionPrevention/Chemical%20Pollution/Pages/IBCCode.aspx), (19.03.2020).

⁵⁷ MI News Network, “The Relation Between Human Error and Marine Industry”, <https://www.marineinsight.com/author/marine-insight-news-network/> (08.03.2020).

⁵⁸ Bell, B.: “Zeebrugge Herald of Free Enterprise Disaster Remembered”, *BBC News*, <https://www.bbc.com/news/uk-england-39116394> (18.06.2020).

⁵⁹ Leahy, 36.

⁶⁰ Munger, S.: “Norway’s Titanic: the “Scandinavian Star Disaster”, April 7th, 2014, <https://seanmunger.com/2014/04/07/norways-titanic-the-scandinavian-star-disaster/> (17.04.2020).

⁶¹ Wills, J. / Warner, K.: *Innocent Passage: The Wreck of the Tanker Braer*, Trafalgar Square, Shetland 1994, p. 46.

late in the establishment of the IMO. The joint work of the IMO and the International Labour Organization (ILO) led, in 1978, to the "International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)".⁶² This Convention was necessary because of the increasing drift of under-qualified sailors onto ships, possibly due to the frantic race of ship owners who, thanks to the flags of convenience, could staff their ship with sailors at low cost but unfortunately also with limited or no experience. Some Indian sailors, previously shepherds or beggars, would never have seen a sea before boarding for the first time, maritime navigation being an opportunity to get out of an economic situation with no tomorrow. In developed countries the training of officers⁶³ takes at least three years while in some countries a license can be bought, opening the door to a seafaring profession without the requisite knowledge.

This first Convention was useful in establishing harmonization of the different patents issued in the different flag states. However, without checking the conditions for granting patents and without common patent equivalence, the achievements of the objective of STCW were limited. In 1995, the STCW was revised and clearly established the conditions and modules, which each patent or additional training had to contain to be recognized internationally. The Convention also considered the technological progress recorded⁶⁴ in the field of maritime navigation.

The influence of the human factor⁶⁵ could be reflected not only in the conduct of the ship itself but also in the interface between the ship and the shore, what it is called management, whether technical or human. This field is now covered by the "ISM⁶⁶ Code" adopted by the IMO in November 1993.

⁶² International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, (STCW), 1978, <http://www.imo.org/es/OurWork/HumanElement/TrainingCertification/Paginas/STCWConvention.aspx> (09.04.2020). Turkey, Enter into Force, 21/12/1992, Resmi Gazete, 29/09/2003.

⁶³ STCW: "What are the STCW Requirements for Officers?", <https://www.edumaritime.net/stcw/general-requirements-for-officers>, (21.04.2020).

⁶⁴ Earls, A.: "Speed Of Technological Change Overtaking Scope Of STCW", Professional Mariner, <http://www.professionalmariner.com/March-2019/Speed-of-technological-change-overtaking-scope-of-STCW/> (14.07.2020).

⁶⁵ Corovic, M. / Djurovic, P.: "Marine Accidents Researched Through Human Factor Prisma", <https://www.researchgate.net/publication/272807445> (19.06.2020).

⁶⁶ MI News Network, "What is International Safety Management Code or ISM Code for Ships?", <https://www.marineinsight.com/maritime-law/what-is-international-safety-management-code-orism-code-for-ships/> (13.07. 2020).

Another key human factor contributing to maritime safety is that of the composition of the crew and their working conditions, an area essentially controlled by the flag state, although the workforce is covered by rules that are partly international. They have been reduced in areas of technical progress and new means of navigation now available to ships. However, the investigation, which followed the incident involving the *Melbridge Bilbao*, a ship stranded on the coast of Molène, showed that an officer was alone on the bridge after having slept only two out of 24 hours due to a lack of manpower. Reducing the number of crewmembers excessively can lead to major safety problems. The Convention governing this area is the ILO convention on the organization of seafarers' working time,⁶⁷ which established, among other things, limits on work and rest hours. The Convention was superseded by European Directive 99/63⁶⁸ and incorporated into European Community law.

The ISM Code⁶⁹ and STCW Convention⁷⁰ are therefore currently the two major instruments that have changed maritime safety applicable to the quality of crews. The progress brought by these regulations is undeniable because, by laying down obligations binding on all, they aim to ensure that competition between ship owners does not operate at the expense of safety. To make sure that the rules of competition are respected, the IMO has established a “White List”⁷¹ of states granting certificates and diplomas in accordance with STCW Convention.

A further, innovative convention on maritime safety is the Convention on the International Regulations for “Preventing Collisions at Sea (COLREG)”⁷², a regulation

⁶⁷ ILO, C180 “Seafarers' Hours of Work and the Manning of Ships Convention”, 1996 (No. 180), https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C180 (06.04.2020).

⁶⁸ Directive 1999/95/EC of the European Parliament and of the Council of 13 December 1999 Concerning the Enforcement of Provisions in Respect of Seafarers' Hours of Work on Board Ships Calling at Community, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:31999L0095&rid=2> (13.07.2020).

⁶⁹ Golapall, L.: “The ISM Code Implementation and Its Effects on Maritime Claims”, *World Maritime University*, <https://commons.wmu.se/cgi/viewcontent.cgi?article=1365&context=all dissertations> (13.07.2020).

⁷⁰ Edu Maritime: *What is STCW and Why Do You Need It? - Introduction to the Convention*, <https://www.edumaritime.net/stcw/what-is-stcw-an-introduction> (13.07.2020).

⁷¹ IMO White List, “International Convention on Standards of Training, Certification and Watchkeeping for Seafarers” (STCW), 1978, <http://www.imo.org/es/OurWork/HumanElement/TrainingCertification/Paginas/STCWConvention.aspx> (09.04.2020).

⁷² Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREGs), Adoption: 20 October 1972; Entry into force: 15 July 1977, <https://www.imo.org/en/About/Conventio>

of the IMO. The purpose of COLREG is to set “priority⁷³” rules for the prevention of collision. These rules are based on the relative direction of the ships, their ability to manoeuvre, and their means of propulsion. The regulations also standardize the lights and various ship markings. They apply to all ships on the high seas and in adjacent waters accessible to ships of the sea.

Every word used in these regulations is of import, so for example, we do not speak of a "priority" ship, but of a "privileged" ship, the latter has the "priority" in the broad sense of the term, to maintain its route and its speed. However, this privileged vessel can manoeuvre in certain cases. This is an obligation in parallel with that of the other vessel with which there is a proven risk of collision, whose obligation is to move aside and make room for it. In some situations, there may not be a privileged vessel, for example, two power-driven vessels taking directly opposite routes, and in this situation the two vessels must manoeuvre on their starboard side. Other situations can include more than two ships and quickly become complicated such that reducing speed then allows more time to analyse the situation (rule 8.e). The goal is to prevent collisions at sea. As a last resort, the so-called “privileged” ship has a duty to avoid collision by all means possible if the “non-privileged” ship does not apply the rules (rule 17.b)⁷⁴, which explains the lack of use of the priority term.

2- Consequences of Human Activities on the Marine Environment

Another danger to maritime safety and more specifically to the marine environment is the effect of several activities on the ecosystem. Marine pollution and protection of the marine environment is a big threat to the fisheries, bird life and human fatalities that lead to global warming and threatens humankind and its existences. These dangers are accentuated by most notably dumping such as;

ns/Pages/COLREG.aspx (19.12.2020). Turkey, Enter into Force, 17/10/2010, Resmi Gazete, 31/12/2009.

⁷³ Demirel, E. / Bayer, D.: “The Further Studies on the COLREGs (Collision Regulations)”, March 2015 *TransNav the International Journal on Marine Navigation and Safety of Sea Transportation*, Vol. 9, Iss. 1, p. 17, https://www.researchgate.net/publication/276103119_The_Further_Studies_On_The_COLREGs_Collision_Regulations (19.12.2020).

⁷⁴ Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREGs), Adoption: 20 October 1972; Entry into force: 15 July 1977, <https://www.imo.org/en/About/Conventions/Pages/COLREG.aspx> (19.12.2020).

- The dumping nuclear toxic wastes in Somali coastline, which is of the causes of the piracy;
- dumping by the Mobro 4000 of NY garbage in the mid-Pacific after several denials 1987;
- dumping by the Probo Koala in the Port of Abidjan led to several deaths, injuries and long-term cancer concerns; and
- continued dumping of electronics and garbage in developing countries (esp. West Africa).

International sources of international law are trying to establish a credible framework to prevent such activities. We can look at the UNCLOS with –“PART XII”- “Protection and Preservation of the Marine Environment”, the IMO with – the “MARPOL 73/74” and the “London Dumping Convention 1971”, UN Environmental Program and ENMOD which was formally the “Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques”, which is an international treaty which prevents the military or other hostile use of environmental modification techniques having widespread, long-lasting or severe effects.

C) RECENT MEANING AND STAKES OF MARITIME SAFETY

1- The Pressure and the Importance of Regulations

From the catastrophic sum plus, public pressure results in the obligation for governments to react. Before analysing the effects of this pressure on the maritime safety sector, which is very often the cause of this reaction, it is first necessary to study the economic stakes involved in the evolution of safety in the maritime sector with the aim of understanding the economic impacts of safety measures in international transportation.

In 2020⁷⁵ 90% of goods traded internationally (2,061,944 thousand DWT of goods) were transported by sea (the world maritime fleet comprising more than 93,000 ships). These figures demonstrate the power that the entire maritime transport⁷⁶ sector represents.

The two common terms in the world of maritime transport are “profitability” and “competition” interrelated to each other in this sector⁷⁷. Indeed, whoever speaks about competition, says transport⁷⁸ costs for the shipper must be as low as possible to obtain the best possible profitability. While being competitive in the face of competition, the ship operators are always tempted to make savings on fixed running expenses not limited to navigational costs but also to maintenance costs.

Nevertheless, it must be noted that public pressure, often public emotion,⁷⁹ is certainly the determining factor that encourages the maritime safety sector to evolve, overcoming the weight of the economic context. The idea behind the maritime safety regulations started with the public pressure but the scope of such regulations has been determined considering their economic efficiencies.

In fact, without prejudging the future position of the various bodies,⁸⁰ both national and international, in the area of prevention⁸¹, the political will to draw up or implement texts concerning maritime safety has, until now, been the result of public pressure or public emotion, emotion currently relayed through different methods of communication: television, radio and the internet. Dissatisfaction is made known and propagated through

⁷⁵ UNCTAD: “Review of Maritime Transport”, 2020, https://unctad.org/system/files/official-document/rmt2020_en.pdf (07.04.2021).

⁷⁶ Founder’s Guide, “What Is the Importance of Maritime Transport?”, August 2019, <https://foundersguide.com/importance-of-maritime-transport/> (27.05.2020).

⁷⁷ Leggate, H. / McConville, J. / Morvillo, A.: *International Maritime Transport: Perspectives*, Routledge Advances in Maritime Research, London 2004, p. 89.

⁷⁸ Nguyen, H.: “Competition in Maritime Transport Networks”, *University of Tasmania*, Australia, https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=ESAMACE2014&paper_id=330 (21.05.2020).

⁷⁹ Gery, M.: “Marine Accident Reports - Lessons to be Learned”, *Seatrade Maritime News*, <https://www.seatrade-maritime.com/opinions-analysis/marine-accident-reports-lessons-be-learned> (11.06.2020).

⁸⁰ Duru, O.: “Irrationality in Politics and Governance of Maritime Affairs: The Collapse of Sovereign Maritime Governance”, <https://www.sciencedirect.com/science/article/pii/S2405535214000072> (27.06.2020).

⁸¹ Tutuncu A. N.: *Gemi Kaynaklı Deniz Kirlenmesinin Önlenmesi, Azaltılması ve Kontrol Altına Almasında Devletin Yetkisi*, 3rd ed., Istanbul 2004, p. 70.

the media,⁸² and all those involved in the maritime sector, whether private or public, know that this dissatisfaction can result in either a declining turnover or poor results.

Two aspects of the effects of popular pressure should therefore be studied: Its power on the participants in political life and on the professional environment⁸³.

(a) The political level:⁸⁴ At the time of the sinking of the *Titanic*, the printed press,⁸⁵ produced a circulation of five million five hundred thousand copies and more than six million in the provinces.

The *Titanic* had on board members of the UK and the US upper middle class. It was in this context that the catastrophe occurred and created its extraordinary impact. This emotion is mentioned in the introduction to the report of the US Senate Committee (and is one of the arguments for the justification of the establishment of this committee). Two commissions of inquiry were quickly formed, one in London and the other in New York less than a month after the disaster.

Within the framework of the *Titanic*, the factor, which started this emotion, was therefore the large loss of human life and, what is more, lives coming from developed societies such as the UK and the US. Other maritime accidents that also cost human casualties did not have the same impact, either because only sailors were concerned, or the location of the disaster or the victims' origin was not a highly industrialized country.

The other issue that creates public pressure on the shipping company is the effect of maritime accidents on the environment. Since the *Amoco Cadiz* oil spill, such accidents have received a lot of media attention.⁸⁶

⁸² Mollie, W.: *Global Economic Institutions*, Routledge, Rotterdam 2003, p. 96.

⁸³ Wlezien, C. / Soroka, S.: "Public Opinion and Public Policy", *Oxford Research Encyclopedia*, <https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore9780190228637-e-74> (28.06.2020).

⁸⁴ Guest Column: "Titanic Reaction", *The Durango Herald*, <https://durangoherald.com/articles/37503> (27.06.2020).

⁸⁵ Gavin, A. / Zarr C.: "They Said it Couldn't Sink NARA Records Detail Losses, Investigation of Titanic's Demise", *National Archives*, Vol. 44, Iss. 2, 2012, <https://www.archives.gov/publications/prologue/2012/spring/titanic.html> (28.06.2020).

⁸⁶ Maritime Knowledge: "Amoco Cadiz Oil Spill: The Largest Loss of Marine Life Ever", *Safety4sea*, 08/10/2019 <https://safety4sea.com/cm-amoco-cadiz-oil-spill-the-largest-loss-of-marine-life-ever/> (02.07.2020).

However, media pressure can lead to media haste and overbidding. When a disaster occurs, which moves emotionally a large part of the population, political authorities can no longer postpone their actions. Deadlines for drafting texts and obtaining consensus are too long. This is the reason why national or regional decisions have been born.

Following the *Prestige*, which occurred on the coast of Spain in which a 26 year old and deficient oil tanker burst an oil tank causing one of the worst spills in history, a bi-lateral Franco-Spanish political decision⁸⁷ was taken just as quickly under the influence of public emotion: the Malaga Agreements.⁸⁸ Before the decision, the Aznar government was strongly criticized for its erratic management of the crisis and protest movements brought thousands of demonstrators onto the streets of Madrid. The implementation of the Malaga Agreements took place the week following the sinking, France asking certain ships to leave the exclusive economic zone.

(b) The professional level: Television⁸⁹ has given a spectacular aspect to maritime disasters. Millions of viewers were able to watch live, hour by hour, the damage caused by the grounding of the *Amoco Cadiz* including images of oil-covered birds and oil-soaked beaches.

A few years later, it was the environmental disaster⁹⁰ caused by the *Exxon Valdez*. For several days, the whole world was able to observe the inscription *Exxon Valdez* on the oil tanker's chimney. Such images put maritime petroleum transport professionals in the limelight, pushing them to issue instructions to place any symbol that could connect a ship to the owning company in such a position that it would be hidden in the event of a disaster.

Following the accident, the main oil companies gradually disengaged from direct maritime transport. In fact, the main oil companies now mainly use the charter system to

⁸⁷ Abogados A.: "The "Prestige" Case: Implications for Charterers After the Spanish Supreme Court Hands Down Exemplary Judgement", <http://www.actam.es/en/the-prestige/> (03.07.2020).

⁸⁸ Gavouneli, M.: *Functional Jurisdiction in the Law of the Sea*, 2nd ed., Martinus Nijhoff Publishers, Basim Yeri 2007, p. 86.

⁸⁹ AP Archive: "Synd 29 3 78 Oil Tanker Amoco Cadiz Depth Charged", <https://www.youtube.com/watch?v=ww7e9kECpVY> (03.07.2020).

⁹⁰ Struck, D.: "Twenty Years Later, Impacts of the Exxon Valdez Linger", *Yale School of the Environment*, March 2009, https://e360.yale.edu/features/twenty_years_later_impacts_of_the_exxon_valdez_linger (29.06.2020).

carry out the transportation of hydrocarbons⁹¹ in order to avoid the carrier's responsibilities in the first place, which could also be done in the context of the takeover bid. The shipper is no longer responsible and can avoid popular discontent.

