



HAL
open science

Generalities - Transforming the ocean law by requirement of the marine environment conservation

Patrick Chaumette

► **To cite this version:**

Patrick Chaumette. Generalities - Transforming the ocean law by requirement of the marine environment conservation. *Annuaire de droit maritime et océanique*, 2019. hal-02395879

HAL Id: hal-02395879

<https://hal.science/hal-02395879>

Submitted on 11 Dec 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

GENERALITIES

Professor Patrick CHAUMETTE

*Former director of the Maritime and Oceanic Law Centre
University of Nantes
ERC 2013 Advanced Grant No. 340770 Human Sea - FP7
<http://www.humansea.univ-nantes.fr>*

The European program *Human Sea* was selected by the European Research Council in August 2013. It is an Advanced Grant 2013 No. 340770 within the 7th Framework Programme for Research and Development (or FP7). The research programme spans five years from 2014 to 2019.

1. «MAKING THE SEA MORE HUMAN»

The project deems that one of the roles of the law is to civilise the use of techniques. Technological developments have allowed and will allow the extension of human activities at sea. To what extent does economic activity development at sea lead to the transformation of maritime and oceanic law? The research programme held two conferences —one in June 2014 called Piracy: From the Sea to Cyber Space—¹. It addressed piracy and linked work from law historians and general historians to current research being conducted by contemporary legal practitioners and geographers regarding maritime piracy off the Horn of Africa and the Gulf of Guinea. Frantz Mynard and Frédéric Davansant organised the event. The impact the risk of violence has on underwriters and legal jurisdiction was contemplated in the follow up to *Piracy* published by Pédone et Hart in 2012, and

¹ Colloque Piraterie: de la mer au cyberspace, 4 and 5 June 2014, http://www.msh.univ-nantes.fr/63674436/0/fiche___actualite/. *Annuaire de Droit Maritime et Océanique*, Université de Nantes, t. XXXVI, 2018.

coordinated by Charles Norchi and Gwenaele Proutière-Maulion². Piracy became part of common language to describe the precariousness of large areas, routes, and in the world of internet, cybercrimes. Internationalisation extends beyond the national framework of States and has complicated the control and enforcement of activities of businesses set up in one country but operating globally. In June 2015, the conference *New Maritime Routes: Origins, Evolutions and Possibilities* organised by Odile Delfour-Samama, Gwenaele Proutière-Maulion and Cédric Leboeuf, developed a multi-disciplinary approach to these multi-faceted phenomena that is as old as maritime navigation but a real challenge of the 21st century. Maritime routes evolve, disappear and are created under the influence of external circumstances —in particular those that are political, economic and technical—. Routes in use are the result of how economic, geopolitical and technical data has evolved. They are created, adapted and disappear as a result of external circumstances, in particular political and economic. Oceans remain most often deserted outside these maritime routes. «Regardless the origin or transformation of the routes, these new maritime routes of communication have shaken up the global economy and relations among maritime operators». The main goal of the conference was to analyse the various disciplines (historical, geographical, political and legal) and provide a comprehensive overview of the causes and effects of new routes as a result of the opening of the Poles, the straits, as well as the conventional routes which are used by more than 50,000 ships of over 500 UMS. Discussions addressed risks and threats which are inherent to routes such as pollution of areas with low human presence and maritime piracy. The melting of the polar pack has opened up two new Arctic routes —one near Russia and the other in Canada—. It has also created international tensions and threats to the marine environment. These developments need to be taken into account by political and operational stakeholders, even researchers, so that they may reflect on the anthropogenic pressure and ethical nature of the development of new human-based activities at sea³. Have oceans been invaded by the 55,000 large merchant vessels that sail its waters? It is precisely the definition of maritime routes that explains the flow of maritime traffic towards the Strait of Malacca, the Bosphorus and the Channel. There is a main longitudinal axis running west-east and east-west between 55° and 30° parallel north and narrower north-south meridians, as well as a few north-east/south-east diagonals⁴. The world's merchant fleet is not spread out on the entirety of the oceans' vastness. In fact, it is concentrated on very specific

² NORCHI, C. H., and PROUTIERE-MAULION, Gw. (dir.) (2012), *Piracy in comparative perspectives: Problems, Strategies, Law*, Paris-London, Pedone-Hart, <http://www.pedone.info/piracy/piracy.html>.

³ DELFOUR-SAMAMA, O.; LEBOEUF, C., and PROUTIERE-MAULION, Gw. (dir.) (2016), *Nouvelles routes maritimes - Origines, évolutions et prospectives*, Paris, Editions A. Pedone, 269, <http://www.pedone.info/792/NRM.html>.

⁴ FRÉMONT, A. (1996), «L'espace maritime et marchand: pour une problématique», *Espace géographique*, Volume 25, Number 3, 203-213, http://www.persee.fr/doc/spgeo_0046-2497_1996_num_25_3_985; FRÉMONT, A. (2008), «Les routes maritimes: nouvel enjeu des relations internationales?», *Revue internationale et stratégique*, 2008/1, n° 69, 17-30; GRATALOUP, Chr. (2015), *Géohistoire de la mondialisation - Le temps long du monde*, U Géographie, Paris, A. Colin.

routes that link the world's most important economic regions and raw material extraction sites to consumer areas. It is thus necessary to secure ports, vessels and exchanges at the international level.

2. SEAFARERS: AN INTERNATIONAL LABOUR MARKET IN PERSPECTIVE

The first publication of the European project *Human Sea Seafarers: An International Labour Market in Perspective* examines the developments that took place in the marine merchant sector. This sector was the first to be globalised in the second half of the 20th century because of the freedom given to vessel registration and the pacification of the oceans. This industry was mostly deregulated despite conventions adopted by the International Maritime Organisation, SOLAS and MARPOL. The sector was also experiencing significant growth in both international merchandise trade and the merchant navy⁵. 7.4 billion tons of merchandise was transported via maritime routes in 2006 in comparison to 550 million tons in 1950. Maritime transport has acted as a laboratory for globalisation since the 70s through free vessel registration. Ships could only be attached to flag States via the implementation of port state controls and the development of minimum standards of international law established by the IMO through the conventions SOLAS, MARPOL and STCW. The port state control was founded on an equal treatment principle and guides signatories of international conventions on how to ensure ships stopping over in their ports, independently of the vessel's flag, comply with the stipulations set forth by said conventions. The International Labour Organisation was involved in the implementation of the port state control via the 1976 Convention 147 on minimum merchant shipping standards. The Paris Memorandum of Understanding (MoU) was created in 1982 and provided robust guidelines and a common database available to all signatories to control ships. The 1974 STCW Convention, subsequently revised in 1995 and 2010, sets standards of training, certification and watch keeping for seafarers. The adoption of the Maritime Labour Convention in Geneva in 2006 and Convention 188 on Fishing in 2007 completes international law of this globalised sector. This means a globalised sector is no longer associated with deregulation. Now that flag States issue social certifications of vessels under the control of port States, it seems to have made the minimum international norms that much more effective. It will eventually be complemented by international negotiations being conducted by social partners in regard to remuneration.

The book considers the changes in work on board merchant ships. This is the first internationalised sector, due to open registry shipping, search of a skilled and competitive labour force. The 2006 ILO Maritime Labour Convention takes

⁵ CHAUMETTE, P. (coord.) (2016), *Seafarers: An International Labour Market in Perspective - Gens de Mer: un Marché International du Travail*, Bilbao, Gomylex Editorial, 428.

a universal dimension and renews the framework of this sector, including a social certification. Control of ships by the port State contributes to the effectiveness of international standards, and their regionalisation. The European social law seeks to integrate the international dimension of this sector, to build a harmonized regional market and to treat shipping companies as any other company. The control of manning companies and the link of seafarers to a social protection system are two particularly complex projects, which might lead to unfair competition.

«From a wider international law perspective, the (Maritime Labour) Convention is of interest because it is one of the growing cadre of conventions that are responding to the search for “effectiveness of international law” and reaches beyond the “face” the State sovereignty to directly affect the behaviour of private actors. Even more unusually, the MLC, 2006 contains provisions that seek to apply its requirements to non-ratifying States? In that sense it can be described as a convention that is “universal” in its reach»⁶. «Does this Convention and the way in which it was developed present model of workable process whereby international conventional law can be designed to be (more) effective and, in particular, in such a way as to affect the behaviour of non-State actors directly, while at the same time operating primarily at the level of State responsibility?»⁷.

Research regarding seafarers was continued during a conference organised by Olga Fotinopoulou Basurko on September 13, 2016 in Bilbao within the framework of Maritime Work Watch, Sea Workers’ Labour and Social Conditions International Research Network-Studying Today’s challenges and Future Amendments to the Maritime Labour Convention. It focused on research stemming from the fishing industry and actions of the International Transport Federation (ITF) and port workers⁸. A follow-up working session will be held in Nantes on June 15 and 16, 2017.

3. MARITIME AREAS: CONTROL AND PREVENTION OF ILLEGAL TRAFFICS AT SEA

The second publication of the European project Human Sea stems from the conference held in Nantes on October 5 and 6, 2015, titled Maritime Areas: Control and Prevention of Illegal Traffics at Sea and Marine Spaces: Surveillance and Prevention of Illegal Trafficking at Sea⁹. The Montego Bay Convention also stipulated the creation of exclusive economic zones (EEZ) to regulate fishing and protect fishery resources from excessive appropriation of marine spaces by coastal

⁶ McCONNELL, M. L.; DEVLIN, D., and DOUMBIA-HENRY, Cl. (2011), *The Maritime Labour Convention, 2006 - A Legal Primer to an Emerging International Regime*, Martinus Nijhoff Publ., 32-33.

⁷ *Ibid.*, 569.

⁸ <http://www.maritimeworkwatch.eu/es/que-es-mww>.

⁹ CHAUMETTE, P. (coord.) (2016), *Maritime areas: control and prevention of illegal traffics at sea - Espaces marins: Surveillance et prévention des trafics illicites en mer*, Bilbao, Gomylex Editorial, 316.

States. However, the law of the sea still focuses on vessels and does not include new sea-going vessels and the workers that man them¹⁰. Furthermore, high-sea jurisdiction is not clear because vessel registration has allowed some flag States to be complacent. The link between a vessel and its flag State is more or less lax¹¹. Internationally wrongful acts imputable to a ship do not make flag States liable in any way. At most, flag States are to respond «without delay» to requests made by States regarding ship registration. In the *Saiga* case, the International Tribunal for the Law of the Sea simply accepted Saint Vincent's claim without verifying the facts, even though the registration certificate had not been renewed when the ship had been seized by Guinea when caught illegally fishing¹². The development of illegal activities at sea tests the competences of States and their cooperation at regional levels.

In addition to combating arms trafficking, combating human trafficking is another example of illegal activities at sea. The abolitionist movement sought to bring an end to human trafficking. In 1784, Necker believed that only international efforts would bring an end to human trafficking. England abolished human trafficking in 1807 and slavery in 1833. It took advantage of the Napoleonic Wars to seize enemy slave ships along the coast of Africa and monitor neutral ships under the pretext that it was fighting contraband of war¹³. A military court was set up in Sierra Leone to try the offenders¹⁴. England forced Portugal to end its slave trade with Africa in 1810, and then South America. At the 1815 Vienna Congress, the world powers signed a declaration to end the slave trade without any other actions. From 1816 to 1841, the United Kingdom increased the number of bilateral conventions, stipulating reciprocal rights of access to merchant vessel by warships, the arrest of slave ships and their diversion to Sierra Leone. The right of access came to be during wartime but was extended to periods of peace to combat illegal trafficking. It limited the freedom of the seas and that of maritime trade. Portuguese slave trafficking was tolerated south of the equator between Brazil and Angola until 1830. Spain only officially abolished slave trafficking in 1845. In 1850, the *Royal Navy* bombed and sank slave ships in Brazilian ports. The Brazilian Parliament passed a prohibition law that was much more effective than that of 1831. On December 20, 1841, the main signatories of the 1815 Vienna

¹⁰ MIRIBEL, S. (2013), «Qu'est-ce qu'un navire?», in BLOCH, C. (dir.), *Mélanges en l'honneur de Christian SCAPEL, Aix-en-Provence*, PUAM, 279-288.

¹¹ KAMTO, M. (2003), «La nationalité des navires en droit international», in *La Mer et son Droit - Mélanges offerts à L. Lucchini et à J. P. Quéneudec*, Paris, Pédone, 343-373. Sur le pavillon des organisations internationales, HINOJO ROJAS, M. (2014), «La insuficiente regulación de la cuestión del pabellón en la Convención, de las Naciones Unidas sobre el Derecho del Mar de 1982», in SOBRINO HEREDIA, J. M. (ed.), *La contribución de la Convención de las Naciones Unidas sobre el Derecho del Mar a la buena gobernanza de los mares y océanos*, Nápoles, Editoriale Scientifica, 79-97.

¹² TIDM, arrêt du 1^{er} juillet 1999, n° 2, demande de prompt main levée; KAMTO, M., *op. cit.*, 359.

¹³ PÉTRÉ-GRENOUILLEAU, O. (2004), *Les traites négrières - Essai d'une histoire globale*, Paris, Gallimard, 263 et s.; DAGET, S. (1997), *La répression de la traite des Noirs au XIX^{ème} siècle*, Paris, Karthala.

¹⁴ WARD, W. E. F. (1969), *The Royal Navy and the Slavers: the Suppression of the Atlantic Slave Trade*, London, Allen & Unwin.

Congress granted the British the right to combat the slave trade from the Atlantic Ocean to the Indian Ocean. In 1842, the United States of America committed to maintaining an 80-canon fleet to combat the slave trade. On September 25, 1926, the General Assembly of the League of Nations rejected the proposition set forth by the British to assimilate the maritime transport of slaves to an act of piracy. Governments committed to take all the necessary measures to prevent and suppress the transport of slaves on vessels sailing under their flag. An international convention, similar to that signed on June 17, 1925 regarding the international arms trade, was signed.

Marine areas give rise to various illegal activities at sea: piracy and robbery, human trafficking and illegal immigration, drug trafficking, illegal fishing. The United Nations Convention on the Law of the Sea of 1982, Montego Bay, provides various legal regimes of state intervention at sea, resulting by the establishment of cooperation mechanisms. The evolution of the threat and risk monitoring techniques questions historically interstate practices and today, call upon new players and private services. The book contemplates the fight against piracy, against drug trafficking, against human trafficking, as well as against illegal fishing through the different legal regimes.

The United Nations Convention on the Law of the Sea (UNCLOS) adopted in Montego Bay in 1982 still allows the high sea to be associated to an idea of freedom. However, Article 87 lists the items proposed by the Institute of International Law in Lausanne in 1927 and the 1958 Geneva Convention on the high seas. It includes freedom of navigation, freedom to fly over high seas, freedom to lay submarine cables and pipelines, freedom to construct artificial islands and other installations permitted under international law and freedom of scientific research, subject to Part VI and XIII¹⁵. The article is not restrictive. However, the 1972 London Convention and the 1982 Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircrafts had significantly restricted the freedom to dump waste even without Article 210 of UNCLOS. The Brussels Convention of November 29, 1969 came into effect following the Torrey Canyon oil spill off the eastern part of the Isles of Scilly on March 18, 1967. It consisted of an international convention regarding the intervention on the high seas in cases of oil pollution casualties, affirming the right of coastal States to take measures to prevent, mitigate or eliminate grave and imminent danger of pollution of the sea by oil¹⁶. It represented a significant departure from the exclusivity granted by the law of the flag State in the interest of the protection of the marine environment. The Protocol of 2 November 1973 extended the right of intervention on the high seas in cases

¹⁵ LUCCHINI, L., and VOELCKEL, M. (1990), *Droit de la mer*, t. 1, *La mer et son droit - Les espaces maritimes*, Paris, Pédone, 267-281; ROTHWELL, D. R., and STEPHENS, D. (2010), *The International Law of the Sea*, Oxford and Portland, Hart, 154-158.

¹⁶ DU PONTAVICE, E. (1968), *La pollution des mers par les hydrocarbures. A propos de l'affaire du Torrey Canyon*, Paris, LGDJ; LUCCHINI, L. (1970), «La pollution des mers par les hydrocarbures: les conventions de Bruxelles de novembre 1969», *JDI*, 795.

of pollution by substances other than oil. High-sea jurisdiction is not limited to a ship's registration and the law of the flag State under which it sails. States agree to maintain public order at sea in order to combat human trafficking and the transport of slaves at sea (UNCLOS, Art. 99), piracy (Art. 100 to 107) and illicit trafficking of narcotic drugs or psychotropic substances (Art. 108) and unauthorized broadcasting (Art. 109). Duty to render assistance to any person found at danger at sea, as stipulated in Article 98, corresponds to an active obligation of solidarity that goes beyond a moral, natural and ancient obligation. The UN Convention is conservative in regards to terrorism at sea—the subject of the Rome Convention of 10 March 1988—, following the hijacking of the Italian liner *Achille Lauro* in the eastern part of the Mediterranean Sea, which is a multilateral convention for the suppression of unlawful acts against the safety of maritime navigation and protocol for the suppression of unlawful acts against the safety of fixed platforms located on the continental shelf.

If the principle of the law of flag State is the expression at high sea of the sovereignty of States, there can be exceptions to this principle in the event of sufficiently serious infractions and threats¹⁷. Professor Djamchid Momtaz believes the legal framework relating to the prevention and suppression of unlawful acts on the high seas is inefficient because of the tension between global and zonal governance. Global governance strives to fill the gap between an integrated global economy and the continued fragmented world order. In terms of prevention, States are reluctant to allow their ships to be inspected on the high seas and even more reluctant to allow other States to intervene in their territorial waters. In terms of suppression, existing suppression powers and the reluctance of States to exercise their powers weakens global governance¹⁸. Therefore, only national frameworks and interstate cooperation are in place.

4. HUMAN SEA-MARISK - ECONOMIC CHALLENGES AND NEW MARITIME RISK-MANAGEMENT: WHAT IS BLUE GROWTH?

There are lawful activities being carried out at sea that require security and safety measures. The Human Sea Program organised another international conference on October 3 and 4, 2016 in conjunction with the 5th International MARISK conference. The objective of the conference was to consider the risks associated to sea-based renewable energies, oil and gas rigs and large vessels. The MARISK conferences were organized by the ENSM (École Nationale Supérieure Maritime) —which now encompasses the following institutions—: École Nationale

¹⁷ BEURIER, J. P. (2006), *Droits Maritimes*, Paris, Dalloz Action, 1^{ère} éd., n° 115.21, 3^{ème} éd., 2014, n° 115.21 à 115.27.

¹⁸ MOMTAZ, D. (2014), «Tension entre gouvernance globale et gouvernance zonale dans la prévention et la répression des actes illicites en mer», in SOBRINO HEREDIA, J. M. (ed.), *La contribución de la Convención de las Naciones Unidas sobre el Derecho del Mar a la buena gobernanza de los mares y océanos*, Nápoles, Editoriale Scientifica, 441-453.

de la Marine Marchande, École Nationale de la Sécurité et de l'Administration de la Mer (ENSAM), École des Affaires Maritimes and the Port of Nantes Saint-Nazaire. Our colleague, Professor Jean-Pierre Beurrier, an expert in the law of the sea and environmental law, was the chair of the scientific committee. It took place in 2005, after the ISPS (International Ship and Port Facility Security) Code went into effect as part of the SOLAS Convention, and subsequently in 2007, 2009 and 2012. Following further research, the final conference of the European program Human Sea shall take place in Nantes in October 2018 and it will provide an overview of the evolution of the law of the sea and of maritime law by examining tensions among technological and economic developments and the measures needed to ensure the protection of the marine environment.