In addition, the appearance and development of the internet⁹² has enabled ordinary people to share their opinions and carry out smear campaigns, as, for example, that suffered by *Total* whereby several sites parodied the *Total* name, having a significant media impact. The emotion created by a disaster is relayed directly and very often without hindsight: It is also the danger of popular pressure and the main players in maritime transport must integrate this notion.

2- EU and US Interventions to Maritime Safety

In terms of maritime safety, the European Union (EU) took its place in the institutional game following the *Braer* accident in 1993.⁹³ Long before the *Braer* oil spill, following the *Amoco Cadiz* accident in 1978, the EC had repeatedly drawn the Council's⁹⁴ attention to the fact that the classic framework for international action in the field of maritime safety across the IMO was insufficient for addressing the causes of accidents.

Maritime safety was, however, only the subject of a few *ad hoc* alterations during this period. The EU has had jurisdiction over maritime safety only since the Maastricht Treaty, which acknowledges the EU's jurisdiction over transport safety in general.

⁹¹ Karan, H.: *The Carrier's Liability under International Maritime Conventions, The Hague, Hague-Visby, and Hamburg Rules*, The Edwin Mellen Press, 2004, p. 55.

⁹² Leveque, T.: "Total Found Guilty in 1999 French Oil Spill Case", <https://www.reuters.com/article/environment-france-tanker-trial-dc/total-found-guilty-in-1999-french-oil-spill-case-idUSPAB00375220080116> (28.06.2020).

⁹³ Wills / Warner, 61.

⁹⁴ Stares, J.: "Full Steam Ahead: Brussels Draws up Plan for EU Navy", *Daily Telegraph*, <https://www.telegraph.co.uk/news/worldnews/1519005/Full-steam-ahead-Brussels-draws-up-plan-for-EU-navy.html> (04. 03.2020).

On 24 February 1993, the Committee distributed a communication entitled “for a common policy on maritime safety”.⁹⁵ The aim of this common policy was to advance maritime safety and prevent marine pollution in Europe⁹⁶ by way of:

- promoting concerted action between member states so that they take positive action within the IMO and that they apply all its rules in a harmonized manner in order to prevent misrepresentation of competition between member states;
- strengthening their fight against third-country standards vessels which do not correctly apply IMO rules, in the spirit of the Paris⁹⁷ Memorandum;⁹⁸
- defining common standards for areas not covered by the IMO.

The strategy proposed by the EC was quickly implemented 12 directives and three regulations followed. These texts aim⁹⁹ to ensure a stricter, even anticipated, application of rules stemming from international conventions in the fields of ship safety, pollution prevention, qualification and training criteria for seafarers, and on-board working conditions.

Barely a few months after the pollution caused by the *Exxon Valdez* in 1990, the US unilaterally imposed a series of measures integrated in a text called Oil Pollution Act (OPA).¹⁰⁰ Among this set of measures, probably the most important in terms of safety is the obligation for all new oil tankers (understood as those before 1995) bound for a US port to be of double hull design.¹⁰¹ The importance of economic trade with the US is such

⁹⁵ EC, “Communication from the Commission on the Enhanced Safety of Passenger Ships in the Community”, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52002DC0158> (06.04.2020).

⁹⁶ Shi, Y.: *Climate Change and International Shipping, The Regulatory Framework for the Reduction of Greenhouse Emissions*, Brill-Nijhoff, Leiden 2017, p. 288.

⁹⁷ Zahar A.: *Climate Law*, Vol. 6. Iss. 1-2, Brill-Nijhoff, Leiden 2016, p. 91.

⁹⁸ The Paris Memorandum of Understanding on Port State Control (Paris MoU), <http://197.230.62.214/ParisMoU.aspx> (17.05.2020).

⁹⁹ European Maritime Safety Agency, “EMSA 5-Year Strategy”, file:///C:/Users/kalka/Downloads/5y_strategy_2010web.pdf (22.05.2020).

¹⁰⁰ US Environmental Protection Agency: Summary of the Oil Pollution Act, 33 U.S.C. §2701 et seq. (1990), <https://www.epa.gov/laws-regulations/summary-oil-pollution-act> (07.04.2020).

¹⁰¹ “USCG increases limits of liability for ships under OPA 90”, https://safety4sea.com/uscg-increases-limits-of-liability-for-ships-underopa90/?cfchljschlthk=1091cb08ddebeeb8e0a95a8aa7bca719f5ed68d3-1594397742-0-AbVD8UT-dQv9clmHBxc5uY_ZrJB6YjhOy8kApVHxkr2jGdXQbkHkiA4NdYnG4xLXusXy0Hsx9C9UIKe67znRNtV8k8BDMQ6MPxTBHjXgqCmtbXmHko6M6S7Sepdulol7a5jszYi2IluoX09CAulV4lbb9Js9CPnAh2c0PwxOPg6ZvG6aseVBTT3ub2KehamEpFBOpiHp_Aessi

that this unilateral measure was quickly applied in the maritime sector and in 1993 was taken up by the IMO with a modification¹⁰² of Annex I¹⁰³ of the MARPOL but with a planned withdrawal by 2026.

The other measures, important from an economic point of view for the professional are the establishment of a mandatory annual contract with a private organization liaising with the US Coast Guard, the antipollution means and the federal authorities called Qualify Individual and a towing company. These measures have a significant annual economic cost. Currently, the first of these measures is in the spotlight for several reasons.¹⁰⁴ First, this technical solution is nowadays increasingly being questioned, and second because the EU,¹⁰⁵ through its common maritime policy,¹⁰⁶ has taken measures to speed up the exclusion of single hull tankers going beyond the timetable drawn up by the IMO, creating tensions between the IMO and the EU.

There is no doubt that this decision contributed to reducing operational pollution¹⁰⁷ because the space created by the double hull serves as permanent ballast, so ballast water is never in contact with the cargo, even the circuits being separated. In addition, in terms of accidents, this measure is beneficial, but not for the reasons previously mentioned by the US. Indeed, the existing fleet of single hull tankers before this measure was almost non-existent, this measure therefore allowed a rejuvenation of the world fleet.¹⁰⁸ What is questioned today is the efficiency of the double hull in the event of grounding and its

1mh969l3zADJkdQ5n__zSTRU2noE9VFt9Aqi5GFmIDpqN8_XJvYmGNT6AFJA2XD1InTcaZkX7eB1IW1tvma5dkTtlrjdxBhTSneBFPc7Wsl3dNQoY38aCe4HQdJWdYa2QPfx-Hs1fD_ujbQEqlvei GEC8 (13.06.2020).

¹⁰² Ivarsson, M. / Magnussen, K. / Heiskanen, A. / Navrud, S. / Viitasalo, M.: *Ecosystem Services in MSP: Ecosystem Services Approach as a Common Nordic*, Nordic Council of Ministers, Denmark 2017, p. 95.

¹⁰³ IMO: "Manual on Oil Pollution, Section I – Prevention", Chap. 3, London 2011, p. 21.

¹⁰⁴ Action Against Oil Pollution: "A Guide to the Intergovernmental and Industry Organizations Involved in the Prevention and Mitigation of Oil Pollution in the Marine Environment", <https://www.cid.csic.es/era/images/reports/IPIECA%20AAOP.pdf> (02.07.2020).

¹⁰⁵ EC, "Communication from the Commission on the Enhanced Safety of Passenger Ships in the Community", <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52002DC0158> (06.04.2020).

¹⁰⁶ European Maritime Safety Agency, "EMSA 5-Year Strategy", file:///C:/Users/kalka/Downloads/5y_strategy2010web.pdf (22.05.2020).

¹⁰⁷ Global Marine Pollution Information Gateway, "Operational Discharges of Oil", <http://oils.gpa.unep.org/facts/operational.htm> (22.06.2020).

¹⁰⁸ The National Academies of Sciences Engineering Medicine, "Double-Hull Tanker Legislation: An Assessment of the Oil Pollution Act of 1990", Chapter Executive Summary, 1998, <https://www.nap.edu/read/5798/Chapter/2> (11.07.2020).

structural quality over time; indeed it is certain that the double hull cannot resist a collision¹⁰⁹ or a grounding at a speed of about 4-5 knots, which can even make the ballast atmosphere explosive, which in this case becomes a mixture of hydrocarbon gas/air.

In addition, the atmosphere of the space, which therefore serves as ballast is, once the ship is loaded and therefore deballasted, composed of air on a saline environment, which makes it very corrosive to materials. The question thus posed today by professionals is the efficiency of this system over time if the same dubious ship owners, who still operate simple hulls today, do not carry out adequate maintenance to keep the hull in good condition.

At the time of the appearance of the takeover bid, a European shipyard (the Atlantic shipyards) was building an oil tanker, which, due to its design, limited pollution even in the event of grounding or a collision at high speed. The EEA (such was the name of the project for European Economic Environment)¹¹⁰ was based on the principle of static equilibria. Unfortunately, as this system was not retained by the US, only one of these tankers has been built and is still sailing.

The double hull system was first established through the US and inevitably, by the IMO, which at the time did not so openly denounce the interference of the US as today for the measures imposed by the EU. It is good to note that if within the framework of the OPA¹¹¹ only the double hull option was retained, the MARPOL retained the double hull or any other equivalent system as regards retention of pollution¹¹². Indeed, until the *Erika* disaster, a timetable for the withdrawal of single hull ships had already been established by the IMO taking up the proposals of the US in the matter.

¹⁰⁹ Prabowo, A. / Hyun, J. / Geon Lee, S. / Myung, D.: *Investigation on the Structural Damage of a Double-Hull Ship, Part II – Grounding Impact*, Procedia Structural Integrity Vol. 5, Amsterdam 2017, p. 943.

¹¹⁰ European Environment Agency (EEA): https://europa.eu/european-union/about-eu/agencies/eea_en (11.07.2020).

¹¹¹ The National Academies of Sciences Engineering Medicine: “Double-Hull Tanker Legislation: An Assessment of the Oil Pollution Act of 1990”, Chapter Executive Summary, 1998, <https://www.nap.edu/read/5798/Chapter/2> (11.07.2020).

¹¹² MARPOL, Annex I- Regulations for the Prevention of Pollution by Oil, Chapter 4 - Requirements for the Cargo Area of Oil Tankers, Part A – Construction Regulation 19 - Double Hull and Double Bottom Requirements for Oil Tankers Delivered on or after 6 July 1996, <https://www.nap.edu/read/5798/Chapter/2> (12.07.2020).

Following the sinking of the *Erika*¹¹³, the EC¹¹⁴ took a series of measures, one of which was a regulation providing for an acceleration of the elimination schedule for single-hull tankers and two directives concerning the control of classification societies and port state control. The regulation was the subject of a common European¹¹⁵ approach, which resulted in the IMO in April 2001 where the Community position was widely adopted. This regulation entered into force¹¹⁶ in 2002 and provided for the withdrawal of single hull tankers by 2015 rather than 2026 for the IMO calendar.

Unfortunately, the time between the will and the achievement was long enough for the *Prestige*¹¹⁷ disaster to occur. Following this catastrophe, Loyola de Pallaccio¹¹⁸, Commissioner for Transport and Energy, declared that if the measures envisaged by the EC before the discussions of the common position had been applicable on the day of the accident, the *Prestige* would not have sailed, and the accident could not have occurred. Furthermore, as an old boat (26 years old, single hull), the *Prestige* fell within the scope of the ships to be eliminated if most states had kept their commitment to apply these measures immediately before the transposition of directives commitment obtained during the Nice summit.¹¹⁹

On March 27, 2003, EU transport ministers met in Brussels and reached a political agreement on an accelerated timetable for the withdrawal of single hull tankers¹²⁰ which shows here the concern to intervene very quickly at a European level. These new rules

¹¹³ Pozdnakova, A.: *Criminal Jurisdiction Over Perpetrators of Ship-Source Pollution*, Part 4, Martinus Nijhoff Publishers, Leiden 2013, p. 228.

¹¹⁴ Maritime Safety: Erika I Package Commission Communication of 21 March 2000 to Parliament and the Council on the Safety of the Seaborne Oil Trade [COM(2000) 142 final - Not published in the Official Journal], <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=06.07.2020>.

¹¹⁵ Ringborn, H.: *European Union Maritime Safety Policy and International Law*, Martinus Nijhoff Publishers, Leiden 2008, p. 268.

¹¹⁶ Commission Directive 2002/27/EC of 13 March 2002 Amending Directive 98/53/EC Laying Down the Sampling Methods and the Methods of Analysis for the Official Control of the Levels for Certain Contaminants in Foodstuffs (Text with EEA Relevance), <https://Eur-Lex.Europa.Eu/Legal-Content/EN/TX T/?Uri=Celex%3A32 002L0027> (02.07.2020).

¹¹⁷ Maritime Knowledge, 21

¹¹⁸ Loyola de Palacio Vice-President of the European Commission Responsible for Transport and Energy Public Hearing on the Prestige European Parliament Committee on Regional Policy, Transport and Tourism (RETT) Brussels, 19 March 2003, <https://ec.europa.eu/commission/presscorner/detail/en/SPEECH03141> (03.07.2020).

¹¹⁹ De La Rue, C.: *Shipping and the Environment*, Routledge, Taylor and Francis Group, 2nd ed., London and New York 2018, p. 1118.

¹²⁰ Single-hull Oil Tankers Banned from European Ports from 21 October 2003, IP/03/1421, Brussels, 21 October 2003, <https://ec.europa.eu/commission/presscorner/detail/en/IP031421> (13.06.2020).

apply not only to all European flags¹²¹ but also to foreign flags bound for a port or anchorage falling under the jurisdiction of a member state. Although the legal services of the European Council considered that this provision was not contrary to international law of the sea, which allows states to impose higher standards than those in force at an international level for reasons of maritime safety, during the last hearing of the European Parliament on the *Prestige*¹²² disaster, an IMO expert considered this measure contrary to international law at sea.

The IMO does not look favourably¹²³ on the EU¹²⁴ taking initiatives in this way, even if its legitimacy is no longer in doubt for the geographical area of Europe. The case of the US with the OPA¹²⁵ was then even more outrageous for the IMO because it was not even a common position of a regrouping of sovereign states but indeed a unilateral decision.

Accordingly, three levels have already intervened in the case of the withdrawal of single hull oil tankers. First the national level with the US followed by the international level with the IMO, which has taken up in the MARPOL the provisions of the OPA in terms of timing for the withdrawal of single hulls, then at the European level, which is trying to speed up this withdrawal by trying to impose its own provisions.

The study in this first part was therefore devoted to maritime safety, an area in which the desire to act in favour of improvement was only very rarely shared by all stakeholders in the marine environments simultaneously. Now it is time to study an area, which, for its part, is now unanimous within intergovernmental bodies and states: the maritime security sector, an area which derives from maritime safety, but which is concerned with security external to the ship, which can sometimes become a tool of destruction.

¹²¹ EC: “Maritime Security Strategy”, [https://ec.europa.eu/maritimeaffairs/policy/maritime-security_en#:~:text=The%20European%20Union%20maritime%20security,and%20responds%20to%20these%20challenges.&text=The%20strategy%20is%20built%20upon,the%20regional%20and%20national%20levels.\(21.05.2020\).](https://ec.europa.eu/maritimeaffairs/policy/maritime-security_en#:~:text=The%20European%20Union%20maritime%20security,and%20responds%20to%20these%20challenges.&text=The%20strategy%20is%20built%20upon,the%20regional%20and%20national%20levels.(21.05.2020).)

¹²² Maritime Knowledge, 55

¹²³ Wouters, J. / De Jong, S. / Marx, A. / De Man, P.: “Study for the Assessment of the EU’s Role in International Maritime Organisations”, *Leuven Centre for Governance Studies*, April 2009, https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/publications/euroleinternationalorganisations_en.pdf (07.07.2020).

¹²⁴ Ospina, E., V.: “The Law and Practice of International Courts and Tribunals”, *International Law Journal*, Vol. 15, No. 1, Leiden, Netherlands, 2016, p. 102.

¹²⁵ De La Rue, 122.