Humankind will need to overcome the following challenges in order to achieve Blue Growth: the exploitation of new sea-based energies, further and further and deeper and deeper drilling sites, as well as larger and larger vessels. New economic opportunities are ready to be seized but are not exempt of new risks affecting security, safety and the marine environment. These new challenges are at the core of the Human Sea-Marisk discussions. This event brings together international experts to discuss the latest scientific and technological developments in the port and maritime sector. The maritime, ship and port industry must impose restrictions to protect the environment but it must also be protected against malicious and violent attacks. Security issues are not new but those related to safety are. Players can include public, private and international organisations; States and their administrations; regional organisations; port authorities; economic players; port and port facility management firms; insurance companies; classification societies; security experts and advisers. The participation of these players is usually complementary and non-competitive, but this conciliation should nonetheless be thought through and organised¹⁹.

5. WEALTH AND MISERIES OF THE OCEANS: CONSERVATION, RESOURCES AND BORDERS

The theme of human activities at sea, technological innovations, conservation of the marine environment have been developed in several seminars in 2017 and 2018; the same is true of European maritime safety policies, the new European function keeps coastlines and guard borders, taking a major place in the articulation between various international conventions and regional strategies, then national implementation. A book comes from these seminars²⁰.

¹⁹ CHAUMETTE, P. (coord.) (2017), *Economic challenge and new maritime risks management: What blue growth? - Challenge économique et maîtrise des nouveaux risques maritimes: Quelle croissance bleue?*, Bilbao, Gomylex Ed., 480.

²⁰ CHAUMETTE, P. (coord.) (2018), *Wealth and miseries of the oceans: Conservation, Resources and Borders - Richesses et misères des océans: Conservation, Ressources et Frontières*, Bilbao, Gomylex Ed., 426.

5.1. Offshore platforms and exploitation of the continental shelf

Oil and gas exploration and exploitation at sea have undergone significant developments in the last decades. Almost a third of the oil and a fourth of natural gas are extracted from sub-sea reservoirs. The recent drop in the price of oil barrels has considerably slowed down investments. Firms are making efforts to cut costs. ENI began production at the Nooros field, discovered in July 2015, off the coast of Egypt.

Zohr gas field will begin production in July 2017. The eastern part of the Mediterranean Sea looks promising for the development of sea-based energies. The following accidents showed how ecological risks can result in significant damages: Montara in Australia (2009), Deep Water Horizon in the U.S.A. (2010), Penglai in China (2011), Elgin in the United Kingdom (2012) and Kulluk in the U.S.A. (2012). These accidents revived the need for an international framework²¹. It also brought forth the gap in international conventions that recognised oil tankers but not offshore facilities²². At the end of the 1970s, the International Maritime Committee (IMC) requested that the International Maritime Organisation (IMO) elaborate a draft convention regarding offshore mobile units. The draft was reviewed in 1990. In 1996, the Canadian Maritime Law Association published a discussion paper, which was revised in 2000. In 2004, the IMC working group identified that there is little support for this initiative. Several international agreements regarding regional seas take into account the risks generated by offshore activities and determine the prevention regulations²³.

Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations is the first regional approach²⁴. The directive is applicable *ratione loci* to territorial sea, the exclusive economic zone or the continental shelf of the Member State within the meaning

²¹ ROCHETTE, J. (2015), «Activités pétrolières et gazières en offshore et protection de l'environnement», in NGWANZA, A., and LHUILLIER, G. (dirs.), *Le contentieux extractif*, ICC, Paris, Chambre de Commerce Internationale, 125-136.

²² CAMERON, P. (2012), «Liability for catastrophic risk in the oil and gas industry», *International Energy Law Review*, Volume 6, 207-219; SCOVAZZI, T. (2012), «Maritime accidents with particular emphasis on liability and compensation for damage from the exploitation of mineral resources of the seabed», in DE GUTTRY, A. *et al.* (eds.), *International disaster response law*, The Hague, Asser Press, 287-320.

²³ ROCHETTE, J., and CHABASON, L. (2011), «L'approche régionale de préservation du milieu marin: l'expérience des mers régionales», in JACQUET, P.; PACHAURI, R., and TUBIANA, L., *Regards sur la Terre 2011*, Paris, Armand Colin, 111-121; ROCHETTE, J.; WEMAËRE, M.; CHABASON, L., and CALLET, S. (2014), *En finir avec le bleu pétrole: pour une meilleure régulation des activités pétrolières et gazières offshore*, Studies n° 01/2014, Paris, IDDRI, 40. «Seeing beyond the horizon for deep-water oil and gas: strengthening the international regulation of offshore exploration and exploitation», IDDRI, Study n° 01/14, 36, http://www.iddri.org/Publications/Collections/Analyses/Study0114_JR%20et%20al_offshore_FR.pdf.

²⁴ THIEFFRY, P. (2014), «Un régime "Seveso" pour les accidents majeurs liés aux opérations pétrolières et gazières en mer (Directive 2013/30 du 12 juin 2013, relative à la sécurité des opérations pétrolières et gazières en mer et modifiant la directive 2004/35/CE)», *Rev. Trimestrielle de Droit Européen*, Dalloz, 553 et s.; JUSTE-RUIZ, J. (2014), «La directive européenne sur la sécurité des opérations pétrolières et gazières en mer», *Revue juridique de l'environnement*, 1, n° 39, 43; CHAUMETTE, P. (2016), «Opérations pétrolières et gazières en

of the United Nations Convention on the Law of the Sea (Art. 2, § 2). It does not include operations conducted in inland waters of Member States or those conducted at high seas. By way of prevention, Member States must oblige operators to ensure all the necessary measures have been adopted to prevent the occurrence of major accidents during gas and oil operations at sea. In the event of a mayor accident, Member States shall also ensure that operators take all suitable measures to limit its consequences on human health and the environment. In addition, offshore oil and gas operations are to be carried out on the basis of systematic risk management so that the residual risks of major accidents to persons, the environment and offshore installations are acceptable (Art. 3). French Law n° 2015-1567 of 2 December 2015 modified its Mining Code as a result of Directive 2013/30/EU of 12 June 2013 on safety of offshore oil and gas operations and Directive 2004/35/EC. The Directive presents gaps in regard to safety measures imposed on operators, especially regarding decommissioning. It does not include European controls, which are left to Member States. It does not give any accountability to European operators with facilities in non-member States²⁵.

The French law n° 2017-1839 of 30 December 2017 put an end to research and hydrocarbon exploitation and stipulates several provisions regarding energy and the environment. Based on the general introduction of the bill, France's energy policy seeks to promote the development of renewable energies and reduce the consumption of fossil energy, including liquid and gaseous hydrocarbons, and contribute to the fight against climate change to keep global warming below 1.5/2° C. This policy also aims to ensure energy supply security and competitive energy prices. In order to achieve these objectives, the bulk of already-identified world hydrocarbons will need to remain underground. Today's exploration will only lead to the production of hydrocarbons in fifteen to twenty years. Therefore, a proactive energy policy, which has been in place for several years, and aims to remain in effect, will lead to a significant reduction of hydrocarbons in our energy mix by 2040-2050. Moreover, when the currently exploited deposits are depleted (decline from 5 to 10% per year)²⁶ and no new exploration permits are issued, it will lead to a progressive extinction of the national production of residual hydrocarbons. It is already at very low levels, representing less than 1% of our consumption. Efforts supporting energy transition also strive to reduce national production at a faster pace than the natural decline of deposits, while continuing to develop renewable energies and significantly lower fossil fuel consumption.

mer - Adaptation du code minier français au droit de l'Union européenne», *Carnet de Recherche Programme Européen ERC Human Sea*, n° 340770, 6 janvier, <https://humansea.hypotheses.org/405>.

²⁵ THOMAS, Fl. (2018), *Les relations de travail offshore - Contribution à l'étude du pluralisme juridique*, Thèse Droit, Université de Nantes, 5 février 2018, Presses universitaires d'Aix-Marseille (PUAM), 2019 (à paraître).

²⁶ *Source*: projections de production après analyse des données fournies par les opérateurs, Direction générale de l'énergie et du climat, Ministère de la Transition Ecologique et de l'Énergie.

In this respect, it is not advisable to continue hydrocarbon exploration to discover more reserves in the decades to come. This is why it was decided to no longer issue new hydrocarbon exploration permits on national territory.

In doing so, this law constitutes a very important action, both in its adoption but also because of its exemplary scope and impetus to fight climate change—a key element in protecting the environment, human and biodiversity health, and environmental protection, as per stipulated in the Environmental Charter adopted in 2005. Global warming affects all areas of the world. Ice melts, rising sea levels, changes in precipitation patterns, more frequent extreme weather conditions impact the environment (*e. g.* droughts and flooding) which in turn impacts agriculture, human health and wildlife²⁷.

This law is highly symbolic. Its impact is low—there are no oil platforms on the French continental shelf—, nor on the mainland, nor overseas. There are no known offshore oil reserves where operation is prohibited. French oil production is on land and barely corresponds to 1% of consumption. It is necessary to drop from 1% to 0%. Patrick Pouyanné, CEO of Total said the following regarding the bill, «If I cannot explore in France, I'll explore elsewhere».

The symbolic force of this law can therefore not be ignored. Once more, France wants to set an example and create a catalyst effect. Before France's summit celebrating the second anniversary of the Paris Agreement on 12 December 2017, over 80 economists from 20 countries demanded an end be put to investments in fossil fuels.

«We call for an immediate end to investments in new fossil fuel production and infrastructure, and encourage a dramatic increase in investments in renewable energy», wrote the Americans Jeffrey Sachs and James Galbraith; the Frenchman Patrick Criqui; the British Tim Jackson (University of Surrey) and Charles Palmer (London School of Economics); the Swede, Thomas Sterner; the Japanese, Takeshi Mizuguchi and Shuzo Nishioka; and the former Minister of Finance of Greece, Yannis Varoufakis. «The French President and other leaders have already expressed the need for a dramatic increase in financial support for climate changes, but they did not mention the other part of the equation: Financing that continues to be granted to new oil, gas, and coal infrastructure and production projects, reads the text».