II. EMERGENCE OF MARITIME SECURITY

Part II of the study deals with the concept of security in maritime transport. Security in the maritime sector mainly focuses on terrorism,¹²⁶ which was a neglected aspect until the US drew the IMO's¹²⁷ attention to the fact that any ship could become a weapon by destination, or weapon of mass destruction despite the numerous acts of piracy in certain areas of navigation. There is therefore a need to look first at the new international legislation dealing with this concept of maritime security¹²⁸ and analyse the goal of maritime security. September 11, 2001,¹²⁹ was a pivotal date in the history of maritime security as this tragic event led to the US challenging the IMO on the subject. Following a reminder of the events, this first part describes the new IMO provisions in this area.

A) THE BIRTH AND THE RELEVANCE OF MARITIME SECURITY

1- The First Steps Taken

a) *Creation of the SUA Convention*

The maritime environment, and it is to be celebrated, does not have a past as strewn with bloody events as the civil aviation sector, which has experienced such significant events as the diversion of the TWA¹³⁰ and DC 10 UTA¹³¹ attacks, among others. Even though it is widely considered that it is the hijacking of the *Santa Maria* in 1961 that started the maritime security era, one key event occurred in October 1985, when the Italian liner *Achille Lauro* was captured off coast of Egypt by the “Palestine Liberation Front” (PLF)

¹²⁶ Stable Seas: “Maritime Terrorism”, <https://stableseas.org/category/maritime-terrorism> (16.07.2020).

¹²⁷ Canca, H. S.: *Denizde İşlenen Suçlar*, Seckin Publishing Company, Ankara 2012, p. 198.

¹²⁸ Ryan, B. J.: *The Disciplined Sea: A History of Maritime Security and Zonation*, International Affairs, 2019, p. 1055, <https://academic.oup.com/ia/article/95/5/1055/5537416> (18.07.2020).

¹²⁹ Metaparti, P.: *Rationality and Reality in Post-9/11 Maritime Security*, The Flagship Journal of International Shipping and Port Research, Vol. 37, Iss. 7, 2010, p. 723.

¹³⁰ TWA: “Profit Diversion Opposed; Airport Council Warned on Loss of Passengers”, <https://www.nytimes.com/1964/10/18/archives/profit-diversion-opposed-by-twa-airport-council-warned-on-loss-of.html> (24.03.2020).

¹³¹ French Association of Victims of Terrorism: “Bombing of UTA DC10 – The Families Demand the Trial of Abdullah Senoussi”, *Press Release Paris*, September 6, 2012, <https://www.afvt.org/bombing-of-uta-dc-10-families-demand-the-trial-of-abdullah-senoussi/> (16.03.2020).

taking 450 passengers in hostage. One of the hostages, Mr. Klinghoffer¹³² was executed and thrown into the sea.

The essential element of this event for the purposes of this thesis is that the terrorists hijacked this ship to use it as a means of destruction. Indeed, this hijacking had the primary objective of destroying the Ashdod naval base, located barely 200m from the planned the *Achille Lauro* anchorage, the terrorists having to change their mind after being discovered by one of the ship's crew. The ship was in fact only a vehicle for carrying out their terrorist act. The initiator of the operation, Abou Al Abbas, chose this cruise ship because of the embarkation facilities offered by the port of Genoa and because of the planned route. The director of ballet, Mr. Potocka, recalls "very quick departure formalities without checking baggage"¹³³.

This tragic event led perhaps to the most significant convention in maritime security: The "Convention for the Suppression of Unlawful Acts (SUA)"¹³⁴. SUA Regime is made up of the SUA Convention 1988, the SUA Protocol 1988, which, *inter alia*, enabled the passage and entry into force of the SUA Convention 1988. The essential contribution of the SUA and its 2005 protocol, which, *inter alia*, introduced terrorist offences, lies in the identification of acts, which can be assimilated as maritime terrorism. Without providing a precise definition, "Article 3"¹³⁵ identifies "six material acts that may constitute a criminal offense comparable to terrorism such as seizing a ship by violence, committing an act of violence at sea or against a person on board, or that leads to the destruction of a ship or navigation facilities". It should be added that these offenses have "a moral element"; since the article specifies that, they must be carried out "intentionally". In addition, "attempting incitement, aiding and abetting as well as threatening is also a criminal offense". To ensure the effectiveness of this relatively detailed framework,

¹³² Bass W. / Salamon J.: "An Innocent Bystander: The Killing of Leon Klinghoffer", American Jewish Historical Society, <https://ajhs.org/innocent-bystander-killing-leon-klinghoffer> (25.07.2020).

¹³³ Bohn, M. K.: *The Achilles Lauro Hijacking: Lessons in the Politics and Prejudice of Terrorism*, Potomac Books, Inc. Washington D.C. 2004, p.132.

¹³⁴ Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA), Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, Adopted 10 March 1988; Entry into force 1 March 1992; 2005 Protocols: Adopted 14 October 2005; Entry into force 28 July 2010, <https://www.imo.org/en/About/Conventions/Pages/SUA-Treaties.aspx> (19.12.2020). Turkey, Enter into Force, 17/10/2010, Resmi Gazete, 31/12/2009.

¹³⁵ SUA Convention 2005, art. 3, <https://www.jus.uio.no/english/services/library/treaties/07/7-04/safety-maritime-consolidated.xml> (19.12.2020).

“Article 5” of the Convention imposes on States an “obligation to punish these offenses with appropriate sanctions under domestic law”. The States party to the SUA 1988 framework also undertake to establish their jurisdiction over the various offenses provided for by the Convention. The clarification made by the “SUA framework” is major. It frees from the complications that arose during the *Achille Lauro*¹³⁶ case relating to the transposition of the piracy regime to acts akin to maritime terrorism.

The SUA 2005 framework takes note of the difficulties of its predecessor and introduces new impetus. It is imbued with the evolution of maritime terrorism, which is in essence volatile; to reflect the plurality of threats it covers. To do this, the protocol to the Convention extends its scope by integrating the transport of biological, chemical, and nuclear weapons. Broadly speaking, Article 4 of the protocol incorporates new provisions within the convention, which criminalize three types of situations. First, the new article, 3bis, criminalizes cases in which a ship is used as a weapon. The use or discharge, against and on board a ship, of BCN weapons is therefore criminalized. On the other hand, Article 3bis (b) deals with specific offenses relating to the transport of BCN weapons and dangerous substances. For these two situations, the motivation for the act performed is recalled, specifying, "When the purpose of the act, by its nature or context, is to intimidate a population or to compel a Government or an international organization to do or to abstain from any act". Finally, the new “article 3” of the “Convention” prohibits the fact of transporting people who have committed such acts in order to help them escape justice. Once again, the attempt, complicity, organization, and contribution to the commission constitute “an offense within the meaning of the Convention” as amended by the Protocol.

The SUA 2005 framework is not limited to updating threats that may strike at sea. It includes in a new article, 8bis, and the possibility of taking action against a vessel flying a foreign flag. To do this, various cooperation procedures are detailed. When a State has "serious reasons" to suspect that a foreign vessel is engaging in acts criminalized by the SUA 1988 and SUA 2005, it can ask the flag authority to confirm its nationality.

¹³⁶ Bohn, M. K.: *The Achilles Lauro Hijacking: Lessons in the Politics and Prejudice of Terrorism*, Potomac Books, Inc. Washington D.C. 2004, p. 132.

Once it has been approved, inspectors can ask to board the vessel as well as to carry out searches on board. The suburban prevalence persists here, since the State to which the vessel is attached must first authorize the intervention. In addition, it can also refuse the intervening State permission to board and carry it out on his own searches. In order to encourage cooperation and facilitate interaction between States, so-called "pre-consent" procedures are provided for in this article. These mechanisms can be broken down into two. First, at the time of ratification, a State can notify the IMO that, when a third party wishes to intervene against one of its ships, if it has not received a response within four hours, that party can proceed with boarding. This is a form of tacit consent. Then, a State can also notify the IMO of its intention to allow the possibility of boarding its vessels when one of the offenses covered by the texts "is in progress or is about to be committed". Here, there is no need to wait for a specific period to board. These two procedures aim to simplify action at sea, but they remain optional. It is moreover to encourage States to participate in this type of cooperation that a good number of guarantees are provided for by the new Article 8bis, such as the assurance of respect for the fundamental rights of the persons on board by the intervening authority.

To sum up, SUA gives us a list of unlawful activities:

- "Illegally or forcefully taking control of a ship";
- "Violence against a person on ship if it is likely to endanger the safety of the ship";
- "Damaging or destroying a ship or its cargo in such a way that endangers the safety of the ship";
- "Placing or trying to place any device or substance that can destroy or damage the ship or its cargo"
- "Destroying or damaging a ship's navigation facilities or interfering with their operation if it is likely to endanger the safety of the ship";
- "Communicating information which is known to be false, thereby endangering the safety of the navigation of the ship";
- "Injuring or killing someone while committing any of the above offenses";

- “Being an accomplice to any of the above offenses”;
- “Compelling someone through threats to commit any of the above offenses”.

Thus, it is easy to understand why this concept of security has international consensus,¹³⁷ but it is at the same time only advisory, still with a view to discovering the environment of this security context, dwelling slightly on the economic aspect generated by maritime security.

b) The Impact of Attack on the New York Twin Towers

On a political level, the EC had been concerned prior to destruction of the New York Twin Towers, with the security question, as put in evidence by the “White Paper” on transport¹³⁸, which referred to the need to reinforce the security of passengers boarding ships for cruises in Europe. Then came the events of destruction of the New York Twin Towers,¹³⁹ which saw the destruction of the two towers of the World Trade Centre (WTC) and the deaths of more than 3,000 people. This tragic event made the world aware that no country was immune from terrorism¹⁴⁰ and that all air, land and sea assets could be used for destructive purposes.

Little more than a year after destruction of the New York Twin Towers, came the attack on a French super tanker, the *Limburg*.¹⁴¹ On October 2002, off the coast of Yemen,¹⁴² the tanker was hit on one of its cargo sections by a speedboat packed with explosives. The death toll could have been much heavier than it was, but this event reveals the risk that an oil tanker can represent in a large port if it is the target for a suicide attack.

¹³⁷ IMO: “Maritime Security”, http://www.imo.org/en/OurWork/Security/Guide_to_Maritime_Security/Pages/Default.aspx (16.06.2020).

¹³⁸ European Economic and Social Committee the White Paper on Transport, <https://www.eesc.europa.eu/en/file/white-paper-transport> (12.03.2020).

¹³⁹ “September 11th Fast Facts”, CNN, March 2015, <https://edition.cnn.com/2013/07/27/us/september-11-anniversary-fast-facts/> (19.07.2020).

¹⁴⁰ Karim, S.: Maritime Terrorism and the Role of Judicial Institutions in the International Legal Order, Brill Nijoff Vol. 82, part II, 2016, p. 39.

¹⁴¹ Miramar Ship Index, Limburg (9184392), <https://www.miramarshipindex.nz/ship/9184392> (04.03.2020).

¹⁴² Schanzer J.: “Yemen’s War on Terror”, <https://www.washingtoninstitute.org/uploads/Documents/ope ds/4224cd7 e95ec5.pdf> (09.07.2020).

This, fortunately limited, list exposes the potential threats¹⁴³ the maritime environment can pose to external interests: Any ship can become a weapon by destination, or the vector of a weapon of mass destruction, even an innocent transporter of inappropriate charges. Passenger transport¹⁴⁴ vessels are of course the preferred targets because they are direct targets, but all kinds of vessels can be used, particularly oil or gas vessels, which can become real floating bombs. Terrorists could be tempted to detonate such ships in port areas, where economic interests are represented, with the human and environmental consequences that one can imagine.

So, the American people were greatly affected¹⁴⁵ by the events of September 11 2001, which is why the US has been particularly determined in this area. Like the action it has taken on maritime oil pollution, the US has taken national protective measures regarding maritime security,¹⁴⁶ often anticipating provisions under negotiation in international forums. In the maritime domain in particular, security is a “matter of internal security”. US parliamentary activity has been rich in initiatives, resulting concretely in the adoption by Congress, on November 14, 2002, of the “Maritime Security Act of 2002”,¹⁴⁷ which places broad security requirements on the marine industry¹⁴⁸.

One of the major issues facing maritime law and the law of the sea is the resurgence of illegal behaviour at sea¹⁴⁹. The gradual emergence of the concept of maritime security illustrates the will of the international community to take these threats into account with

¹⁴³ “Ocean Threats”, National Geographic, <https://www.nationalgeographic.com/environment/habitats/ocean-threats/> (28.07.2020).

¹⁴⁴ “Ex-post Evaluation of PASR Activities in the field of Security and Interim Evaluation of FP7 Security Research Maritime Security and Surveillance - Case Study”, https://ec.europa.eu/home-affairs/sites/homeaffairs/files/elibrary/documents/policies/security/pdf/maritime_case_study_cs_en.pdf (06.07.2020).

¹⁴⁵ “Reaction to 9/11”, *History*, <https://www.history.com/topics/21st-century/reaction-to-9-11> (17.06.2020).

¹⁴⁶ National Commission: “On Terrorist Attacks upon the US”, July 22, 2004, <https://www.govinfo.gov/features/911-commission-report>, (25.04.2020).

¹⁴⁷ USCG: “The U.S. Coast Guard Maritime Strategy for Homeland Security”, <https://www.uscg.mil/Portals/0/Strategy/2013USCGWP.pdf>, (16.04.2020).

¹⁴⁸ Nordquist M. H. / Moore. J. N. / Heidar T. H.: “Changes in the Arctic Environment and the Law of the Sea”, *Center for Oceans Law and Policy*, Martinus Nijhoff Publisher, Leiden 2010, p. 387.

¹⁴⁹ “IMO and Maritime Security Historic Background”, http://www.imo.org/en/OurWork/Security/Guide_to_Maritime_Security/Documents/IMO%20and%20Maritime%20Security%20-%20Historic%20Background.pdf (09.10.2020).

the aim of effectively fighting against them. However, its lack of definition poses concrete difficulties.

The concepts of maritime safety and security aim at the same ideal: “The protection of human life at sea”. For a long time, the priority of States and international organizations focused on securing maritime activities, ships and waterways. These measures were aimed at reducing the risks inherent in shipping. This materialized legally by the adoption of many international conventions, such as the SOLAS¹⁵⁰, which provides for minimum standards in matters of safety at sea. However, illicit activities have rarely been taken into account by these international texts. The “Twin Tower attacks of September 11, 2001”¹⁵¹ were the trigger that awakened the international community to the vulnerability of maritime spaces in the face of intentional threats. In response, the ISPS code¹⁵² was adopted in December 2002. This code of direct applicability establishes specific measures for the security of ships and ports.

However, the “ISPS code”¹⁵³ does not define maritime security. This lack of a precise definition has led to numerous amalgamations between security and maritime safety being made. Without a clearly marked distinction between these two concepts, maritimesecurity appears a "fashionable expression", an assertion "without concrete referents, whose meaning can be given by their users". It is true that in practice, maritime security is understood differently depending on the field of activity in which it is invoked. For example, within the nautical industry, maritime security refers to the arrival of a ship in port without external interference, while in the field of defence; it aims more at the fight against criminals from the sea. Maritime security is therefore a polysemous concept, which complicates its understanding to the point that it seems difficult to use it with full legal certainty. In view of these difficulties, the distinction between maritime safety and security does not appear to be useful. A global approach to the two concepts under the

¹⁵⁰ Resolution Msc.380(94) (Adopted On 21 November 2014) Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as Amended, <http://www.imo.org/en/OurWork/Safety/Cargoes/Containers/Documents/resolution%20MSC-380-94.pdf> (10.10.2020).

¹⁵¹ Metaparti, 129.

¹⁵² UK P&I: “Ship Security Plans - US Requirements and The ISPS Code”, Circular 17/03, <https://www.ukpandi.com/news-and-resources/circulars/2003/circular-1703-ship-security-plans---us-requirements-and-the-isps-code/> (06.10.2020).

¹⁵³ The International Ship and Port Facility Security (ISPS) Code is an amendment to the Safety of Life at Sea (SOLAS) Convention (1974/1988).

name maritime safety seems more appropriate. The search for a definition of maritime security therefore appears to be an "unproductive quest" since it is only a part of maritime safety.

However, although they share a common goal, maritime safety and security are distinguished by the type of dangers they address¹⁵⁴. Indeed, maritime security targets risks, whatever their nature (technological or natural), while maritime security exclusively targets threats. The distinction between these two concepts is made at the level of intent: A threat is always preceded by "criminal intent", an element that does not exist for risk. Risk therefore refers to an external danger, which is not the result of a prior intention. From this, a distinction can be made between these two concepts. Maritime security can be defined as "taking charge of risks of natural origin or caused by maritime navigation", while maritime security consists of protecting ships against "criminal acts likely to harm the operation of the ship or maritime transport". The ISPS code has also paid particular attention to the terms used to deal only with measures specific to each of the dangers present at sea.