6. THE EUROPEAN DIMENSION OF MARITIME SAFETY AND SECURITY - LEGAL AND OPERATIONAL ASPECTS OF THE ACTION AT SEA

In the last 25 years, almost 40,000 migrants died from either drowning or exhaustion on European borders. 6,000 of those migrants died in 2016, the deadliest year ever recorded. The refugee crisis that has rattled Europe since 2015,

²⁷ *Climate change consequences*. European Commission, https://ec.europa.eu/clima/change/consequences_en (accessed December 2, 2018).

has highlighted political institutions inability in providing satisfactory responses to various migrant profiles. As a result of contradictory globalisations, migratory flows have increased around the world. Even though borders are closed and walls are being erected, the difference between migrant and refugee are blurred—departure countries become transit and/ or host countries, and vice versa. As a result, the content of citizenship is much more diversified; the expression of the right to mobility of people has arisen around the world. «It is a real world problem, one that has a long time been forgotten—migrations transform and impact international relations, and redefine State sovereignty. They also highlight the urgent need for a new type of diplomacy that is integrated in global and regional governance»²⁸.

Since 2000, more than 46,000 people have crossed the Mediterranean Sea and have died at sea, trying to reach Europe. This phenomenon has only worsened in the last years. 2016 resulted in the deadliest in the Mediterranean Sea's history—5,079 deaths were recorded of the 363,348 people who entered Europe by sea—. This figure does not account for boats, which disappeared without leaving a trace. Since the 2016 agreement between the European Union and Turkey, the central Mediterranean axis between Libya and Italy has become the first route migrants chose to reach Europe. It is the deadliest migratory axis in the world because of the distance needed to be covered and the dangerousness of crossing in boats that are inept for high seas. 90% of deaths recorded in the Mediterranean take place in the Strait of Sicily, off the coast of Libya²⁹.

The European Union faced an unprecedented crises and it let Italy and then Greece to tackle it on their own. Then, other Member States closed their land borders. In June 2015, the EU finally launched EUNAVFOR MED and Operation Sofia to dismantle the network of migrant traffickers and smugglers, and prevent the loss of life at sea³⁰. This military operation is supplemented by the presence of the EU in the Mediterranean Sea as part of operations conducted by the European agency FRONTEX, Triton and Poseidon.

On 9 October 2015, the United Nations Security Council adopted Resolution 2240 (2015), authorising Member States to seize vessels that were confirmed as

²⁸ WIHTOL DE WENDEN, C. (2017), *La question migratoire au XXIème siècle - Migrants, réfugiés et relations internationales*, Paris, Les Presses de Sciences PO, 3ème éd.; MUNCK, R. (ed.) (2009), *Globalisation and migration. New issues, New politics*, London, Routledge.

²⁹ SOS MÉDITERRANÉE FRANCE (2017), *Rapport d'activité*, http://www.sosmediterranee.fr/medias/rapport_activite_2016.pdf; CHAUMETTE, P. (2017), «Détournement de la convention SAR? Sauvetage en mer, code italien de déontologie des ONG et garde-côtes libyens», Carnet de Recherche Programme Européen ERC Human Sea n° 340770, 28 août, <http://humansea.hypotheses.org/889>; CHAUMETTE, P. (2017), «Piraterie en Méditerranée et action médiatique? Les dérives du navire C-Star», 25 août, <http://humansea.hypotheses.org/878>; CHAUMETTE, P. (2018), «Les réfugiés en mer: droit des réfugiés ou droit de la mer?», *Neptunus*, revue électronique, Université de Nantes, vol. 24, 2018/3, www.cdm.univ-nantes.fr.

³⁰ MANIATIS, A. (2016), «Maritime migrant smuggling», *Annuaire de Droit Maritime et Océanique*, Université de Nantes, t. XXXIV, 11-19; COPPENS, J. (2016), «Interception of Migrant Boats at Sea», in MORENO-LAX, V., and PAPA-STRAVRIDIS, E. (eds.), *Boat Refugees and Migrants at Sea: A Comprehensive Approach*, Brill-Nijhoff, 213 et s.

being used for migrant smuggling of human trafficking from Libya³¹. As noted by Kiara Neri³², the United Nations collective security system is, in theory, ineffective to address illegal activities performed by private individuals³³. The new Italian policy of closure of the ports, instituted by the Minister Matteo Salvini, neglects the respect of the international conventions, of the European convention of the humans right; Italy is inspired by the Australian policy, very problematic³⁴.

7. INTERACTIONS BETWEEN INTERNATIONAL LAW AND EUROPEAN LAW

The European Union is not an ordinary and trivial international organisation. Its relations with international law and its place within the international community are historic and permanent. The European Union has a broad range of jurisdiction and as a result it participates in the development and implementation of international law, claiming its presence through its behaviour³⁵. The European Union is a specific subject matter of international law that inserts itself in the international legal order and develops interactions³⁶.

Serge Beslier³⁷ suggests it is necessary to consider the development of the law of the sea by the United Nations and the relations with the European Union (EU)

³¹ Résolution 2259 (2015) du Conseil de sécurité du 23 décembre 2015, [http://www.un.org/fr/documents/view_doc.asp?symbol=S/RES/2259\(2015\)](http://www.un.org/fr/documents/view_doc.asp?symbol=S/RES/2259(2015)); Communiqué de presse de l'ONU, <https://www.un.org/press/fr/2017/cs13015.doc.htm>; Conseil de sécurité, Résolution 2380 du 5 octobre 2017; BEVILACQUA, G. (2017), «Exploring the Ambiguity of Operation Sophia Between Military and Search and Rescue Activities», in ANDREONE, G. (ed.), *The Future of the Law of the Sea*, Springer, 165 et s.; MIRÓN, A. (2012), «L'ordre juridique de l'UE et l'ordre juridique des NU: les résolutions du Conseil de sécurité dans l'ordre juridique de l'UE», in BENLOLO-CARABOT, M.; CANDSA, U., and CUJO, E. (dir.), *Union européenne et Droit international, en l'honneur de Patrick Daillier*, Paris, Pédone, 689-717.

³² NERI, K. (2013), *L'emploi de la force en mer*, Bruxelles, Bruylant, 230 et s.

³³ SAAS, C. (2016), «La Méditerranée, une zone de non-droit pour les boat people?», in CHAUMETTE, P. (dir.), *Maritime areas: control and prevention of illegal traffics at sea - Espaces marins: surveillance et prévention des trafics illicites en mer*, Bilbao, Gomylex Ed., 179-193; BILLET, C. (2018), «Quelle(s) responsabilités(s) pour l'agence FRONTEX?», in CHAUMETTE, P. (coord.), *Wealth and miseries of the oceans: Conservation, Resources and Borders - Richesses et misères des océans: Conservation, Ressources et Frontières*, Bilbao, Gomylex Ed., 407-426.

³⁴ KOJIMA, C. (2018), «The Use of Force in Turnback Operations against Asylum Seekers' Boats and International Law», *Billet pour le Carnet de Recherche Human Sea*, 26 juin, <https://humansea.hypotheses.org/1073>; CHAUMETTE, P. (2018), «Les réfugiés en mer: droit des réfugiés ou droit de la mer?», *Neptunus*, revue électronique, Université de Nantes, vol. 24, 3, www.cdm.univ-nantes.fr.

³⁵ NEFRAMI, E. (2010), *L'action extérieure de l'Union européenne*, Paris, LGDJ; FENET, A. (dir.) (2006), *Droit des relations extérieures de l'Union européenne*, Paris, Litec; LAMBLIN-GOURDIN, A. S., and MONDIELLI, E. (2013), *Le droit des relations extérieures de l'Union européenne après le Traité de Lisbonne*, Bruxelles, Bruylant; DASHWOOD, A., and MARESCEAU, M (eds.) (2008), *Law and Practice of EU External Relations*, University of Cambridge; CREMONA, M., and DE WITTE, B. (eds.) (2008), *European Union Foreign Relations Law: Constitutional Fundamentals*, Hart.

³⁶ BENLOLO-CARABOT, M.; CANDSA, U., and CUJO, E. (dirs.) (2012), *Union européenne et Droit international, en l'honneur de Patrick Daillier*, Paris, Ed. Pédone.

³⁷ BESLIER, S., Honorary Director of the European Commission and Chief, Administrator of Maritime Affairs (UE Retired), (2018), «La gouvernance des océans et la contribution de l'Union européenne à la structuration de l'ordre juridique international», in CHAUMETTE, P. (coord.), *Wealth and miseries of the oceans: Con-*

so that two original systems of governance —that share a common goal— may converge. The first addresses collective management by all States in a space not appropriated in the United Nations intergovernmental logic. The second is based on a supranational system comprised of sovereign delegations, varying in size. Both are seeking a global and/or coherent management of oceans.

The United Nations and the European Union share a common element —they were both founded to replace legal relations and balance powers among nations—. The United Nations has been relatively successful, while the European Union has been able to achieve lasting peace among member States. While the international society remains governed by force structures, even if it does not result in the systematic use of armed forms, the enactment of binding legal regulations, sometimes even to an extreme, are at the heart of the European structure.

In terms of maritime security, Philippe Boisson, PhD in Law and author of the what is considered the «bible» of maritime security³⁸, observed that the European Union's maritime security packages, founded on the Erika oil tanker disaster of December 1999 and the Prestige oil tanker disaster of November 2002, form «a coherent set of measures comprised of interdependent elements,» that go beyond a mere reaction to a specific incident at sea³⁹. In 2007, Philippe Boisson reflected upon the efficiency of this regional policy and concluded that the European Union had contributed to expediting the international and national normative process, regarding member States⁴⁰. By means of the European integration, the European Union influences international maritime law⁴¹ and harmonises national legislation of member States. European jurisdiction requires member States to hold joint positions within international institutions. The European Union requires member States to enact implementation regulations and controls, complementary to those set out by international standards. The European Union adapts to the international competition in the field of maritime transport, more so than it does so in terms of its domestic market⁴². Philippe Boisson clearly demonstrates in a fully documented

servation, Resources and Borders - Richesses et misères des océans: Conservation, Ressources et Frontières, Bilbao, Gomylex Ed., 299-310.

³⁸ BOISSON, Ph. (1979), *La sécurité en mer*, Thèse droit, Université de Lille, décembre; BOISSON, Ph. (1998), *Politiques et droit de la sécurité maritime*, Paris, Ed. Bureau Veritas, 669; BOISSON, Ph. (1999), *Safety at Sea: Policies, Regulations and International Law*, Paris, Ed. Bureau Veritas, 536.

³⁹ BOISSON, Ph. (2009), «L'adoption du 3^{ème} paquet ne vient pas modifier les équilibres fondamentaux du système de la sécurité maritime», *Droit Maritime Français*, n° 705, 579-587.

⁴⁰ BOISSON, Ph. (2007), «La politique européenne de la sécurité maritime, source d'efficacité?», in CUDENNEC, A., and GUEGUEN-HALLOUET, G. (dirs.), *L'Union européenne et la mer - Vers une politique de l'Union européenne?*, Paris, Pédone, 329-33

⁴¹ DEVOUCHE, A. (2016), «L'Union Européenne et le droit du travail maritime: De l'adoption à l'application de la CTM 2006», in CHARBONNEAU, A. (dir.), *La mise en œuvre de la Convention du Travail Maritime de l'OIT: Espoirs et défis*, Bourdeaux, *Rev. COMPTRESEC*, n° 2, 58-64; GAMBARDILLA, S. (2016), «L'Union Européenne et le droit international du travail des gens de mer», in CHAUMETTE, P. (dir.), *Seafarer's: An International Labour Market in Perspective / Gens de Mer: un Marché International du Travail*, Bilbao, Gomylex Ed., 353-392.

⁴² BELLOYER-ROILLE, A. (2000), *Le transport maritime et les politiques de sécurité de l'Union européenne*, Rennes, Apogée; LANGLAIS, P. (2016), *Sécurité maritime et droit de l'Union européenne - Étude d'une*

manner, the future of European maritime security law based on relationships with international institutions and integrated implementation. On 7 December 2017, the Employment and Social Affairs Council adopted the agreement concluded among European maritime social partners on the revision of Directive 2009/13/EC regarding the implementation of the 2014 amendments made to the 2006 ILO Maritime Labour Convention. Shipowners shall provide seafarers with up to two months of financial security in the event they are abandoned in a foreign port. The Convention equally sets out shipowners are responsible for providing financial compensation in the event of the death or long-term disability of seafarers due to an occupational injury, illness or hazard⁴³.

European directives regarding the maritime transport of passengers went beyond international requirements. The «communitarisation» of international regulations ensures the harmonisation of implementations by Member States. The risk of fragmentation of international regulations remains —banning measures targeting specific ships from European ports could lead to these ships being redirected to areas that are far less coordinated. For example, in February 2006, the passenger ferry al-Salem sank in the Red Sea, which resulted in over a thousand victims. The vessel was built in 1970 by an Italian company and named Boccacio. It was sold in 1998 to an Egyptian company and it sailed under Panamanian flag between Saudi Arabia and Egypt.

8. WHAT CHALLENGES FOR A NEW EUROPEAN MARITIME GOVERNANCE?

As regards maritime security, EU action has increased since the 1980s and 1990s. Also its content became more dense: the safety of persons and of ships, the maritime borders of the Member States and the protection of the marine en-

contribution réciproque, Thèse droit, Université de Paris II Panthéon-Assas; LANGLAIS, P. (2018), *Sécurité maritime et intégration européenne*, Bruselas, Bruylant, 956.

⁴³ CHARBONNEAU, A., and CHAUMETTE, P. (2014), «Premiers amendements à la convention du travail maritime de l'OIT de 2006 - Garanties financières en matière d'abandon des gens de mer et de responsabilité des armateurs en cas de décès ou de lésions corporelles», *Droit social*, n° 10, 802-810. Pour des raisons historiques, nous sommes très attachés à ces amendements: CHAUMETTE, P. (1999), «De l'abandon de marins - Vers une garantie internationale de paiement des créances salariales?», *Dr. Social*, 872-877; CHAUMETTE, P. (2004), «Des Résolutions A 930 (22) et A 931 (22) de 2001 de l'Assemblée de l'OMI aux réformes du droit français quant aux garanties de paiement des créances salariales», *Annuaire de Droit Maritime et Océanique*, t. XXII, Université de Nantes, 239-263; CHAUMETTE, P. (2007), «Quelle garantie du paiement des salaires dans une activité internationale?», *Annuaire de Droit Maritime et Océanique*, Université de Nantes, t. XXV, 125-139; CHARBONNEAU, A. (2009), *Marché international du travail maritime. Un encadrement juridique en formation*, Aix-Marsella, PUAM, collection Berthold Goldman; NIFONTOV, D. (2014), «Seafarer Abandonment Insurance: A System of Financial Security for Seafarers», in LAVELLE, J., *The Maritime Labour Convention 2006 - International Labour Law Redefined*, Informa Law, London, Routledge, 117-134; VICENTE PALACIO, A. (2017), «Control by the Port State and Flag State, and Amendments to the MLC 2006 to protect workers in cases of Abandonment», in FOTINOPOULOU BASURKO, O., and MARTÍN OSANTE, J. M. (dirs.), *New Trends in Maritime Law*, Cizur Menor, Aranzadi, 205-218; FOTINOPOULOU BASURKO, O. (2017), «Protecting seafarers in cases of outstanding wage claims resulting from abandonment of vessels and crews», in *New Trends in Maritime Law*, *ibid.*, 243-280.

vironment. The protection of the maritime borders is subjected to contemporary challenges, based on geopolitical changes and the influx of immigrants. The Commission proposed the creation of a European body of frontier guards and coast guards, which should be provided with the right of intervention in case the respective Member State is not able to deal with the migratory pressure. In December 2015, the Commission issued a number of proposals. The idea is to be part of logic of significant reinforcement of the security framework. Indeed, it involves strengthening FRONTEX's mandate, for example by allowing it to directly acquire equipment, by substantially increasing its human and financial resources, and by developing its role in operations back. The new European Border and Coast Guard Agency will act in a supporting role for the Member States in need, as well as in a coordinating role in the overall management of Europe's external borders. The balance prevailing between the different lines of action of the EU is delicate, with the inherent risk of a change in security concerning the protection of the maritime borders⁴⁴.

The creation of a specialised Agency (European Maritime Safety Agency, EMSA) allows a clear identification of a European policy, by giving it institutional visibility and appropriate expertise. It results from a compromise between the impetus for integration brought by pragmatism on the one hand, and the existential reluctance of national authorities to entrust powers to new entities, which might escape their control, on the other hand. EMSA is no exception; the internal institutional complexity of the national maritime administrations as well as the human, economic and environmental stakes of maritime safety issue make it a special theatre of these tensions. Its creation in response to the sinking of the *Erika*, then the expansion of its missions and the consolidation of its resources, went balanced by a strengthened control of the national authorities on its activities. With limited autonomy, the Agency appears to be an interface of cooperation between the national maritime administrations and between them and the institutions of the European Union. If EMSA could originally be seen as the spearhead of an emerging European maritime administration, this tends now to be based on a three-pole structure where FRONTEX may become the keystone, in response to the migratory crisis⁴⁵.

Maritime security law is disaster and prevention law⁴⁶. The sinking of the Titanic on 15 April 1912 led to the creation and the adoption of the International Convention for the Safety of Life at Sea (SOLAS) in 1914 by the United King-

⁴⁴ BOUTAYEB, C. (2018), «L'irrésistible construction d'un espace de sécurité maritime», in CHAUMETTE, P. (coord.), *Wealth and miseries of the oceans: Conservation, Resources and Borders - Richesses et misères des océans: Conservation, Ressources et Frontières*, Bilbao, Gomylex Ed., 343-352.

⁴⁵ LANGLAIS, P. (2018), «L'Agence européenne pour la sécurité maritime - Entre diversification des missions et renforcement des moyens: les limites de l'intégration maritime européenne», in CHAUMETTE, P. (coord.), *Wealth and miseries of the oceans: Conservation, Resources and Borders - Richesses et misères des océans: Conservation, Ressources et Frontières*, Bilbao, Gomylex Ed., 353-380.

⁴⁶ BEURIER, J. P. (2004), «La sécurité maritime et la protection de l'environnement: évolutions et limites», *Droit Maritime Français*, n° 645, 99-112.

dom, France and the USA⁴⁷. International maritime security law is characterised by four pillars. The first three pillars were adopted within the framework of the MLC, in London; the SOLAS Convention; the 1973 MARPOL Convention for the Prevention of Pollution from Ships, as modified by its 1978 protocol; the STCW Convention (International Convention on Standards of Training, Certification and Watchkeeping for Seafarers), adopted in 1978 and revised in 1995 and then in 2010. The fourth pillar of International Maritime Law is provided by the Maritime Labour Convention, adopted by 2006 by ILO in Geneva, and introduced in August 2013, ratified by 84 States in 2017, which represents 91% of the world fleet. This is an international convention of universal scope⁴⁸.