Thus, Chapter XI of the SOLAS¹⁵⁵, initially devoted to security, has been amended to incorporate a clear distinction between maritime security and maritime safety. Indeed, several States have not made a clear distinction between these two concepts. The adoption of the ISPS code made it possible to clarify this vagueness of terminology, by renaming Chapter XI, and by subdividing it into a part specific to safety measures and the other to maritime security measures. This distinction appears to be a manifestation of the will of the international community to target these two types of danger in order to equip itself with specific instruments with which to tackle it.

The movement initiated by the international community seems to be in favour of the clear establishment of a concept of autonomous maritime security. Moreover, this swing in favour of maritime security has been followed by EU law. Regulation 725-2004¹⁵⁶

¹⁵⁴ Ameri, M.: "Maritime Security and Safety", Unitar/Doalos Briefing 17 October 2007, https://www.un.org/Depts/los/convention_agreements/convention25years/07unitardoalos2007.pdf (19.12.2020).

¹⁵⁵ SOLAS, "Chapter XI-2 Special Measures to Enhance Maritime Security".

¹⁵⁶ Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on Enhancing Ship and Port Facility Security, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004R0725&from=ES> (19. 12.2020).

incorporating the ISPS code defines maritime security as “the combination of preventive measures aimed at protecting maritime transport and port facilities against the threats of intentional unlawful actions”.

2- First Regulations Governing Maritime Security

The US also saw the effective creation, in March 2003, of a large “Department of Homeland Security ¹⁵⁷ (DHS)” and it is in this security context that three types of important measures having huge repercussions for the maritime world have been set up. The US has introduced two types of measures as compulsory and voluntary. The US unilaterally adopted a series of compulsory measures, which go further than the measures adopted by the IMO, keeping in mind the US has made both “parts A and B” of the “ISPS Code” mandatory for all ships serving US trade routes¹⁵⁸. First, the US sought to transpose the new regulations international law and for this a new law was adopted, The American Maritime Transportation Security Act of 2002 ¹⁵⁹, which effectively transposes into domestic law the measures adopted at the IMO but adding new more restrictive measures.

Always in their “security focus”, the US has adopted different rules to ensure the highest possible level of security in the transport sector maritime, but unlike the rules previously presented, those to which we are going interest now are in principle not mandatory, their application depending on the voucher want interested parties. Two different voluntary programs can then be identified, the “Container Security Initiative (CSI)”¹⁶⁰ on the one hand and the “Customs-Trade Partnership Against Terrorism (C-TPAT)”¹⁶¹ on the other hand. Different in some respects, these two programs pursue nevertheless a common goal,

¹⁵⁷ U.S. Customs and Border Protection: “March 1, 2003: CBP is Born”, <https://www.cbp.gov/about/history/march-1-2003-cbp-born> (08.07.2020).

¹⁵⁸ UK P&I, Circular 17/03, “Ship Security Plans - US Requirements and The ISPS Code”, <https://www.ukpandi.com/news-and-resources/circulars/2003/circular-1703-ship-security-plans---us-requirements-and-the-is-ps-code/> (06.10.2020).

¹⁵⁹ U. S. Department of Homeland Security: “Protecting America’s Ports, Maritime Transportation Security Act of 2002”, July 1, 2003, https://www.aapa-ports.org/files/pdfs/mtsa_press_kit.pdf (03.09.2020).

¹⁶⁰ Smita, X.: “What Is Container Security Initiative (CSI) and How Does It Work?”, <https://www.marineinsight.com/marine-safety/what-is-container-security-initiative-csi-and-how-does-it-work/> (13.07.2020).

¹⁶¹ Hinkelman, E. G.: The World Press Guide to C-TPAT (Customs-Trade Partnership Against Terrorism), Professional Industry Report, Washington D.C. 2020, p. 52

namely the verification of the contents and the integrity of the containers to the US “as far upstream as possible in the logistics chain”.

a) The CSI:¹⁶² Since mid-2002, the US has developed this measure, intended to be applied in a first phase in the 20 European and Asian ports¹⁶³ concentrating the largest share of maritime trade in containers¹⁶⁴ to the US.

Its principle revolves around four points for the same port:¹⁶⁵

1. “Establishing security criteria to identify high-risk containers”.
2. “Pre-screening of containers before their arrival at US ports”.
3. “The use of technological means to screen high-risk containers”.
4. “The installation of secure containers allowing intelligent monitoring”.

b) The so-called “24-hour notice” rule: Sea carriers must provide their cargo manifest 24 hours before this operation is effective on ships departing for the US. This would allow US customs to assess the risk of terrorist containers for that country that could pose a terrorist threat.¹⁶⁶

c) The proposal for a regulation relating to the abolition of visas issued on the basis of crew lists: This proposal aims to abolish the practice of issuing visas on the basis of crew lists for crewmembers of foreign vessels requesting entry to a US port.

The US is therefore at the origin¹⁶⁷ of national initiatives in favour of maritime security, but they are above all measures that affect the customs area, therefore, internal. However,

¹⁶² OOCL: “Customs Advance Manifest”, <https://www.oocl.com/eng/resourcecenter/customeradvisories/usacanada/Pages/containersecurityinitiative.aspx> (06.07.2020).

¹⁶³ U.S. Customs and Border Protection: “CSI: Container Security Initiative”, <https://www.cbp.gov/border-security/ports-entry/cargo-security/csi/csi-brief> (07.07.2020).

¹⁶⁴ Erdal, M.: *Konteyner Deniz ve Liman İşletmeciliği*, Beta Basım Yayım, İstanbul 2017, p. 3.

¹⁶⁵ Smita, 160.

¹⁶⁶ Homeland Security: *Fact Sheet: Container Security Initiative*, Homeland Security Digital Library, <https://www.hsdl.org/?abstract&did=29070> (21.07.2020).

¹⁶⁷ Clark, B. / Walton T. A.: “Security Contributions of the U.S. Maritime Industry”, CBSA, Briefs of March 2019, <https://csbaonline.org/research/publications/national-security-contributions-of-the-u.s.-maritime-industry> (06.04.2020).

maritime security has become a global priority and international bodies have also begun actions in this area.

Also as developed following the attack on the New York Twin Towers, this program volunteer goes further than the CSI. While the ITUC (International Trade Union Confederation) addressed port authorities, C-TPAT¹⁶⁸¹⁶⁹ concerns more importers, shippers and brokers, among others. By adopting C-TPAT¹⁷⁰, participants commit to implementing policies secure the credibility of their entire chain logistics, which in practice results in the implementation of four different measures.

As a first step, they should carry out a comprehensive self-assessment of the security of the supply chain by respecting the guiding principles of C-TPAT relating to safety and security. These guiding principles are jointly defined by Customs and transport professionals and cover several areas, such as security procedures, personnel, and transportation, among others. Subsequently, the participant in C-TPAT must send Customs a questionnaire on the supply chain security profile, then establish and implement a program intended to enhance security throughout the supply chain, in accordance with the principle's directors of C-TPAT. Finally, the guiding principles of C-TPAT should be passed on to other companies involved in the supply chain and ensure that these same principles are integrated into relations with the other above-mentioned companies.

Furthermore, on an international level, on 20 November 2001, at its twenty-second session, the "IMO Assembly" convened adopted "resolution A.924"¹⁷¹, which dealt with "the review of measures and procedures aimed at preventing acts of terrorism that compromise the security of passengers and crews and ship safety". Following the adoption of this resolution, work was carried out for more than a year, finally culminating

¹⁶⁸ U.S. Customs and Border Protection: "CTPAT: Customs Trade Partnership Against Terrorism", <https://www.cbp.gov/border-security/ports-entry/cargo-security/ctpat> (26.09.2020)

¹⁶⁹ Hinkelman, 161.

¹⁷⁰ "Customs-Trade Partnership Against Terrorism ("C-TPAT")", Global4PL, <https://www.global-4pl.com/c-tpat/> (28.09.2020).

¹⁷¹ Resolution A.924(22) Adopted on 20 November 2001, "Review of Measures and Procedures to Prevent Acts of Terrorism Which Threaten the Security of Passengers and Crews and the Safety of Ship" [http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Assembly/Documents/A.924\(22\).pdf](http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Assembly/Documents/A.924(22).pdf) (11.10.2020).

in the IMO Diplomatic Conference, which was held from 9 to December 12, 2002¹⁷². During this conference, several resolutions were adopted by the MSC 76, amending the SOLAS. Thus, eleven resolutions that were adopted. All mandatory provisions apply moreover to all the Contracting Governments of the IMO.

Thus, resolution 1¹⁷³ notably amended Chapter V¹⁷⁴ of the SOLAS and this same resolution introduced a new “Chapter XI”. “Chapter XI” existing was thus split into two parts, with a “Chapter XI-1” containing the content of previous Chapter XI by adding some new provisions, and a “Chapter XI-2” on “special measures to strengthen maritime security”.

Resolution 2¹⁷⁵, in its part, implemented “the ISPS”¹⁷⁶ code. According to the IMO, the subject of the code is, among other things¹⁷⁷, “to establish an international framework within which the Governments contractors, public bodies, local administrations and the maritime sectors and port can cooperate to detect and assess threats to security and take protective measures against security incidents involving ships or port facilities participating in international trade”

¹⁷² IMO and Maritime Security Historic Background, https://www.imo.org/en/OurWork/Security/Guide_toMaritimeSecurity/Documents/IMO%20and%20Maritime%20Security%20-%20Historic%20Background.pdf (09.10. 2020).

¹⁷³ Resolution Msc.380(94) (Adopted on 21 November 2014) Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as Amended, <http://www.imo.org/en/OurWork/Safety/Cargoes/Containers/Documents/resolution%20MSC-380-94.pdf> (10.10.2020).

¹⁷⁴ SOLAS, “Chapter V, Safety of Navigation”.

¹⁷⁵ Resolution Msc.380(94) (Adopted on 21 November 2014) Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as Amended, <http://www.imo.org/en/OurWork/Safety/Cargoes/Containers/Documents/resolution%20MSC-380-94.pdf> (10.10.2020).

¹⁷⁶ The International Ship and Port Facility Security (ISPS) Code is an amendment to the Safety of Life at Sea (SOLAS) Convention (1974/1988).

¹⁷⁷ IMO, “Frequently Asked Questions on Maritime Security”, http://www.imo.org/en/OurWork/Security/Guide_to_MaritimeSecurity/Pages/FAQ.aspx (10.10.2020).

B) THE GOAL OF MARITIME SECURITY

1-To Suppress Illegal Activities at Sea

a) General

First, it would be pertinent to study the general meaning of maritime security, then look at each goal and the regulation that comes with it. Maritime security¹⁷⁸ is the set of measures that “States, owners, operators, and administrators of ships, port facilities, offshore infrastructure, and other organizations or establishments in the maritime sector implement in order to protect themselves against malicious acts in waters under national jurisdiction and at high seas”.¹⁷⁹ A maritime security “incident” is any “suspicious act or any suspicious circumstance threatening the safety of a ship, an offshore platform, a port, a port facility, a ship/port interface, or an artificial island”.

Maritime security incidents include all illegal acts committed at sea, on lower rivers, in ports, roads, and bays such as¹⁸⁰:

- Terrorism;
- Sabotage in all its forms;
- Piracy or armed robbery on board a ship and/or against passengers on board;
- Clandestine passage;
- Illegal migration;
- Arms trafficking;
- Human trafficking;
- Drug trafficking; Smuggling;

¹⁷⁸ Ryan, 128.

¹⁷⁹ Taufer, M.: “The Evolution of Maritime Security in the Mediterranean Sea”, *Strategic Studies*, Vol. 35, No. 4, 2015, p. 45.

¹⁸⁰ IMO: “Maritime Security”, http://www.imo.org/en/OurWork/Security/Guide_to_Maritime_Security/Pages/Default.aspx (16.06.2020).

- Illicit transport or deliberate dumping at sea, in inland waters, or in ports of radioactive materials, NBC weapons, explosives, harmful substances, etc.;
- Unauthorized radio transmissions from the sea;
- Illegal, unreported, and unregulated fishing;
- Ecological and environmental threats; or
- any other act that could affect maritime safety in waters.

Indeed, while maritime safety relates to accidental events without voluntary anthropogenic causes, maritime safety relates to voluntary malicious acts.

b) Armed Robbery Against Ships (ARAS)

Originally a part of maritime piracy, Somalian experiences have led the IMO to treat ARAS as a unique maritime threat. “A 26/Res.1025Annex”¹⁸¹ on “IMO's Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery Against Ships”, determines that ARAS consists of “any of the following acts”:

- “(a) any illegal act of violence or detention or any act of depredation, or threat thereof, other than an act of piracy, committed for private ends and directed against a ship or against persons or property on board such a ship, within a State's internal waters, archipelagic waters and territorial sea;
- (b) any act of inciting or of intentionally facilitating an act described above.”

Therefore, to prevent such activities the IMO recommends and adopts provisions such as “recommendations to Governments for preventing and suppressing piracy and ARAS”¹⁸². “Guidance to ship owners and ship operators, shipmasters, and crews on preventing and

¹⁸¹ Resolution A.1025(26) Adopted On 2 December 2009 (Agenda Item 10) Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery Against Ships, [https://www.gard.no/Content/31036385/ REs.A.1025\(26\).pdf](https://www.gard.no/Content/31036385/REs.A.1025(26).pdf) (13.03.2021).

¹⁸² MSC.1/Circ.1333/Rev.1, 12 June 2015, Piracy and Armed Robbery against Ships, Recommendations to Governments for Preventing and Suppressing Piracy and Armed Robbery Against Ships, http://rise.odessa.ua/texts/MS1_Circ1333e.php3 (13.01.2021).

suppressing acts of piracy and armed robbery against ships”, “guidelines to assist in the investigation of the crimes of piracy and armed robbery against ships”¹⁸³ with the Code of Practice for the Investigation of Crimes of Piracy and ARAS”¹⁸⁴.

c) Smuggling Psychotropic Substances

More recent, drug trafficking did not emerge until the 19th century¹⁸⁵. It gradually developed to acquire a planetary dimension and become a real globalized phenomenon in the aftermath of World War II. Opium, morphine, cocaine, cannabis etc. All these narcotics have borrowed and continue to use the sea, a veritable “royal road” with many advantages. More profitable, safer, more discreet; the maritime solution clearly prevails over transport by plane or by human being.

Inexpensive, it also offers the advantage of allowing the transport of large quantities of narcotics on vessels as diverse as they are varied: sailboats, mini-submersibles, go-fast, merchant ships, freighters, grain, and container ships¹⁸⁶. They all contain a considerable number of potential hiding places to conceal prohibited goods. In addition, it must be said that in this matter, traffickers are not lacking in imagination: double hulls, partitions, false ceilings, watertight receptacles welded to the submerged part of the hull. Every square centimetre is liable to be exploited and diverted from its initial function.

The war against this traffic in drugs is seen in regional and international agreements. “Article 108 (Illicit Traffic in Narcotic Drugs or psychotropic substances) of the UNCLOS”¹⁸⁷, regional agreements in Europe and Caribbean, bilateral arrangements such as the Ship Boarding Agreements and the Drugs Convention of 1988 are some of the

¹⁸³ (Msc.1/Circ.1404 23 May 2011), <https://www.igpandi.org/article/msc1-circ-1334-guidance-to-ship-owners-and-ship-operators-shipmasters-and-crews-on-preventing-and-suppressing-acts-of-piracy-and-armed-robbery-against-ships> (13.01.2021).

¹⁸⁴ Resolution A 26/Res.1025 18 January 2010, [https://www.gard.no/Content/31036385/Res.A.1025\(26\).pdf](https://www.gard.no/Content/31036385/Res.A.1025(26).pdf) (13.01.2021).

¹⁸⁵ Onion, A.: “History of Drug Trafficking”, *History*, May 2017, <https://www.history.com/topics/crime/history-of-drug-trafficking> (27.04.2020).

¹⁸⁶ Short I.: “Drug Smuggling in Commercial Shipping”, *Safety4sea*, 17.11.2020 issue, <https://safety4sea.com/drug-smuggling-in-commercial-shipping/> (11.01.2021).