The European policy on maritime security was first deployed in 1978 to ensure the cohesion of the internal market and fair competition⁴⁹. Following the Amoco Cadiz oil spill in March 1978, Council Recommendation 78/584/CEE of 26 June 1978 requested member States to ratify the 1974 SOLAS Convention and its 178 protocol; the 1973 MARPOL Convention and its 1978 protocol; Convention 147 of the 1976 ILO concerning minimum standards in merchant ships; and Council Recommendation 79/487/CEE of 15 May 1979 concerning the ratification of the 1978 STCW Convention by member States. The European Community did not consider unilateral measures, similarly to the 1990 Oil Pollution Act introduced by the USA following the 1989 Exxon Valdez oil spill in Alaska. This was also the case following the 1999 Erika oil spillage and the 2002 Prestige oil spillage. However, the European Union put significant pressure to eliminate single-hull oil tankers and succeeded in pushing its agenda onto International Maritime Organisation. The 1992 Maastricht Treaty opened the qualified majority rule in the area of transportation and Community powers in environmental protection. The Council issued a Commission communication on 25 January 1993 regarding common maritime security policy. The European competence asserted itself, paving the way for the «communitisation» of international regulations⁵⁰.

The creation of the European Maritime Security Agency in 2002, in Lisbon, was a major step forward, as was the European Parliament Directive 2009/21/EC of 23 April 2009 on compliance with flag State requirements⁵¹. When the ship

⁴⁷ BOISSON, Ph. (1998), *Politiques et Droit de la sécurité maritime*, Paris, Bureau Veritas, 32-36.

⁴⁸ MCCONNELL, M.; DEVLIN, D., and Dombia-Henry, Cl. (2011), *The Maritime Labour Convention*, Martinus Nijhoff Publishers; MCCONELL, M. L. (2011), «The Maritime Labour Convention, 2006 - reflections on challenges for flag State implementation», World Maritime University, Malmö, *WMU J Marit. Affairs*, n° 10, 127-141; CHAUMETTE, P. (coord.) (2016), *Seafarer's: An International Labour Market in Perspective / Gens de Mer: un Marché International du Travail*, Bilbao, Gomylex Ed.

⁴⁹ LANGLAIS, P. (2016), *Sécurité maritime et droit de l'Union européenne - Étude d'une contribution réciproque*, Thèse droit, Université de Paris II Panthéon-Assas, 2016, *Sécurité maritime et intégration européenne*, Bruxelles, Bruylant, 2018, 956.

⁵⁰ BELLOYER-ROILLE, A. (2000), *Le transport maritime et les politiques de sécurité de l'Union européenne*, Rennes, Apogée; ZAMORA ROSELLÓ, M. R. (2008), *La seguridad marítima - problemática y alternativas institucionales*, Thèse droit, Universidad de Málaga; CHAUMETTE, P., and BEURIER, J. P. (dirs.) (2014), *Droits Maritimes*, Paris, Dalloz Action, 3^{ème} éd., chap. 214.

⁵¹ NESTEROWICZ, M. (2007), «Le rôle de l'Agence européenne pour la Sécurité Maritime (EMSA): Une perspective juridique sur l'application de la législation communautaire en matière de sécurité maritime», in CU-

social certification requirement was added to the Directive, adopted from the 2006 ILO Maritime Labour⁵², some landlocked EU Member States failed to develop a maritime legislation on vessel registration because they first need to put in place a competent maritime authority. These decisions support the analysis put forward by our colleague Moira McConnell, who believes that the ILO Convention could reduce the number of Member States that are complacent⁵³.

Under the influence of the European integration, the EU influences international maritime law⁵⁴ and harmonises State Member national legislations. European authorities require Member States to maintain common positions within international institutions. The EU also requires Member States to comply with complementary implementation and control regulations. The EU adapts itself to international competition in the area of maritime transport, more than it does via its domestic market. The European Maritime Security Agency has seen its powers grow in terms of maritime security and its coast guard obligations.

FRONTEX (European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union), established by EC Regulation n° 2007/2004 of the European Council on 26 October 2004⁵⁵, tried to do so but it was overwhelmed by the scale of migration and the number of incoming refugees. The European Union studied the issue, which led to the overhaul of the Border Code in order to tackle the situation in a more efficient manner and aide Member States, who were directly affected by the migratory crisis such as Greece and Italy. The reform was necessary not only to address available resources but also the powers of the Code. In this respect, the European Coast Guard project, with its wider scope of powers, was presented on 15 December 2015⁵⁶ and it became Regulation (EU) 2016/1624 of the European Parliament and Council of 14 September 2016, on the European Border and Coast Guard.

DENNEC, A., and GUEGUEN-HALLOUET, G. (dirs.), *L'Union européenne et la mer - Vers une politique de l'Union européenne?*, Paris, Pédone, 199-204.

⁵² Directive 2013/54/UE du Parlement européen et du Conseil du 20 novembre 2013 relative à certaines responsabilités de l'État du pavillon en ce qui concerne le respect et la mise en application de la convention du travail maritime, 2006.

⁵³ MCCONNELL, M. (2016), «A delicate balance: The seafarers' employment agreement, the system of the maritime Labour Convention, 2006 and the role of Flag States», in CHAUMETTE, P. (coord.), *Seafarer's: An International Labour Market in Perspective / Gens de Mer: un Marché International du Travail*, Bilbao, Gomylex Ed., 119-173.

⁵⁴ DEVOUCHE, A. (2013), «L'Union Européenne et le droit du travail maritime: De l'adoption à l'application de la CTM 2006», in *La mise en œuvre de la Convention du Travail Maritime de l'OIT: Espoirs et défis*, CHARBONNEAU, A. (dir.), Bordeaux, Rev. COMPTRASEC, n° 2, 58-64; GAMBARDILLA, S. (2016)), «L'Union Européenne et le droit international du travail des gens de mer», in CHAUMETTE, P. (dir.), *Seafarer's: An International Labour Market in Perspective / Gens de Mer: un Marché International du Travail*, Bilbao, Gomylex Ed., 353-392.

⁵⁵ Council Regulation (EC) n° 2007/2004 of 26 October 2004 establishing a European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union, OJ L 349, 25.11.2004, 1-11.

⁵⁶ Communication from the Commission to the European Parliament and the Council, «A European Border and Coast Guard and effective management of Europe's external borders», 15 December 2015, COM (2015) 673 final.

It is vital for the EU to control its external borders and its maritime space⁵⁷: «The EU and its Member States have a strategic interest in identifying and addressing security matters regarding the sea and maritime border management, pertaining to their territory but also of the wider global domain». In view of the various issues, the EU opts for a multi-agency approach in order to increase efficiency when managing maritime issues⁵⁸. FRONTEX must intervene at sea while respecting international law, the UN Convention on the Law of the Sea, free access to high seas, flag State prerogatives, the 1979 Hamburg Convention on maritime search and rescue. The Security Council authorised Member States to intercept vessels off the coast of Libya, suspected of migrant and human trafficking⁵⁹. The Council's decision of 26 April 2010 and the Regulation of 15 May 2014 set out the legal framework of operations in high seas by Member States and coordinated by FRONTEX. They are not in conflict with UNCLOS provisions because they both contain the flag State authorisation regulation, except for stateless vessels and in the event of search and rescue missions.

Operational progress is relative and monitoring efforts are reinforced. The European Border and Coast Guard Agency (FRONTEX) can operate on Member State borders without having been granted authorisation. FRONTEX oscillates between communitisation and inter-governmentability. Its powers were expanded when dealing with foreign States, thus reinforcing border control externalisation. The border and coast guards supplied by FRONTEX to the European Corps are either their own experts or national experts seconded by Member States. FRONTEX continues to fight terrorism and cross-border crimes. The logic of surveillance contributes to information sharing with other European agencies and national administrations such as Europol, Eurojust, the European Fishery Agency and the European Maritime Security Agency.

The AACP functions at the highest level of excellence and transparency with the objective of fostering the necessary trust and cooperation of all involved parties, and in turn ensure the effective and efficient development of its activities. European Union governments agreed to establish an agency within the framework of the 2002 reform, which would inject a culture of respect for fishery regulations throughout Europe. In April 2005, these governments adopted Council Regulation n° 768/2005. The agency is responsible for coordinating and cooperating national

⁵⁷ European Union Maritime Security Strategy as adopted by the Council (General Affairs) on 24 June 2014, https://ec.europa.eu/maritimeaffairs/policy/maritime-security_en.

⁵⁸ BALAN, G. (2016), «Le projet d'Agence Européenne de Gardes - Côtes et l'Agence Européenne de contrôle des Pêches», Billet du carnet de recherche Human Sea, 21 avril, <http://humanseahypotheses.org/477>; BALAN, G. (2016), «Union Européenne et frontières maritimes - Une volonté de gestion des frontières extérieures de l'UE aux multiples facettes», 7 septembre, <http://humanseahypotheses.org/627>; FABRIZI-RACINE, N. (2017), «Frontex, nouvelle Agence européenne de garde-frontières et de garde-côtes: Des données et des hommes», *La Revue des droits de l'homme* [En ligne], Actualités Droits-Libertés, mis en ligne le 21 mars, consulté le 26 octobre 2018. URL: <http://revdh.revues.org/3037>; DOI: 10.4000/revdh.3037.

⁵⁹ Communiqué de presse de l'ONU: <https://www.un.org/press/fr/2017/cs13015.doc.htm>. Conseil de sécurité NU, Résolution 2380 du 5 octobre 2017: [http://www.un.org/fr/documents/view_doc.asp?symbol=S/RES/2380\(2017\)](http://www.un.org/fr/documents/view_doc.asp?symbol=S/RES/2380(2017)).

control and inspection activities so that common fishery policy regulations are respected and efficiently implemented. Until 2002, the CFP had been inefficient and not tackled overfishing and control measures had not been systematically implemented by EU Member States. Fishermen felt that they were not being treated on a level-playing field when working in EU waters, and sometimes felt discriminated against. The fishing industry requested that control and execution requirements be reinforced in order to provide a level-playing field at the EU level. At the institutional level, the Commission did not have the right to perform task on the behalf of EU Member States, not did it have the means to do so. The Agency must ensure the uniform and effective enforcement of CFP regulations in collaboration with EU Member State specialised national services.