¹⁸⁷ UNCLOS, 1982. Art. 108, <https://maifa.org/resolution/resolutions/UNCLOS%2094.htm> (09.02.2021).

many ways of international regulation used to combat the smuggling of drugs and psychotropic substances.

d) Human Trafficking, Smuggling and Illegal Immigration

The illicit transport of migrants ¹⁸⁸ a phenomenon greatly increased by the conflicts affecting the Middle East. Furthermore, human trafficking includes several forms of exploitation of human beings, the most common being prostitution, slavery and forced labour, but we can also include, among others, organ trafficking, surrogacy or forced begging. Once again, smugglers are perfectly aware of existing regulations at international level and know how to divert them to their advantage. The methods they use in the transport of human beings are a glaring example by cramming dozens or even hundreds of men, women and children aboard rubber boats, old rafts and other skiffs; they found a way to voluntarily put these people in a situation of distress. Moreover, they do not stop there. Nor are they shy about scuttling these makeshift craft as they approach the coast or another vessel. The objective of these manoeuvres is to force the principle of the rescue obligation¹⁸⁹. This ancestral custom between seafarers, which was previously more of a moral imperative, is now codified internationally and nationally, and shamelessly hijacked by criminals for their benefit.

Many conventions such as “The Slavery Convention of 1926”, “The Migrants Protocol”, “The Council of Europe Convention on Action against Trafficking in Human Beings” which was adopted by the “Committee of Ministers of the Council of Europe on 3 May 2005 and art. 99 of UNCLOS”¹⁹⁰, “Duty to Suppress Transportation of Slaves” are proof of the international will to prevent such illegal activities.

¹⁸⁸ Seeberg, P. / Eyadat, Z.: *Migration, Security, and Citizenship in the Middle East*, Palgrave Macmillan, 2nd ed., London 2013, p. 43.

¹⁸⁹ Dandurand, Y.: “International Centre for Criminal Law Reform, Migrant Smuggling Patterns and Challenges for Law Enforcement, 2020”, https://icclr.org/wp-content/uploads/2020/02/Smuggling-of-Migrants-Dandurand_FEBRUARY-2020-.pdf?x68316& x30145 (16.02.2021).

¹⁹⁰ UNCLOS, 1982, Art. 99, <https://maifa.org/resolution/resolutions/UNCLOS%2094.htm> (16.02.2021).

e) Illegal Unlawful and Unreported Fishing

Illegal, Unlawful and Unreported Fishing (IUU) is a major threat to maritime security¹⁹¹. It prevents nations the living resources within their maritime zones and confronts them against foreign fishing boats. The presence of IUU fishing in less developed countries is also one of the major reasons for the causes of piracy in these regions such as Somali¹⁹².

UNCLOS and Food and Agricultural Organisation are the main actors in the prevention of IUU fishing. UNCLOS Part V ¹⁹³, in its articles 67 through 75, ensures the just utilisation, management and the conservation of living resources and fish stocks. The FAO also has a code of conduct¹⁹⁴ for responsible fishing in which “measures to prevent, deter, and eliminate IUU fishing” are outlined.

f) Maritime Cyber Security

One of the new and quick emerging threats to maritime security is Maritime Cyber Security ¹⁹⁵. Initially part of maritime terrorism, it is the threat of an attack on the technological side of the ships safety and security by the manipulation of the information and technology systems within the ship. With the use of tools such as jamming, hijacking and stealing shipping and trade secrets from the vessel or shipping company for ransom or terrorism reasons.

IMO has been leading the regulation on this issue with its guidelines such as the MSC-FAL.1/Circ.3 ¹⁹⁶. The IMO also provides recommendations to existing management process for the safety and the security protocols.

¹⁹¹ Kiattisin, S. / Chuyasi, B.: Fishing Vessels Behavior Identification for Combating IUU Fishing: Enable Traceability at Sea, Springer, Vol. 115, New York 2020, p. 2971.

¹⁹² Glaser, S. M. / Roberts, P. M. / Hurlbur, K. J.: “Foreign Illegal, Unreported, and Unregulated Fishing in Somali Waters Perpetuates Conflict”, <https://www.frontiersin.org/articles/10.3389/fmars.2019.00704/full> (16.05.2021).

¹⁹³ United Nations Convention on the Law of the Sea (UNCLOS), 1982, Part V, Exclusive Economic Zone, art. 66-art.75, <https://maifa.org/resolution/resolutions/UNCLOS%2094.htm> (16.02.2021).

¹⁹⁴ FAO, Code of Conduct for Responsible Fisheries, Dec 1995.

¹⁹⁵ Jones, K. D.: “Threats and Impacts in Maritime Cyber Security”, *University of Plymouth*, https://pearl.plymouth.ac.uk/bitstream/handle/10026.1/4387/UoP_Deposit_Agreement%20v1.1%2020160217.pdf?sequence=2&isAllowed=y (22.02.2021).

¹⁹⁶ Guidelines on Maritime Cyber Risk Management, <https://www.gard.no/Content/23896593/MSC-FAL.1-Circ.3.pdf> (22.02.2021)

2-To Supress Terrorism at Sea

Maritime terrorism has become a major concern of States with large fleets or maritime areas. The exponential development of maritime traffic and the multiplicity of threats that accompanies it have led States, following the US, to tighten control measures and initiatives have multiplied since 2001¹⁹⁷. Despite the relevance of threats, maritime terrorism has not been defined in any Convention but has been regarded as part of the SUA offences.

However, Maritime Terrorism definition has been clarified by “Council for Security Cooperation in the Asia Pacific (CSCAP)”¹⁹⁸ as “the undertaking of terrorist acts and activities within the maritime environment, using or against vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities.”

SUA Protocol of 1988 and SUA Protocol of 2005 form the international legal basis of maritime terrorism the other supplementary Conventions are: the SOLAS of 1974 and Hijacking Convention of 1970.

Among the unlawful acts covered by the SUA in Article 3¹⁹⁹ are the:

- “seizure of ships by force”;
- “acts of violence against persons on board ships”;
- “and placing of devices on board a ship which are likely to destroy or damage it”.

It is States targeted by terrorists from the sea are entitled to resort to self-defence. In its “Resolution 1368 (2001) of September 12, 2001”, the “Security Council ((UNSC) condemned the acts of terrorism committed on September 11, 2001” and underlined the

¹⁹⁷ Metaparti, 129.

¹⁹⁸ Council for Security Cooperation in the Asia Pacific (CSCAP) Study Group on the Responsibility to Protect (RtoP) Final Report, <http://www.cscap.org/uploads/docs/RtoP/CSCAP%20Study%20Group%20on%20RtoP%20Final%20Report.pdf> (26.02.2021).

¹⁹⁹ Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, Adopted 10 March 1988; Entry into force 1 March 1992; 2005 Protocols: Adopted 14 October 2005; Entry into force 28 July 2010, <https://www.imo.org/en/About/Conventions/Pages/SUA-Treaties.aspx> (19.12.2020).

need to “*combat by all means threats to international peace and security... caused by terrorist acts.*” In the same resolution, the UNSC confirmed again by invoking the wording of “Article 51 of the Charter of the UN”, “*the inherent right to individual or collective self-defence*”. The UNSC adopted the same position in its Resolution 1373 (2001) of September 28, 2001. For its part, “the Council of the North Atlantic Treaty Organization” also said on September 12, 2001 that the terrorist attack of 11 September 2001 triggered the exercise of the “right of self-defence” in accordance with “Article 5 of the North Atlantic Treaty Organization (NATO)”²⁰⁰.

In its Resolutions 1368 (2001) and 1373 (2001)²⁰¹ The UNSC also states that “*terrorist attacks of equivalent or similar magnitude may be considered threats to international peace and security and that it may take appropriate action according to, Article 39 of the Charter of the UN*”²⁰². This indication is particularly relevant for the repression of terrorism since it is about preventing the freedom of navigation from being abused to support terrorism”.

Regarding the counter of these threats, there are general and specific regulations. Since ships can be economic targets, iconic targets, mass casualty target and weapons.

If the security forces approach regarding these risks and the countering of these threats are looked at, NATO is perhaps the most important agent. NATO organizes itself in four distinguished pillars regarding²⁰³:

- Anti-terrorism, which ensures the defensive measures,
- Consequence management to deal with the effects of a terrorist attack after it has taken place

²⁰⁰ The North Atlantic Treaty Organization (NATO Treaty), Washington D.C. - 4 April 1949, https://www.nato.int/cps/en/natolive/official_texts_17120.htm (16.12.2020). Turkey, Enter into Force, 30/06/1954, Resmi Gazete, 02/07/1954.

²⁰² Charter of the United Nations, Chapter VII: Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression, <https://www.un.org/en/sections/un-charter/chapter-vii/index.html> (19.12.2020).

²⁰³ Santamato, D.: “The New NATO Policy Guidelines on Counterterrorism: Analysis, Assessments, and Actions”, *Center for Strategic Research Institute for National Strategic Studies National Defense University*, <https://inss.ndu.edu/Portals/68/Documents/stratperspective/inss/Strategic-Perspectives-13.pdf> (28.12.2020).

- Counterterrorism, which involves the offensive measures against the terrorist threat,
- Military co-operation, which is the coordination on the diplomatic, economic, social and information aspects of the terrorist threat.

The SOLAS also takes interest in maritime terrorism and the implementation of the ISPS code through its Chapter XI-2²⁰⁴. It provides for the inventory of hazardous goods, satellite communication and alarm system within the ship.

3-To Suppress Piracy at Sea

Piracy has been around since navigation itself has been around. Binding on many maritime routes, it develops particularly from the poorest coasts and takes different forms depending on the region where it is practiced. The attraction of this economic ²⁰⁵ alternative for coastal populations is often accentuated by the concomitant weakness of state authority with limited budgets. Historically, piracy has only truly eclipsed for a brief period of just over a century, corresponding to the establishment of the great colonial empires. The resulting extreme centralization made it possible to have the necessary forces and organizations to fight effectively against pirates at sea but also in their sanctuaries. After decolonization, the new states, often in the process of development, did not have the budgets necessary to maintain a navy and coastguard forces capable of ensuring the security of their maritime domain.

Economic difficulties ²⁰⁶, the weakness of the opposition and the abundance of opportunities often encourage coastal populations to return to a traditional activity. Piracy is currently rife mainly in the Gulf of Guinea, around the Horn of Africa and in Southeast Asia.

The following could be among acts of piracy:

²⁰⁴ SOLAS, "Chapter XI-2 Special Measures to Enhance Maritime Security".

²⁰⁵ Ademuni-Odeke: "Somali Piracy-Effects on Oceanborne Commerce and Regional Security and Challenges to International Law and World Order", January 2011, https://www.researchgate.net/publication/266484943Somalipiracyeffects_on_oceanborne_commerce_and_regional_security_and_challenges_to_international_law_and_world_order (13.03.2021).

²⁰⁶ Ademuni-Odeke: "Somali Piracy: the Missing Link in Jurisdiction over Foreign Pirates under International Law", 17/2, *Journal of International Maritime Law*, <https://www.lawtext.com/publication/the-journal-of-international-maritime-law/contents/volume-17/issue-2> (26.04.2021).

- The security of on-board seafarers;
- The security of kidnapped and detained seafarers, death and the security of innocent sailors and passengers;
- The state of vessels and their cargo;
- The potential explosions of toxic and harmful cargo;
- The security of economic livelihoods of fisheries, aquaculture, tourism International maritime trade.

Hence, UNCLOS²⁰⁷ adopts important provisions on piracy in Article 99 (Slavery), Article 100 (Co-operation in repression) Articles 105-107 Seizures, Arrests, and Prosecutions, Article 110 (Rights of Visits), Article 108 (Illicit Traffic), & Article 111 (Rights of Hot Pursuit).

Furthermore, IMO codes and guidelines also ensure an efficient protection against piracy with “Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery against Ships 2010”²⁰⁸, “Global Integrated Shipping Information System (GISIS)”²⁰⁹ “Privately Contracted Armed Security Personnel (PCASP)”²¹⁰ which is provided by the maritime industry and based on a request by the IMO to provide guidelines” for “ISO 28000-certified” companies that deploy and the implement the “Best Management Practice”.²¹¹

III. OUTCOME OF THE EVOLUTIONS

All these safety and security threats therefore create measures to protect, prevent and asses the consequences of such activities. These measures thus create responsibility on

²⁰⁷ UNCLOS, 1982, Part VII, High Seas, art. 99 - 111, <https://maifa.org/resolution/resolutions/UNCLOS%2094.htm> (18.02.2021).

²⁰⁸ A 26/Res.1025 18 January 2010), [https://www.gard.no/Content/31036385/Res.A.1025\(26\).pdf](https://www.gard.no/Content/31036385/Res.A.1025(26).pdf) (13.01.2021).

²⁰⁹ Global Integrated Shipping Information System, <https://gis.imo.org/Public/Default.aspx> (14.02.2021).

²¹¹ (MSC328), <https://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Pages/MSC-2010-13.aspx> (15.01.2021).

certain parties. These parties include the States, private parties and international organizations.

A) RESPONSIBILITY OF STATES AND PRIVATE ACTORS

1-Flag State Control

Checking the maritime safety standards, the security of the ship and on-board worker and passengers and regulations essentially consists of the control of ships.²¹² The management of a ship and, more broadly, the management of the ship owner's company, have also been considered a key element in maritime safety. The first level of control in matters of maritime safety is therefore the flag state, the state whose flag is flown,²¹³ and, by extension, the state in which the owner is registered for management control.

The customary rules of the law of the sea²¹⁴ entrust the control of ships to the flag state, a competence based on the principle of territoriality and thus bringing a vessel under a legal order capable of controlling it. This makes it possible to prevent and punish abuses to which the principles of the free use of the high seas and freedom of navigation could give rise. This exclusive competence of the flag state is set out in "Article 94" of the UNCLOS.²¹⁵

An expression of state sovereignty over its vessels, the law of the flag is not only a source of rights or rights of way. Flag state obligations are mainly defined by the UNCLOS and specified in specialized instruments of the IMO and the ILO relating to maritime safety. Thus, the "Article 94 of UNCLOS" imposes on flag states the obligation to ensure that safety rules are effectively applied on ships under their authority: "*The State must in*

²¹² Zwinge, T.: "Duties of Flag States to Implement and Enforce International Standards and Regulations – And Measures to Counter Their Failure to Do So", *Journal of International Business and Law*, Vol. 10, No. 2, <https://scholarlycommons.law.hofstra.edu/cgi/viewcontent.cgi?article=1171&context=jibl> (06.04.2020).

²¹³ Fikri, I.: "Flag State Control: An Overview and Its Relationship with Port State Control", *World Maritime University Magazine*, 2007, <https://commons.wmu.se> (06.04.2020).

²¹⁴ Mangone, G. / Burke, W.: *The Law of The Sea: Customary Norms and Conventional Rules*, Cambridge University Press on Behalf of The American Society of International Law, Vol. 81, Cambridge 1987, p. 75.

²¹⁵ UNCLOS, 1982, Art. 94 <https://maifa.org/resolution/resolutions/UNCLOS%2094.htm> (09.02.20 21)

*particular exercise its jurisdiction and control in the technical, administrative and social fields on ships flying its flag”.*²¹⁶

Articles 94 and 217 of the UNCLOS announces the effective control and the duties of flag States to “protect the marine environment” and “maritime safety”. The obligation of control by the flag State is included in the SOLAS and the MARPOL, which provide two types of obligations, the first concerning the “surveys and inspections” of ships and the second the “issuance of the corresponding certificates”. The last obligation, which has undoubtedly contributed to the improvement of safety standards, is the accident investigation obligation, which derives from both the UNCLOS and the IMO Conventions.

From this enumeration of conventions, it is clear that contracting States cannot avoid their obligation to control. Regardless as seen above, most of these accidents are caused by “human error” or a fortuitous event and in any case would not be the result of neglect linked to economic criteria. Indeed, the abandonment of the state’s obligation to control certain states is an aggravating factor of “maritime insecurity”.

The ship owner is completely free to choose the flag and makes this choice based mainly on economic criteria, particularly if it is a freely registered flag that does not require nationality standards, taxes, crew nationalities, and of course, cost incurred for compliance with technical regulations. These measures are therefore compressible, quite often the reverse of the freight price, which is a market price.