On 30 November 2017, EFCA-AECP co-hosted in Madrid the second annual meeting of the Coast Guard Functions Implementing Group, co-chaired with the European Border and Coast Guard Agency (FRONTEX). During the meeting the agencies presented the activities carried out in the framework of the support to the coast guard functions. The meeting was also an important moment to discuss the projects that will be developed to provide assistance to Member States. The deployment of coast guards by the European Union gave rise to the reform of inter-agency powers. The Fisheries Agency mandates, similarly to those of the European Maritime Security Agency's, have been expanded to specifically mention the role of coast guards and their scope of authority. The coast guard role characterises the search for a synergy, which is supported by several stakeholders. The European Coast and Border Guard Agency will need to evolve over time, just like the European Union and Member States to better protect the maritime space in light of all the challenges they face⁶⁰.

On 7 June 2018, the Security Council committee established pursuant to resolution 1970 (2011) concerning Libya placed six individuals on the Sanctions List for human trafficking in Libya⁶¹. They are considered to be the leaders of migrant smuggling networks in Libya. According to diplomatic sources, this decision is a «first» for the UN. The sanctions of asset freezes and travel bans targeted two Eritreans and four Libyans, one of whom was the Commander of a Coast Guard unit formed and financed by Italy and the European Union. The aim of designating these individuals is to neutralize the networks, which have gone as far as to sell migrants on slave markets in Libya. It is hoped that the decision will have a deterrent effect.

As foreseen, sector-based approaches to maritime activities and technological innovations have required a highly interdisciplinary approach, which has led

⁶⁰ BALAN, G. (2018), «La fonction garde-côtes au sein de l'Union européenne: une mise en œuvre interagences», in CHAUMETTE, P. (coord.), *Wealth and miseries of the oceans: Conservation, Resources and Borders - Richesses et misères des océans: Conservation, Ressources et Frontières*, Bilbao, Gomylex Ed., 393-405.

⁶¹ UN Security council, press release SC13371, 7 June 2018, <https://www.un.org/press/en/2018/sc13371.doc.htm> - UN Security Council, press release SC/13508, 17 September 2018, <https://www.un.org/press/en/2018/sc13508.doc.htm>.

industrial firms, technology specialists, members of administrations and geographers to participate in the research programme. Before considering the legal issues, at the very least, a minimum of technical understanding is required. Between strategic documents and maps, geographer's approaches can call legal normativity into question.

Developments in information technology, artificial intelligence, IT risks and thus the importance of cybersecurity, are in no way specific to the maritime realm. These activities at sea are part of a general technological trend, which should be examined with specialists. Then come maritime questions: is a navigational vehicle at sea with no crew on board actually a ship?

9. THE OCEAN'S DUAL HORIZONTALITY AND VERTICALITY: AN OVERALL APPROACH TO THE OCEAN

Unfolding research has shown that two horizontal dimensions of the oceans are considered, *i. e.*, the ocean surface, used for shipping, and the seafloor, used to exploit mineral, gas and oil resources, install fixed-bottom wind turbines for the moment and moored floating turbines in future, in a word, these are essentially the continental shelves. Insofar as fisheries and fisheries resources were left out of the project, as a long-standing activity already monitored by numerous specialists, the ocean's water column and biological resources were not part of the thought and discussion process, thus revealing that the place of the marine environment was unthought-of in the programme's project. An overall approach to the ocean would also require that its verticality, its volume and therefore, its biological resources be appraised.

Oceanic law stands at the crossroads of the law of the sea, maritime law and environmental law, which has now become indispensable. But the image conjured up by the term crossroads is not well adapted. It would be better to envisage a confluence, where oceanic law is a river formed by three confluents, *i. e.* the branches of law mentioned above.

9.1. Protection of the marine environment

The biosphere is the only place in the universe where life is possible, at least based on our current knowledge. However, it is threatened by human activities. The biosphere has seen its main elements destroyed, altered and threatened; what's more is that its fundamental balances are at risk of forever being altered. Since the 1960s, humankind has become aware of these dangers and it is only normal that this awareness manifest itself at the international level. Furthermore, international law reacted by enacting several types of regulations. These include conventional regulations, non-binding instruments such as customary norms issued from either the repetition of analogue clauses in treaties or comparable provisions in national

legislations⁶². As a result, we can, today, discuss not only the international protection of the environment by law, but also the rights of the environment, progressively recognized as a basic human right⁶³.

The Earth is first a blue planet, even if humans cannot live in or on water long term⁶⁴. Oceans play a major role in climatic balances, fish resources and international trade. Offshore gas and oil operations gained momentum because of innovative techniques. The future is without a doubt rooted in renewable marine energy, generated by wind and oceans. Ocean floors house optical cables placed by information and mass communication firms. Humans are more and more found living on coasts and developing various types of commercial activities. Conflicts over marine area use near land have led to such specialized areas such as sea activity planning. The protection of the marine environment is vital to the survival of humankind. Earth fills its oceans. There are currently five plastic continents occupying the Pacific Ocean, known as the «The Great Pacific Garbage Patch», a gyre of marine debris particles in the North Pacific Ocean. The patch is made up of almost a million plastic fragments by km² and poses a significant poisonous hazard. The peaceful use of oceans is necessary to the development of maritime activities. Despite the return of violence and piracy at sea, maritime and naval tensions are generally managed peacefully. It is necessary to understand these issues and the range of topics before plunging into further research, innovation, onshore and offshore activities, and maritime activity regulation.

The Earth is round. The Earth is blue. Oceans are made up of salt and rain water. They cover 71% of the Earth's surface. That represents 361 million km² and 1.33 billion m³ of water. Oceans also play a vital role in climatic balance. They absorb two-thirds of the CO₂ product in the world, which in turn protects the ozone layer and makes Earth liveable. It cools temperatures thanks to condensation, which produces rain that falls onto soil; it fills rivers; it ensures land is arable, and rain water ultimately returns to the oceans, ideally not polluted. Both salt and fresh water are essential to life. Life was first born in the oceans and then in the air thanks to the oxygen it contains during the Ice Age. Life then moved on to land approximately 360 million years ago. The first primates are estimated to have lived 55 million years ago. Oceans cannot be inhabited by humans and can be compared to a desert of salt water. This cycle is much more complex than just distinguishing land from sea when describing climate oscillations. Over 5 million years ago, the two American sub-continents joined together and separated the Pacific Ocean from the Atlantic Ocean. It led to the Gulf Stream forming in the Atlantic Ocean

⁶² BEURIER, J. P. (2017), *Droit international de l'environnement*, Paris, Ed. A. Pédone, 5^{ème} éd.

⁶³ KISS, A. (2004), «Environnement, Droit international, Droits fondamentaux», *Cahiers du Conseil Constitutionnel*, n° 15 (Dossier: Constitution et environnement), janvier, <http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/nouveaux-cahiers-du-conseil/cahier-n-15/environnement-droit-international-droits-fondamentaux.52001.html>; DÉJEANTY-PONS, M., et PALLEMAERTS, M. (2002), *Droits de l'homme et environnement*, Conseil de l'Europe.

⁶⁴ EUZEN, A.; GAILL, F.; LACROIX, D., and CURY, Ph. (2017), *L'océan à découvert*, Paris, CNRS Editions, 321.

and the Kuroshio Current in the Pacific Ocean (found between China and Japan). These currents comprised of warmer and colder water are essential to aquatic fauna, fishery resources and maritime navigation⁶⁵.

The recognition of environmental protection as a fundamental right has its origins in the Declaration adopted by the Stockholm Conference on the Human Environment in June 1972. The first principle of the declaration states:

«Man has a fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations».

The content of this principle leads one to believe there is a very strong relationship between the environment and fundamental rights. Terms such as freedom, equality and dignity reflect political and civil law while terms such as adequate conditions of life and well-being reflect economic, social and cultural law.

The first time this right was articulated in an international treaty was in the African Charter of Human and Peoples Rights adopted in 1981. Article 24 states:

«All people shall have the right to a general satisfactory environment favourable to their development».

Article 11 in the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, adopted in San Salvador on 17 November, 1988 provides further details. It sets forth the following:

«Article 11 - Right to a Healthy Environment:

1. Everyone shall have the right to live in a healthy environment and to have access to basic public services.
2. The States Parties shall promote the protection, preservation and improvement of the environment».

Two other international conventions stipulate State Parties have the obligation of protecting the environment, at least in certain respects. The first, Article 24 in the Convention on the Rights of the Child of 20 November 1989 stipulates State Parties «to combat disease [...], taking into consideration the dangers and risks of environmental pollution». The second, Article 4 in Convention 169 of the International Labour Organization on Indigenous and Tribal Peoples in Independent Countries prompts governments to adopt special measures to safeguard the environment of the peoples concerned.

These two aspects of environmental law, human rights and the government's responsibility are either found stipulated jointly or separately in over a hundred

⁶⁵ ABATE, R. S. (dir.) (2015), *Climate Change Impacts on Ocean and Coastal Law - US and International Perspectives*, Oxford University Press; ANDREONE, G.; CALIGURI, A., and CATALDI, G. (2012), *Droit de la mer et émergences environnementales - Law of the Sea and Environmental Emergencies*, Cahiers de l'Association Internationale du Droit de la Mer - Papers of the International Association of the Law of the Sea, Napoli, Editoriale Scientifica.

national constitutions. It has been questioned if these two provisions are, in fact, not two sides of the same coin, but rather two fundamentally different provisions. The stakes are high —the right to the environment—, as a human right, could be interpreted as nothing more than the direct protection of individuals against the deterioration of their environment and neglecting the protection of biological and landscape variety. Allocating responsibility to governments in this area could cover environment as a whole.

The right to the environment has also sparked other debates, which could impact the evolution of this subject matter⁶⁶. Three trends emerged consecutively. The first, the oldest and the most generally accepted, is a procedural concept of the human right to the environment. The second seeks to insert environmental concerns in rights already protected by international instruments. The third, still in the trial and error phase, seeks to claim substantive rights that could be linked to environmental protection.