The OECD²¹⁷ has shown that a ship owner who violates safety rules could save up to 30% of its operating costs and at least 10% of overall costs. It is therefore possible to understand the shipowners’ interest in registering their vessels under a flag of free registration, which becomes a flag of convenience when the lack of means, and much more often the lack of will to control, make it possible to do make substantial savings. In addition, these flags provide significant tax advantages and very flexible controls, in particular those relating to labour law.

²¹⁶ UNCLOS, 1982, Art. 94 <https://maifa.org/resolution/resolutions/UNCLOS%2094.htm> (09.02.20 21).

²¹⁷ OECD Council Working Party on Shipbuilding: “Environmental and Climate Change Issues in the Shipbuilding Industry”, <https://www.oecd.org/sti/ind/46370308.pdf> (19.12.2020).

This is how after the Second World War flags of convenience developed in often unindustrialized, poor countries built up a large fleet by implementing maritime policies demanding very little tax and with very little regard for the quality of the ship owners and ships that displayed their flags.²¹⁸

Today in the top ten world fleets, Panama, Liberia, Malta, Bahamas, and Cyprus could be enumerated while among the top ten fleets by nationality is the Greek State (69% under foreign flags), Japanese (81% under foreign flags), the flag of convenience states had a bad reputation in the maritime environment concerning their respect for technical criteria, either due to lack of means or lack of political will.²¹⁹

Figures established in 1998 during the inspections of the Paris Memorandum²²⁰, a subject dealt with in the next Chapter, show that 9% of inspections resulted in immobilizations and that 20% of were Maltese flag vessels while the Cypriot flag represented 19.4%. It is clear that these States were failing their monitoring obligations.

The IMO and the EU are aware of this problem, but how can it be ensured that a sovereign state enforces the conventions to which it adheres. With no law enforcement body, the IMO opted for the technical assistance solution; technical deficiency being one of the components of non-control of a flag State, the other being unwillingness.

In 1997, the IMO recognized the importance of ensuring the effective application of the instruments it adopts. It became the first body to institutionalize a Technical Cooperation Committee (TCC)²²¹. It has thus helped many countries to establish maritime training academies and established the International Maritime Law Institute (IMLI) in 1988 and the World Maritime University of Malmö (WMU) in 1993.

A development on the international scene is the beginning of control exercised by means of “notification obligations”. These oblige each State to provide information in the

²¹⁸ “Why So Many Shipowners Find Panama's Flag Convenient”, *BBC News*, <https://www.bbc.com/news/world-latin-america-28558480> (19.12.2020).

²¹⁹ UNCTAD: “Building, Ownership, Registration and Recycling of Ships”, 2019, <https://stats.unctad.org/handbook/MaritimeTransport/MerchantFleet.html> (19.12.2020).

²²⁰ The Paris Memorandum of Understanding on Port State Control (Paris MoU), <http://197.230.62.214/ParisMoU.aspx> (17.05.2020).

²²¹ Technical Cooperation Committee (TC), <https://www.imo.org/en/MediaCentre/MeetingSummaries/Pages/TC-Default.aspx> (19.12.2020).

manner in which it intends to apply the conventions it has ratified, giving the IMO a right of oversight through its subcommittee on the application of conventions by the flag State.

Certain conventions, in particular that on the certification of crews, go quite far since the State is asked to prove that it has effectively implemented the provisions of the conventions it has ratified. The IMO assesses the performance of flag States through guidelines and self-assessment forms. However, these are still only simple resolutions, which are not binding.²²²

There is also talk of certification of flag State administrations. The problem is knowing which authority will be able to certify the obligations of flag States. In response to the sinking of the *Erika*²²³, Europe chose the voice of the control of the competence of flag States through the European Maritime Safety Agency (EMSA)²²⁴. However, the first measure taken was within Europe, in compensation for the deficiency of the flag States.

2-Coastal State Control

Unlike the flag state responsible for enforcing state regulations on “ships flying the flag of that state”, port state control concerns “inspections of foreign vessels by state authorities to ensure that vessels comply with the international standards in force, technical human, and management”. In fact, its introduction into the system²²⁵ was necessary to compensate for the shortcomings of certain flag states in fulfilling their obligations, in particular their obligations of control and inspection. This control now serves as a “police officer” for the maritime scene because it is the port state that is able to inspect foreign ships that frequent its ports, request examination of certificates and

²²² Corres, A. J./ Pallis, A.: *Flag State Performance: An Empirical Analysis*, WMU Journal of Maritime Affairs, Vol.7, Iss. 1, 2008 p. 241-261, https://www.researchgate.net/publication/225768623_Flag_state_performance_An_empirical_analysis (19. 12.2020).

²²³ Maritime Safety: Erika I Package Commission Communication of 21 March 2000 to Parliament and the Council on the Safety of the Seaborne Oil Trade [COM(2000) 142 final - Not published in the Official Journal], <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%330> (06.07.20 20).

²²⁴ European Maritime Safety Agency: <http://www.emsa.europa.eu/implementation-tasks/accident-investigation.html> (08.06.2020).

²²⁵ FAO: “Fisheries: Effective Flag State Control”, <http://www.fao.org/3/y3824e/y3824e07.htm#fnB213> (23.04.2020).

carry out more in-depth inspections.²²⁶ If it is believed that there is a security risk²²⁷, the authority has the right to set conditions on the authorization to set sail and, in particular, the ship's rights and obligations when it is considered that a ship poses a threat to human life or the environment, in which case the ship can be detained in port. It is indeed a right but also an obligation.

To date, there are seven major frameworks of regional agreements that govern these controls, known as the Memorandum of Understanding (MOU) and the most relevant for this discussion is the "Paris Memorandum²²⁸" or MOU Paris.

The Paris MOU port state control was signed on January 1982, under the auspices of the IMO. "Port State Control" is also instituted by the "European Directive on Port State Control (95/21 / EC)"²²⁹ and has been the subject of a proposed modification, which is part of the package of measures proposed following the sinking of the *Erika*.

The main amendment of this proposal is the directive concerning the targeting of vessels, which must be subject to control. The choice of vessels is no longer discretionary but made compulsory according to age of the vessel, the type, and its history. They also to prohibit access to the EU ports to certain ships at risk. These measures entered into force on July 2003.

More generally, these agreements of understanding provide for regional cooperation between the different States of the same area in order to harmonize the procedures for visiting ships and to require, from these authorities, that they inspect a minimum of ships. The Paris MOU set a minimum inspection quota of 25% of foreign ships that frequent European states' ports during the year. The European States also pool a database

²²⁶ Hosanee, M.: "A Critical Analysis of Flag State Duties as Laid Down under Article 94 of the 1982 United Nations Convention on the Law of the Sea", https://un.org/Depts/los/nippon/un_nff_programme_home/fellows_pages/fellows_papers/hosanee_0910_mauritius.pdf (08.04.2020).

²²⁷ Sage-Fuller, B.: *The Precautionary Principle in Marine Environmental Law with Special Reference to High Risk Vessels*, Routledge, Part 2.3, Abington 2013, p. 57.

²²⁸ The Paris Memorandum of Understanding on Port State Control (Paris MoU), <http://197.230.62.214/ParisMoU.aspx> (17. 05.2020).

²²⁹ Council Directive 95/21/EC of 19 June 1995 concerning the enforcement, in respect of shipping using Community ports and sailing in the waters under the jurisdiction of the Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (port State control), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31995L0021> (19.12.2020).

recording any major deficiencies that require either immediate immobilization of the vessel or rectification for the next declared call.

The other main memorandums of understanding are the Tokyo MOU ²³⁰ for the Asia/Pacific Region, signed on December 1, 1993, the Viña del Mar MOU²³¹ (Chile) for the South American Region, signed in 1992, and the Indian Ocean MOU²³² signed in 1999.

The only way to ensure that a ship has structures in good condition remains the control of class certificates which follow ship visits or dry dock repairs. This was the subject of the controversy which followed the sinking of the *Erika* and which led the EU to propose a directive, which concerns better transparency of classifications.

It is also necessary that there be sufficiently numerous and qualified inspectors, which the members of the corps of maritime administrators and the EC in Europe recognize to be a real problem.

3- Private Actors' Role

a) Role of Charterers and Ship owners

As the maritime transport environment²³³ is subject to competition and ship owners are not altruistic, the whole system is based on profitability, which roughly is obtained in subtracting the income from transport fewer operating costs and maintenance of ships. As we have already seen in the study of the economic context, ship owners are tempted to reduce operating costs and very often choose the flag, which enables them to achieve this objective.

²³⁰ The Memorandum of Understanding on Port State Control in the Asia-Pacific Region (Tokyo MoU), <http://197.230.62.214/TokyoMoU.aspx> (19.12.2020).

²³¹ The Acuerdo de Viña del Mar (Viña del Mar or Latin-America Agreement), <http://197.230.62.214/VMoU.aspx> (19.12.2020).

²³² The Indian Ocean Memorandum of Understanding on Port State Control (Indian Ocean MoU), <http://197.230.62.214/IndianMoU.aspx> (19.12.2020).

²³³ Branch, A.: "Economics of Ship Operation", *Springer Link*, https://link.springer.com/chapter/10.1007%2F978-1-4757-3967-1_5 (13.06.2020).

Nevertheless, there are also poor minded ship owners under the national flag and conversely there are states²³⁴ laxer than others are and there are good or even excellent ship owners flying flags of convenience. They choose this formula in order to benefit from tax advantages but most often reinvest the savings thus made.

However, the situation has changed, the *Erika*²³⁵ accident having played an important accelerating role in raising awareness of the need for maritime safety, driven by pressure from public opinion. There is something new happening on the freight market today: A very significant rise in freight rates²³⁶ and all oil ship owners are again earning enough to ensure safety.

In addition, the financial stakes are high on old ships. It is in this market segment that we find the speculative ship owners who consider as secondary the quality of exploitation. It is also true that there is a strong temptation²³⁷ to no longer maintain an end-of-life ship as it should be maintained. Thus, with the almost imposed renewal of the oil fleet by double hull vessels, the owners of these recent units maintain them properly so that they can be sold with a gain after a few years of use.

Chartering²³⁸ is the most common system in the transportation of hydrocarbons²³⁹ and the transportation of chemicals. In the case of hydrocarbon transport, many “majors” had their own fleet of tankers but already the market economy played a big role because the aim of the majors was not to transport their own product but to own tankers “at the right place and at the right time”, even if it means leaving certain units on standby at anchor

²³⁴ “What a Difference a Flag Makes Why Ship Owners’ Responsibility to Ensure Sustainable Ship Recycling Needs to Go Beyond Flag State Jurisdiction”, *NGO Shipbreaking Platform*, https://www.shipbreakingplatform.org/wpcontent/uploads/2019/01/FoCBriefing_NGOShipbreaking-Platform_-April-2015.pdf (16.05.2020).

²³⁵ Maritime Safety, “Erika I Package Commission Communication of 21 March 2000 to Parliament and the Council on the Safety of the Seaborne”, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%0> (05.07. 2020).

²³⁶ NAP, Effects of Double-Hull Requirements on Oil Spill Prevention: Interim Report, Economic Viability of the Maritime Oil Transportation Industry, 1996, <https://www.nap.edu/read/9131/chapter/6> (09.06.2020).

²³⁷ George, R.: “Worse Things Still Happen At Sea: The Shipping Disasters We Never Hear About”, *The Guardian*, <https://www.theguardian.com/world/2015/jan/10/shipping-disasters-we-never-hear-about> (06.07.2020).

²³⁸ Karan, H.: *Law on International Carriage of Goods*, 3rd ed., Turhan Kitapevi, Ankara 2013, p. 30.

²³⁹ “Maritime Contracts in the Offshore Oil & Gas Industry - An Introduction”, *Lexis Nexis* <https://www.Lexisnexis.co.uk/legal/guidance/maritime-contracts-in-the-offshore-oil-gas-industry-an-introduction> (07.07.2020).

for a long period of time while the freight rate increases and at that time putting these units back on the charter market.

Since the *Exxon Valdez*²⁴⁰ disaster, the majors have disengaged from ship management to turn exclusively to chartering: This system has the advantage of protecting the oil company during any media maritime disaster. It turns out, however, that this was not the case and Total²⁴¹ suffered the consequences when the *Erika* sank.²⁴²

The power of charterers²⁴³ is important from an economic point of view and the American OPA system,²⁴⁴ so quick to adopt the polluter pays principle, has not passed the first step of the contract chain:²⁴⁵ it is the transporter who is responsible but in no case the charterer.

Following the *Exxon Valdez*, the Exxon Company²⁴⁶ imposed on all charterers with whom it worked extremely high technical and management standards, with a questionnaire to be kept up to date and inspections. The oil companies thus followed these standards, which led to the establishment of vetting systems. This allows an oil company who wants to charter a ship, either on time or on voyage, to know the technical “condition of the ship and the quality of its crew and its management”.

In fact, the vetting questionnaires are in a way a repetition of the MOU system (checking the validity of certificates, checking the operating status of aircraft and compliance with safety on board). They therefore use the minimum of the various IMO safety conventions,²⁴⁷ but often also impose criteria higher than these minima; this is the case

²⁴⁰ Shaw / Bader, 35.

²⁴¹ Leveque T.: “Total Found Guilty in 1999 French Oil Spill Case”, <https://www.reuters.com/article/environment-france-tanker-trial-dc/total-found-guilty-in-1999-french-oil-spill-case-idUSPAB00375220080116> (07.07.20 20).

²⁴² ERIKA, West of France, 1999, <https://www.itopf.org/in-action/case-studies/case-study/erika-west-of-france-1999/> (07.07. 2020).

²⁴³ “Authority of Charterers, Sub-Charterers or Their Agents to Sign”, *Ship Inspection* <https://shipinspection.eu/authority-of-charterers-sub-charterers-or-their-agents-to-sign/> (16.07.2020).

²⁴⁴ US Environmental Protection Agency: Summary of the Oil Pollution Act, 33 U.S.C. §2701 et seq. (1990), <https://www.epa.gov/laws-regulations/summary-oil-pollution-act>, (16.07.2020).

²⁴⁵ Fidan, C.: “Responsibilities Of Ocean Carriers & Customers In An Ocean Shipment”, *More Than Sipping*, <https://www.morethanshipping.com/responsibilities-ocean-carriers-customers-ocean-shipment/> (17.07.2020).

²⁴⁶ Leahy, 36.

²⁴⁷ List of IMO Conventions, <http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Default.aspx> (04.07.2020).

for standards for the Exxon time charter.²⁴⁸ Admittedly, this system of control of ships by charterers made it possible to pass a first stage towards the elimination of substandard ships, but the fact that the oil companies put pressure on American senators not to be responsible in the event of pollution in the OPA framework clearly shows that safety is only one of the concerns of charterers as a consequence of the fear of global media coverage.

b) Role of Classification Societies

One of the private actors who has a role to play in maritime safety and maritime security is therefore the classification societies²⁴⁹ because of the advisory role²⁵⁰ they have vis-à-vis state services and professionals. It's very specific status makes it the link between the States and ship owners and from this status arises the first difficulties in apprehending the exact role that the classification society must play.

The classification society is accredited by States for the purposes of certification: The States²⁵¹ that are the laxest or least equipped "to verify ships'" compliance with the safety rules have almost abandoned the field of certification in favour of drawing up navigation certificates for ships flying the flags of these countries. As such, to maintain complete independence, the classification societies should not have a direct link²⁵² with the owners of these ships. However, it is the ship owner who chooses from the list of classification societies²⁵³ approved by the flag state flown by the ship, and who pays for the services of this society.

²⁴⁸ ExxonMobil, Marine Environmental, Safety and Quality Assurance Criteria for International Ocean/Seagoing Tanker Vessels in Exxonmobil Affiliate Service, 2017 Edition, <https://hansbuch.dk/marine/wp-content/uploads/sites/6/2018/01/ExxonMobil-Safety-Criteria-2017-Ocean-Going-Tanker.pdf> (19.07.2020).

²⁴⁹ IACS: "Classification Societies – Their Key Role", <http://www.iacs.org.uk/media/3784/iacs-class-key-role.pdf> (20.07.2020).

²⁵⁰ Sharda, X.: "The Importance of Classification Societies in the Maritime Industry", *Marine Insight*, <https://www.marineinsight.com/maritime-law/the-importance-of-classification-societies-in-the-maritime-industry/> (23.07.2020).

²⁵¹ EMISA: "What is the Relationship between Flag States and Classification Societies?", <http://emisa.eu/content/what-relationship-between-flag-states-and-classification-societies> (22.07.2020).

²⁵² Laihui, S.: "A Study Of The Roles Of Classification Societies Under The New Maritime Atmosphere", *World Maritime University Dissertations*, https://commons.wmu.se/cgi/viewcontent.cgi?article=1221&context=all_dissertations (26.07.2020).

²⁵³ Ship Owners Club, "Class Societies", <https://www.shipownersclub.com/class-societies/> (19.07.2020).

B) ROLE OF ORGANISATIONS

1- Role of the IMO

While the US has been at the forefront of national initiatives in favour of maritime security, these are mainly measures affecting the customs field and are therefore internal. Maritime security meanwhile has become a global priority,²⁵⁴ prompting the initiation of international bodies. The most important legislation is the “SOLAS”. In its “successive forms”, the SOLAS ²⁵⁵ is usually considered the most important of all international instruments relating to the safety of merchant ships.

This 1974 Convention has been updated ²⁵⁶ and modified several times. ²⁵⁷ Its main objective is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety.²⁵⁸ A new evolution of the agreement appeared on, 2016, with an addition relating to the communication from the shipper to the owner, on the shipping document, of the verified gross mass of a container filled in France and intended for loading on a ship calling at a seaport. Shippers are now obliged to communicate this information to a representative of the seafarer at the latest on the container’s entry into the port terminal in order to establish the ship's stowage plan.

The IMO took particular interest in the maritime domain and the security of ships. Work in this area was concluded on December 2002, at the “IMO Diplomatic Conference”. The IMO’s security approach²⁵⁹ involves two main measures:

²⁵⁴ IMO Global Maritime Security Integrated Technical Cooperation Programme, <http://www.imo.org/en/OurWork/Security/TC1/Documents/IMO%20Global%20Maritime%20Security%20Programme%20Overview%20-%202020%20pager.pdf> (30.07.2020)

²⁵⁵ Geerts, E.: “The Impact of SOLAS on Ocean Shipping and Data Management”, Talking Logistics, [https://talkinglogistics.com/2016/02/11/the-impact-of-solas-on-ocean-shipping-and-data-managemen t/](https://talkinglogistics.com/2016/02/11/the-impact-of-solas-on-ocean-shipping-and-data-managemen-t/) (18.07.2020).

²⁵⁶ MSC-IMO: “Proceedings of the Marine Safety Council”, <https://ufdc.ufl.edu/AA00040250/00067> (16.04.2020).

²⁵⁷ IMO: “History of SOLAS (The International Convention for the Safety of Life at Sea)”, <http://www.imo.org/en/KnowledgeCentre/ReferencesAndArchives/HistoryofSOLAS/Pages/default.aspx#:~:text=The%20SOLAS%20Convention%20in%20its,and%20the%20fourth%20in%201960.> (17.07.2020).

²⁵⁸ Anish, X.: “Safety of Life at Sea (SOLAS) – The Ultimate Guide”, <https://www.marineinsight.com/maritime-law/safety-of-life-at-sea-solas-convention-for-prevention-of-marine-pollution-marpol-a-general-overview/> (19. 07.2020).

²⁵⁹ IMO: “Maritime Security”, <http://www.imo.org/en/MediaCentre/HotTopics/piracy/Pages/default.aspx> (14.05. 2020).

- 1) The modification of the SOLAS with the creation of Chapter XI.2,²⁶⁰ which allows the Convention to integrate the dimension of maritime security. It only has technical aspects and requires the ship to have on board a system, called Automatic Identification System (AIS), of automatic identification of ships and an inaudible and hidden alarm system that can signal to an on-shore agency that an event is taking place. The last point concerns the marking of the international number of the ship in a manner highly visible from the outside.
- 2) The adoption of the ²⁶¹ ISPS Code, which establishes the provisions to be followed for the implementation of internal procedures, obtaining a security certificate and reassessing the plan for ship security. In fact, this Code is somewhat similar to the ISM Security Code.

2- Role of the ILO

The ILO²⁶² is also involved in safety and security procedures because seafarers participate directly in the international transport of goods and passenger transport and have easy access to all areas of a port. The person in possession of a shipping book must hence be of a certain quality. In March 2002, an urgent question concerning a more secure system for the identification of seafarers was put on the “agenda of the 91st session of the International Labour Conference” in June 2003,²⁶³ with a view to revising Convention 108 on seafarers’ identity documents, which dates from 1958.

One of the questions considered important in the IMO’s work for the improvement of maritime security is, moreover, that of the identification of seafarers, which falls within the competence of the ILO. Seafarers should be in possession of a document²⁶⁴ that allows

²⁶⁰ SOLAS, “Chapter XI-2 Special Measures to Enhance Maritime Security”.

²⁶¹ The International Ship and Port Facility Security (ISPS) Code as an Amendment to the Safety of Life at Sea (SOLAS) Convention (1974/1988).

²⁶² ILO: “Code of Practice”, [https://www.ilo.org/global/topics/safety-and-health-at-work/normative-instruments/code-ofpractice/langen/index.htm#:~:text=The%20purpose%20of%20this%20code,standards%20or%20other%20accepted%20standards.\(17.06.2020\).](https://www.ilo.org/global/topics/safety-and-health-at-work/normative-instruments/code-ofpractice/langen/index.htm#:~:text=The%20purpose%20of%20this%20code,standards%20or%20other%20accepted%20standards.(17.06.2020).)

²⁶³ ILO: “91st Session of the International Labour Conference, 3 - 19 June 2003”, [https://www.ilo.org/ilc/ILCSessions/previous-sessions/91stSession/lang--en/index.htm\(19.07.2020\).](https://www.ilo.org/ilc/ILCSessions/previous-sessions/91stSession/lang--en/index.htm(19.07.2020).)

²⁶⁴ International Labour Standards on Seafarers, 29 October 1919, 4th ILC adopted the Maritime Labour Convention, 2006, [https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/publication/wcms237451.pdf\(16.04.2020\).](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/publication/wcms237451.pdf(16.04.2020).)

for “positive and verifiable” identification: “Positive”²⁶⁵ in determining that the person who holds the document is indeed the person to whom it was issued and “verifiable” in that the authenticity of the document in relation to the source can be checked.

3- Role of the World Customs Organisation

“The World Customs Organization (WCO)” adopted in June 2002²⁶⁶ “a resolution” on the security and facilitation of trade in the international supply chain. Its implementation aims to protect international trade against terrorist attacks, and the international supply chain against its use for the fraudulent transport of weapons of mass destruction for terrorist purposes. The WCO works mainly on three main points:²⁶⁷

- (a) “Assistance to customs authorities in establishing supply chain security regimes”.
- (b) “Access for customs authorities to a WCO database.”
- (c) “The revision of the 1972 WCO container convention.”

4- Role of the UN

“Chapter VII²⁶⁸ of the UN Charter”, which is not in principle intended to protect maritime security, is regularly implemented at sea by the UNSC during its peacekeeping missions. To this end, it sometimes indirectly participates in the protection of maritime areas against unlawful acts of States. Over the past decade, the UNSC has also used Chapter VII to directly protect maritime areas against acts of criminality occurring there. There is thus an ambivalent practice of the UNSC of making Chapter VII available in the service of

²⁶⁵ International Labour Conference 91st Session 2003, Report VII (1) Improved Security of Seafarers’ Identification, Seventh Item on The Agenda.

²⁶⁶ World Customs Organization (WCO), Proposal for a Council Decision on the Position to Be Taken on Behalf of the European Union within the World Customs Organization (WCO) with Regard to the Adoption of Explanatory Notes, Classification Opinions or Other Advice on the Interpretation of the Harmonized System and Recommendations to Secure Uniformity in the Interpretation of the Harmonized System under the Harmonised System Convention COM/2020/196Final, <https://eur-lex.europa.eu/LegalContent/EN/TXT/?Qid=1589544135563&Uri=COM:2020:196:FIN> (28.07.2020).

²⁶⁷ Weerth, C.: “The Structure and Function of the World Customs Organization”, ResearchGate, May 2009, https://www.researchgate.net/publication/303326303_The_Structure_and_Function_of_the_World_Customs_Organization (19.03.2020).

²⁶⁸ Charter of the United Nations, Chapter VII: Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression, <https://www.un.org/en/sections/un-charter/chapter-vii/index.html> (19.12.2020).

maritime security, which is indicative of the contribution of collective security law to the consolidation of the law of the sea.

The UNSC ²⁶⁹ has adopted a series of resolutions within the framework of “Chapter VII of the Charter” about two forms of criminality at sea: Piracy and the proliferation of ARAS.

The UNSC could also go beyond the exclusive enforcement “*jurisdiction of the coastal state or the flag state respectively*” in “*territorial waters and on the high seas*”, by adopting of a resolution under Chapter VII. Such a resolution could, for example, impose an obligation or offer a right to States to exercise enforcement jurisdiction against pirate ships in Somali territorial waters or to foreign vessels reasonably suspected of proliferation on the high seas (in both cases without consent of the relevant state).²⁷⁰

That would solve the question diverging obligations in the law of the sea and in international customary law, under the guide of Article 103 of the Charter of the UN. The fact that the UNSC did not do this illustrates not only the capacity of the rules of general international law (including cooperative agreements that provide frameworks to obtain the consent of the suburban states) to respond, if not to all then to some of the challenges arising from the increase in maritime crime, but also to the priority that states continue to give to territorial sovereignty and freedom of navigation.

For example, On October 7, 2008, the UNSC unanimously adopted Resolution 1838²⁷¹ and Resolution 1851²⁷² to address acts of piracy off the coast of Somalia and on the high seas. This was proposed by France and was passed under Chapter VII of the UN Charter. It gives the international community more resources to react to the upsurge in piracy off Somalia.

²⁶⁹ Kaye, S.: “Overview of Maritime Security: Responses and Challenges”, <https://www.un.org/Depts/los/consultativeprocess/documents/9kayepresentation.pdf> (19.12.2020).

²⁷⁰ Moseley, A.: “The Implementation of International Maritime Security Instruments in Caricom States”, https://www.un.org/depts/los/nippon/unff_programme_home/fellows_pages/fellows_papers/moseley_0910_barbados.pdf (19.12.2020).

²⁷¹ Resolution 1838 (2008) Adopted by the Security Council at its 5987th meeting, on 7 October 2008, [https://undocs.org/S/RES/1838\(2008\)](https://undocs.org/S/RES/1838(2008)) (19.12.2020).

²⁷² Resolution 1851 (2008) Adopted by the Security Council at its 6046th meeting, on 16 December 2008, [https://undocs.org/S/RES/1851\(2008\)](https://undocs.org/S/RES/1851(2008)) (19.12.2020).

Furthermore, UNSC a guardian of world peace and security through invocation of Chapter VII of the UN Charter has declared piracy a threat to world peace and security and consequently passed hundreds of resolutions on piracy and maritime security. Notable are UNSC Resolutions 1772(2007) and 1816(2008) on Somali Piracy such as:

- “UNSC/African Union (AU) - Mandated Peacekeeping Operations for Somalia”;
- “UNSC- Authorization of and mandates for EU/NATO and all other National Naval Forces Patrols”;
- “UNSC-Authorization of Operation Atlanta (NAVFOR), Operation Open Shield, Combined Task Force 150/15, Independent Navies”.

5- The Role of the EU

The EC²⁷³ considered it necessary to improve the security and the safety of the entire chain supplying maritime transport, from supplier to consumer. It subsequently adopted a communication and proposal for a regulation²⁷⁴ aimed at imposing throughout the EU the application of the highest standards of maritime transport security. The EC has therefore chosen “*to provide a comprehensive response*” to the problem of maritime security by adopting²⁷⁵ international instruments such as the ISPS Code.

Although it was inspired by the conclusions of the Diplomatic Conference of the IMO of December 2002,²⁷⁶ it considers that additional work must nevertheless be carried out in other international forums, and in particular within the EU, to guarantee a global treatment of the problems which arise and to avoid recourse to bilateral initiatives such as those which have been launched by certain third countries. It is in this way the EC

²⁷³ EC: “Communication from the Commission on the Enhanced Safety of Passenger Ships in the Community”, <https://eur-lex.europa.eu/legal-content/EN/TXT> (15.07.2020).

²⁷⁴ EU: Proposal for a regulation of European Parliament and of the Council Amending Regulation (EC) No: 1406/2002 Establishing a European Maritime Safety Agency, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2015:0667:FIN> (13.04.2020).

²⁷⁵ EU Legislation on Maritime Security Ship and Port Facility Security: Regulation (EC) No 725/2004 on Enhancing Ship and Port Facility Security, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:129:0006:0091:en:PDF> (12.04.2020).

²⁷⁶ ILO: Governing Body Geneva, March 2003, Fourth Item on the Agenda Outcome of the IMO Diplomatic Conference on Maritime Security, London, 2-13 December 2002, <https://www.ilo.org/public/english/standards/relm/gb/docs/gb286/pdf/stm-4.pdf> (26.06.2020).

communication²⁷⁷ goes beyond the framework of “the security of ships and port facilities” as it is addressed by “the IMO” and widens the debate to maritime transport in general.

The EU is particularly interested in port areas considered as a whole, in the identification of seafarers and in security throughout the intermodal transport chain. The regulation goes beyond the measures adopted by the IMO in that it makes mandatory certain requirements corresponding only to recommendations “(part B of the ISPS code)”, in order to raise the level of security.

The regulation goes further than the measures adopted by the IMO in that it makes mandatory certain requirements corresponding only to recommendations (part B of the ISPS code), “*to raise the level of security sought and, especially, to avoid discrepancies in interpretation from one Member State to another*”. This is the reason why it requires the appointment of a national authority responsible for the security of ships and port facilities, and the adoption, for certain modalities of the regulation, a timetable for the implementation of the national plans adopted within the framework of the regulation, that it provides for an inspection process supervised by the EC to verify the methods of control, and the implementation of the national plans adopted in the framework of the regulation.

Above all, this regulation extends all the requirements of “Chapter XI-2”²⁷⁸ of the “SOLAS and part A of the ISPS code” to ships serving nations within the Community, and more particularly to passenger ships. European Maritime Safety Agency (EMSA), once again viewing safety and security, similarly, has been given the role of assisting the EC in the execution of its tasks.

²⁷⁷ EC: “Communication from the Commission on the Enhanced Safety of Passenger Ships in the Community”, <https://eur-lex.europa.eu/legal-content/EN/TXT> (15.07.2020).

²⁷⁸ SOLAS, “Chapter XI-2 Special Measures to Enhance Maritime Security”

C) PROBLEMS TO MARITIME SECURITY AND MARITIME SAFETY

1- Political and Diplomatic Variations

a) Diplomatic Complications

As being reluctant first to the US maritime security measures, the EC expressed in 2003²⁷⁹ its fears about what it estimated constitute an element of “*unfair competition between ports*”, in particular within the community. The US and the EU would seem to have difficulty in agree on the issue of maritime security.

An agreement was finally reached on April 22, 2004²⁸⁰ between the US and the EU. The new agreement expands on the customs Cooperation and Mutual Assistance Agreement (CMAA)²⁸¹ existing between the EU and the US, signed on May 28, 1997. While the 1997 accord emphasized traditional customs cooperation, the extended agreement also covers cooperation the logistics chain of international trade.

This agreement therefore seeks to ensure the best possible balance between the facilities business and security. To achieve this, several sets of measures have been adopted like the evaluation of risk, inspections and screening or the exchange of useful information and best practices. Then, for the prevention of a differentiated regime from being applied to member states and that deflection does not occur in the European Community, the agreement notably complements the American CSI. Thus, the safety of containers of all origins is covered, whether these containers are imported, transshipped or circulate in transit through the EU and the US and, in view of this agreement, the standards of controls

²⁷⁹ Official Journal of the European Union, “Commission Regulation No 1607/2003 of 12 September 2003 Amending for the 22nd Time Council Regulation (EC) No 881/2002 Imposing Certain Specific Restrictive Measures Directed against Certain Persons and Entities Associated with Usama Bin Laden, The Al-Qaida Network and the Taliban, and Repealing Council Regulation (EC) No 467/2001”, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:229:0019:0021:EN:PDF> (10.10.2020).

²⁸⁰ Publications Office of the EU, 2004/425/EC: Council Decision of 21 April 2004 on the Conclusion of an Agreement between the European Community and the US of America on the Mutual Recognition of Certificates of Conformity for Marine Equipment, <https://op.europa.eu/en/publication-detail/-/publication/ddd034e4-4a99-4b76-baeb-95cf33c3a8bd> (03.10.2020).

²⁸¹ Container Security: EU–US Agreements, Summary of, Decision 2004/634/EC — Conclusion of the Agreement between the European Community and the US on Intensifying and Broadening the Agreement on Customs Cooperation and Mutual Assistance in Customs Matters to Include Cooperation on Container Security and Related Matters, http://publications.europa.eu/resource/cellar/2c431024-1067433c881c417fda394611.0002.03/DOC_2 (04.10.2020).

applied to American and European operators must be identical. Finally, a working group was set up to develop the elements functionalities of this cooperation. A first meeting of customs experts was thus held at the beginning of May 2004, bringing together experts from the US, Member States of the EU and the EC.

If all these different measures, international as well as unilateral, seem ideal, their implementation nevertheless raises a number of difficulties.

b) The CSI's Implementation Complications

As stated before, the US²⁸² is very active in this area, but their involvement resulted in initiatives denounced as unacceptable to the EC. The first reaction of the EC followed the US actions taken within the framework of the CSI.²⁸³ The economically powerful US approached the largest ports in the world in terms of container exchanges and imposed security measures, including in particular control by US customs of computerized information exchange systems and systems container control (scanner).²⁸⁴ After an audit by US customs, the port concerned is awarded a CSI label allowing them to carry out trade with the US. Without this label, exchanges are subject to much more complex formalities, in particular, much longer deadlines, slowing down the whole process.

As far as Europe is concerned, these provisions have been designed and implemented bilaterally in ignorance of the “*Acquis Communautaire*” and without consultation with the EC, which has had to react in accordance with the provisions of the “Treaty of the European Community”. Faced with this situation and the individual responses of member states to the US requests, the EC obtained, on March 2003, from the Council, authorization²⁸⁵ to negotiate on matters within the EU domain to reach with US customs authorities an “*agreement between the EU and the US*” on the development of an export control system that would integrate the need to secure international trade carried out by containers. Such an “agreement is intended to supersede the current bilateral arrangements between certain member states and the US Customs Service”. It will be

²⁸² Clark / Walton, 62.

²⁸³ U.S. Customs and Border Protection, “CSI: Container Security Initiative”, <https://www.cbp.gov/border-security/ports-entry/cargo-security/csi/csi-brief> (16.07.2020).

²⁸⁴ USCG: The U.S. Coast Guard Maritime Strategy for Homeland Security, https://www.uscg.mil/Portals/0/Strategy/2013_USCG_WP.pdf, (06.07.2020).

²⁸⁵ Mertens, T.: *Netherlands Yearbook of International Law*, Springer, The Hague 2011, p. 123.

“based on principles of reciprocity and non-discrimination applying to all trade between the EU and the US”. Ultimately, this agreement should allow joint monitoring of the implementation of measures drawn up by common agreement.

The main concern of the EC is to avoid elements of unfair competition between ports,²⁸⁶ as has already appeared on the national level between Le Havre and Marseille concerning the CSI.²⁸⁷ The EC is thus studying common security standards as well as common criteria for customs controls to prevent a competitive situation from developing.

c) The International Ship and Port Facility Security Code’s Execution Difficulties

The US is overly concerned by these questions of safety and security and wishes to have control of the matter and they follow very closely the question of the ISPS Code, monopolizing in passage certain rights, which also irritates the European Community. Following the meeting of the EU/US cooperation group on transport security in Washington on July 2003,²⁸⁸ the US and the EU announced that they support an international approach to security measures, that is to say, the application of the measures adopted in December 2002. The US Coast Guard followed this approach by developing their interim July 1 rules.²⁸⁹

However, they face political pressure from the Chamber of Deputies to approve ship security plans rather than accept the decisions of flag states. This is already reflected in the field of maritime safety and more specifically in the context of the OPA²⁹⁰ by the obligation for any oil tanker planning to dock at an American port to have USCG validate

²⁸⁶ Castelein, R. B. / Geerlings, H. / Van Duin, J. H. R.: “The Ostensible Tension between Competition and Cooperation in Ports: A Case Study on Intra-Port Competition and Inter-Organizational Relations in The Rotterdam Container Handling Sector”, 4/7 *Journal of Shipping and Trade*, 2019, <https://link.springer.com/article/10.1186/s41072-019-0046-5> (17.03.2020).

²⁸⁷ Hinkelman, 165.

²⁸⁸ Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 Concerning Measures for a High Common Level of Security of Network and Information Systems Across the Union, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CEL_EX:32016_L1148&from=EN (07.06.2020).

²⁸⁹ Federal Register Online: “The Government Publishing Office”, *Federal Register*, 16.01.2014, Vol. 79, Iss. 11, p. 2947, <https://www.govinfo.gov/app/collection/fr> (16.04.2020).

²⁹⁰ “USCG Increases Limits of Liability for Ships under OPA 90”, <https://safety4sea.com/uscg-increases-limits-of-liability-for-ships-under-opa-90/8> (19.07.2020).

the Shipboard Oil Pollution Emergency Plan (SOPEP),²⁹¹ which must already be approved by the flag state as part of the compulsory certificates. In this case, the US would not recognize the validity of the security certificates issued by the different flag states. For their part, the US has started an assessment of foreign ports.²⁹²

The following outlines the main problems encountered in terms of discussions between the EU and the US for the implementation of various measures concerning maritime security. One problem that has received little attention in the various discussions and that will undoubtedly come to the fore after the application of the ISPS Code is the question of conflicts of jurisdiction: What are the protective measures, under the ISPS Code, “*against a ship flying a foreign flag in the port of another state*”. The other difficulties which are already appearing relate to the logistics of implementation.

2- Logistical Problems

Much more practical than the problems exposed previously, logistical problems are, however, very worrying at this point. The most astonishing is that, on the part of the ship, the section brought into conformity with the new Chapter of the SOLAS that corresponds with the technical part of the ISPS Code is already well advanced. Many ships already have the AIS device and have had the international ship number engraved in accordance with the new provisions.

In fact, the ISPS Code very often only gives directions and undoubtedly leaves too much freedom to states in the implementation of the code, which will pose some implementation problems.

For example:

- Some countries have far from adequate safety standards. It will be “*necessary to determine what assistance should be provided to less favoured countries so that*

²⁹¹ Shipboard Marine Pollution Emergency Plans, Regulation 37 of MARPOL Annex I, Regulation 17 of MARPOL Annex I, <http://www.imo.org/en/OurWork/Environment/PollutionPrevention/OilPollution/Pages/Shipboard-Marine-Pollution-Emergency-Plans.aspx> (26.07.2020).

²⁹² US Government Accountability Office, *Supply Chain Security: DHS Could Improve Cargo Security by Periodically Assessing Risks from Foreign Ports*, <https://www.gao.gov/products/GAO-13-764> (28.07.2020).

they can implement equivalent safety standards". "Resolution 5 adopted on December 12, 2002 at the diplomatic conference on maritime security" does not provide this.

- The remaining point, and not the least, concerns the "management" part of the code, namely the certification side and the development of company and ship security plans.

Currently, what can be learned from these safety and security approaches is that, unfortunately, they have become necessary but that they are still in their infancy. Hopefully, the will to act demonstrated very recently does not run out of steam, as is very often the case in the maritime security sector.

CONCLUSION

After any maritime disaster, emotions flare and demands are made for regulations to prevent such events from happening again. The main purpose of this study is to demonstrate that relevant regulations, drawn up over the course of the 20th century in response to maritime disasters, do indeed exist and, in fact, now cover all areas related to maritime safety. While the IMO for many years was the sole initiator of this regulation, it is no longer the same today; other bodies have taken over, notably the EU and the US.

So why do such events continue to occur? First, the sea remains an unpredictable and risky environment. Above all, this regulation is not applied by all parties nor is it applied in the same way. This is mainly for economic reasons where stakeholders in maritime safety make the most of opportunities to avoid their obligations: As soon as a breach is presented, everyone rushes into it. Unfortunately, the only force for putting offenders back on track is the stick. The problem is that the shipping community is an international and opaque environment that very often facilitates the avoidance of sanctions. However, it is true that the current atmosphere in this sector is more optimistic: Freight rates in recent years have tended to increase and the quality factor is more and more taken into consideration and given attention in international forums.

Maritime safety now encompasses another sector where, and this is rare enough to note, a consensus was quickly reached. This is maritime security, a field that has been recently given a lot of attention in the maritime environment. Although the EU already took this concept into account before September 11, 2001, it has since been the subject of several regulations: One domestic in the US, the CSI, and the other international, the ISPS code, following pressure from the US. These regulations have only recently come into force and implementation is likely to face difficulties. These areas of maritime safety and now maritime security remain very broad areas and, depending on the will of stakeholders and standard-setting bodies, there can be no mathematical formula to ensure these areas will be fully mastered. However, it can only be hoped that the recent change in mentality as discussed will make it possible in the future to anticipate maritime catastrophes and no longer suffer them.

Furthermore, maritime security remains one of the current global topical issues. It has been the major focus of the US, the IMO and to some extent the UN. These measures increased the responsibilities of coastal, port and flag states and gave an importance to private actors.

Thus, Maritime Security and Maritime Safety should not be viewed as two different subjects of study but as two intertwined themes that can help develop the regulations and measures within each other. Maritime safety and maritime security should therefore both be studied in a global perspective in the context of, economics, diplomacy, humanitarian law, peace studies and political science.



ACADEMIC SOURCES

A) PRIMARY SOURCES

1- Convention Based Regimes

Charter of the United Nations, Chapter VII: Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression, <https://www.un.org/en/sections/un-charter/Chapter-vii/index.html> (19.12.2020).

Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA), Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, Adopted 10 March 1988; Entry into force 1 March 1992; 2005 Protocols: Adopted 14 October 2005; Entry into force 28 July 2010, <https://www.imo.org/en/About/Conventions/Pages/SUA-Treaties.aspx> (19.12.2020). Turkey, Enter into Force, 17/10/2010, Resmi Gazete, 31/12/2009.

Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREGs), Adoption: 20 October 1972; Entry into force: 15 July 1977, <https://www.imo.org/en/About/Conventions/Pages/COLREG.aspx> (19.12.2020). Turkey, Enter into Force, 17/10/2010, Resmi Gazete, 31/12/2009.

International Labour Standards on Seafarers (ILC), 29 October 1919, 4th ILC adopted the Maritime Labour Convention, 2006, https://www.ilo.org/wcmsp5/groups/public/-ed_norm/---normes/documents/publication/wcms_237451.pdf, (16.04.2020).

International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), <http://www.imo.org/en/OurWork/Environment/PollutionPrevention/ChemicalPollution/Pages/IBCCode.aspx>, (19.03.2020).

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International Convention for the Safety of Life at Sea (SOLAS), 1974, Adoption: 1 November 1974; Entry into force: 25 May 1980, [http://www.mar.ist.utl.pt/mventura/Projecto-Navios-I/IMO-Conventions%20\(copies\)/SOLAS.pdf](http://www.mar.ist.utl.pt/mventura/Projecto-Navios-I/IMO-Conventions%20(copies)/SOLAS.pdf) (14.12. 2020). Turkey, Enter into Force, 03/12/2013, Resmi Gazete, 27/06/2013.

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The North Atlantic Treaty (NATO Treaty), Washington D.C. - 4 April 1949, https://www.nato.int/cps/en/natolive/official_texts_17120.htm (16.12.2020). Turkey, Enter into Force, 30/06/1954, Resmi Gazete, 02/07/1954.

United Nations Convention on the Law of the Sea (UNCLOS): UNCLOS I, 1958, UNCLOS II, 1960, UNCLOS III, 1982.

2- National Regimes

Commission Directive 2002/27/EC of 13 March 2002 Amending Directive 98/53/EC Laying Down the Sampling Methods and the Methods of Analysis for the Official Control of the Levels for Certain Contaminants in Foodstuffs (Text with EEA Relevance), <https://eur-lex.europa.eu/legal-content/EN/TXT/?Uri=Celex%3A32002L0027> (02.07.2020).

Council Directive, 1999/35/EC of 29 April 1999 on a System of Mandatory Surveys for the Safe Operation of Regular Ro-Ro Ferry and High-Speed Passenger Craft Services, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31999L0035> (18.06.2020).

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Maritime safety: Erika I package Commission communication of 21 March 2000 to Parliament and the Council on the Safety of the Seaborne Oil Trade [COM(2000) 142 final - Not published in the Official Journal], <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3A124230> (06.07.2020).

The US Oil Pollution Act, 33 U.S.C. §2701 et seq. (1990), <https://www.epa.gov/laws-regulations/summary-oil-pollution-act>, (07.04.2020).

3- Organisation Based Regimes

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ÖZET

Emniyet kelimesinin sözlük anlamına bakarsak, her türlü tehlikeden uzaklık olarak tanımlandığını görebiliriz. Diğer bir deyişle, tehlikeden uzak bir yolculuğa, güvenli bir yolculuk denir. Deniz farklı farklı tehlikeler barındırdığından dolayı bu risklerin ayrı ayrı belirlenmesi gerekir. Bu yüzden her iki kavram da denizi ele alsa da deniz emniyeti ve deniz güvenliği kavramları arasında paralel bir çizgi çizilmelidir. Deniz hukuku çerçevesinde, bu iki farklı kavram aynı amaçlara hizmet ettiklerinden dolayı, birbirlerini tamamlayıcı niteliktedir. Bu kapsamda, her ikisinde de “denizde insan hayatının, malların, gemilerin ve genel olarak deniz çerçevesinin emniyeti ve koruması” amaçlanmaktadır. Ancak, hedeflerinin aynı olmasına rağmen ciddi farklılıklar göstermektedir. Bu çerçevede, deniz emniyeti doğal ve deniz seyrüseferinden kaynaklanan riskleri önlemeyi hedeflerken, deniz güvenliği denizde işlenebilecek suçlara karşı koruma sağlanmasına odaklanır. Bu suçlar özellikle, uyuşturucu kaçakçılığı, yasadışı göç, korsanlık, silahlı soygun ve terörizmdir.

Daha farklı temeller üzerine kuruldukları ve çeşitlendirildiklerinden dolayı, yeni deniz güvenliği kuralları, özel bir önem taşımaktadır. Bu kurallar sadece uluslararası örgütlerin cabasıyla oluşmaz, bazı ülkelerin ulusal düzeyde aldığı güvenliğe ilişkin önlemler de bu kuralların oluşmasına katkıda bulunur. Bu çerçevede, IMO’da temsil edilen bütün ülkelerin kabul ettiği önlemler bulunmaktadır. Bunun yanı sıra, AB ve ABD tarafından alınan ulusal ve bölgesel önlemlerin dünya çapında kabul görmesi de söz konusudur.

Bu nedenle, deniz güvenliği ve emniyeti önlemlerini incelerken, önce ulusal düzeyde kabul edilen önlemlere, daha sonra da ABD ve AB tarafından kabul edilen önlemlere bakılacaktır.

Anahtar Kelimeler: Deniz Emniyeti, Deniz Güvenliği, Deniz Ortamı, Çevre Kirliliği, Deniz Kazası, Denizde Can Güvenliği, İnsan Hatası, Terörizm, Hukuka Aykırı Fiiller, Bayrak Devleti, Liman Devleti

ABSTRACT

If we refer to the dictionary, safety is defined as the distance from everything peril. So, we say of a journey made far from danger that it was made in safety. However, it is still necessary to specify what perils these are. It is for this reason that a parallel must then be drawn between the notions of maritime safety and maritime security, these concepts both dealing with the dangers of the sea, but from different angles. Essential in maritime law, these two distinct concepts are nevertheless complementary, because they pursue the same objectives.

Both have thus for purpose of "ensuring the protection of human life at sea, ships and goods circulating there and the marine environment in general ". However, the fields of application of these two concepts remain quite different. Thus, while maritime safety tends to prevent risks of natural origin or caused by maritime navigation, maritime security focuses on protection against criminal practices which take place at the sea.

The new maritime security rules are special in that they are numerous and that their origins are remarkably diverse. Indeed, not all these measures are systematically the work of international institutions; some states have in fact decided to unilaterally set up their own security measures. Therefore, there are measures adopted by all the countries represented in the IMO, and measures nationally or regionally adopted by the US and the EU, which have been accepted unilaterally.

Keywords: Maritime Safety, Maritime Security, Marine Environment, Pollution, Marine Accident, Safety of Life at Sea, Human Error, Terrorism, Unlawful Acts, Flag State, Port State