In numerous discussions where the question of if the right to the environment could be recognized as a right attributed to all individuals just like other fundamental rights, the main argument was that the environment could not be defined with sufficient precision and as such, its implementation in judicial proceedings would face substantial difficulties. The response to the first objective can be partly found in various constitutional texts that stipulate this right. It is clear that the term «environment» must be defined, and when necessary, with additional qualifiers. The latter can more or less be developed on humankind and its needs. An interesting position is that of the Peruvian Constitution of 12 July 1979 where Article 123 stipulates that all individuals «have the right to live in a healthy environment, ecologically balanced and appropriate to the development of life and the preservation of the landscape and nature». However, there does not exist a wording that is generally accepted in international law, even if the shared interest of humankind is mentioned in various treaties⁶⁷. The International Convention, adopted by the United Nations Economic Commission for Europe regarding information, public participation in decision-making and access to justice in environmental matters on 25 June 1998 in Aarhus (Denmark) codified and completed the regulations herein stated.

Human rights, as a whole, are proclaimed and their respect is guaranteed by a series of international conventions that are either universal or regional. Two of the most recent instruments, mentioned above, contain clauses that explicitly target the protection of the right to the environment. Older instruments guarantee rights may be invoked in this respect, especially when there are institutions designated to enforcing said rights.

⁶⁶ GARCÍA CÁCERES, D. V. (2015), *La conservation des milieux marins en droit international et droit de l'Union européenne*, thèse Droit, Université de Paris I, 15 juin 2015, Paris, L'Harmattan, coll. Logiques Juridiques, 876.

⁶⁷ BEURIER, J. P. (2017), *op. cit.*, n° 10, 29, et n° 303-321, 171-179.

At the United Nations level, the Human Rights Commission, established under the International Covenant on Civil and Political Rights, can receive communications that allow them to defend guaranteed rights. Matters related to the protection of the environment brought before this institution, thus invoked provisions established by the Covenant regarding the right to life and the protection of minorities (Covenant, Arts. 4 and 27). The right to health, guaranteed by Article 12 in the United Nations Covenant on the Economic, Social and Cultural Rights, has often been evoked as being able to support claims regarding the protection of the environment. However, only the reports issued by the United Nations Human Rights Commission make any such references. The recognition of Human Rights at sea has made substantial progress as a result of the combat against piracy off Somalia⁶⁸.

At the European level, Article 8 (the right to respect for private and family life) and Article 10 (freedom of expression), stipulated in the European Convention for the Protection of Human Rights and Fundamental Freedoms; and Article 1 of its First Protocol (property protection) are the main articles that have been subject to appeals regarding environmental matters before the European Court of Human Rights⁶⁹.

Following the commitments announced by the President of the Fifth Republic of France during the 2002 presidential campaign to integrate the environment into the Constitution, a commission, steered by the Professor Yves Coppens, began working on an Environmental Charter between 2002 and 2003. The Charter was the subject of several consultations and it resulted in a constitutional bill tabled in the National Assembly on 27 June 2003. The bill was included in the preamble of the French Constitution and stipulates the rights and duties defined in the 2003 Environmental Charter, and based on the historical dismissals of the 1789 Declaration and the 1846 Preamble. The Environmental Charter is comprised of 10 articles and Article 1 proclaims «the right of everyone, individually or in association with others, to enjoy a healthy and ecologically balanced environment»⁷⁰.

⁶⁸ PAPANICOLOPULU, I. (2013), «International Judges and the Protection of Human Rights at Sea», in BOSCHERO, N. *et al.*, *International Courts and the Development of International Law - Essays in Honour of Tullio Treves*, Springer, 535-544; MONTAS, A. (2014), «La lutte contre la criminalité en mer à l'épreuve de la Cour Européenne des Droits de l'Homme», chap. 14, in TRAPP, K.; RAPP, N., and PAPASTAVRIDIS, E. (dir.), *La criminalité en mer - Crimes at sea*, Académie de Droit international de La Haye-Boston, Leiden, Martinus Nijhoff Publishers; MONTAS, A. (2016), «Les migrants maritimes devant la Cour européenne des droits de l'Homme», in CHAUMETTE, P. (coord.), *Maritime areas: Control and prevention of illegal traffics at sea- Edpaces mari: Surveillance et prévention des trafics illicites en mer*, Bilbao, Gomylex Ed., 151-160.

⁶⁹ MARTIN, J.-Chr., and MALJEAN-DUBOIS, S. (2008), «La Cour européenne des Droits de l'Homme et le droit à un environnement sain», Séminaire UNITAR/ENM Prévention des risques et responsabilité pénale en matière de dommage environnemental: une approche internationale, européenne et nationale, 22 octobre (publié sur le site de l'UNITAR en 2011: <http://stream.unitar.org/ftp/pdf.html>); <https://halshs.archives-ouvertes.fr/halshs-00734256/document>.

⁷⁰ MATHIEU, B. (2004), «Observations sur la portée normative de la Charte de l'environnement», *Cahiers du Conseil Constitutionnel* n° 15 (Dossier: Constitution et environnement), janvier, <http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/nouveaux-cahiers-du-conseil/cahier-n-15/observations-sur-la-portee-normative-de-la-charte-de-l-environnement.52000.html>; «Juin 2014: La Charte de l'environnement

10. INSTITUTIONAL FRAGMENTATION

As so remarkably noted by Pierre-Marie Dupuy, «the creation of international legal orders is quite ancient, that of the international legal order as we understand it today seems on the contrary relatively recent, at least on the historical scale»⁷¹. Beginning with the first major United Nations conference on the environment in Stockholm in 1972, the countries that asserted they had «only one earth» were mostly situated in a bilateral or regional perspective; they were above all addressing issues of cross-border pollution. The 1976 Barcelona Convention for the Protection of the Mediterranean, amended in 1995, fell under this approach, even though it was to serve as a model for regional conventions to protect the environment⁷². This approach was consolidated in the period that followed and now forms the hard core of customary international law for environmental protection. Protecting the ozone layer and combating greenhouse gases led to a major shift⁷³.

As shown in the diagram below, oceanic law and the conservation of the marine environment falls under the jurisdiction of numerous international institutions: the United Nations, its secretariat (UNSG), its General Assembly (UNGA), the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the International Maritime Organization (IMO), the International Labour Organisation (ILO) and the United Nations Educational Scientific and Cultural Organization (UNESCO).

Similar jurisdictional fragmentation exists between the International Court of Justice (ICJ) and the International Tribunal for the Law of the Sea (ITLOS), although the Commission on Limits of the Continental Shelf (CLSH) is not a jurisdiction, but a technical institution whose role goes beyond an advisory capacity.

The regional dimension strongly accentuates this institutional and jurisdictional fragmentation. In the case of the MOX plant, an industrial complex in Sellafield recycling nuclear waste, opposing Ireland and the United Kingdom, although the International Tribunal for the Law of the Sea ordered provisional measures in the framework of Article 282 of the United Nations Convention on the Law of the Sea, it required the parties to cooperate, based on the urgency of the situation. The

de 2004», <http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/a-la-une/juin-2014-la-charte-de-l-environnement-de-2004.141685.html>; L'arrêt d'Assemblée du 3 octobre 2008 constitue la première décision du Conseil d'Etat annulant un décret pour méconnaissance de la Charte de l'environnement de 2004, <http://www.conseil-etat.fr/Actualites/Communiqués/Le-Conseil-d-Etat-consacre-la-valeur-constitutionnelle-de-la-charte-de-l-environnement>.

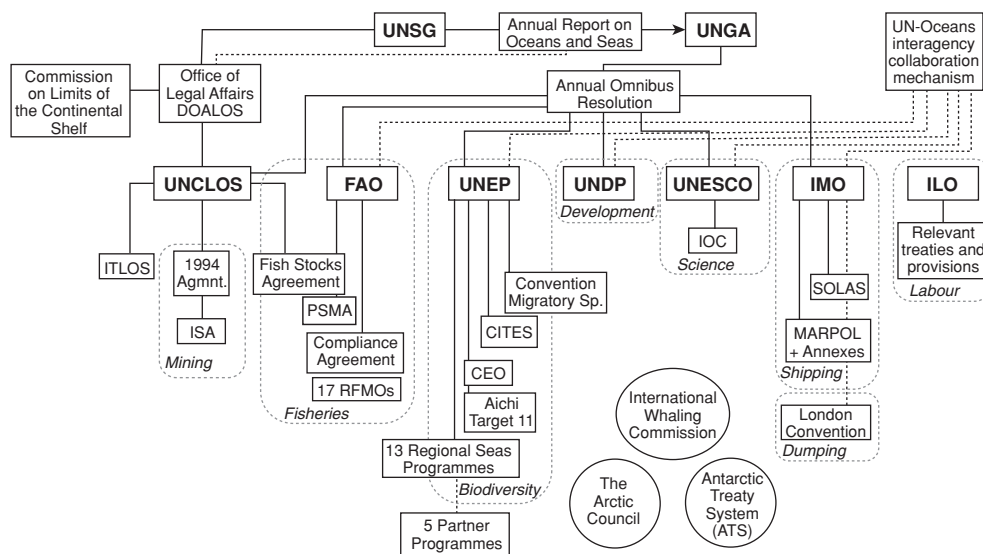
⁷¹ DUPUY, P. M. (2018), «Quelques réflexions sur les origines historiques de l'ordre juridique international», in *Ordre juridique et désordre international*, Paris, Pédone, sp. 39.

⁷² DEJEANT-PONS, M., *La Méditerranée en droit international de l'environnement*, Paris, Economica, 1990, 374.

⁷³ DUPUY, P. M. (2018), «Où en est le droit international de l'environnement à la fin du siècle?», in *Ordre juridique et désordre international*, Paris, Pédone, sp., 264-289, repris de *RGDIP* 1997, n° 4, 873-903.

contribution of the Order of 3 December 2001 is dual. It illustrates the role the Tribunal was led to play in attempting to control the effects of the multiplication and fragmentation of international judicial procedures concerning the law of the sea. Thus, the Tribunal makes a significant contribution to the debate on correctly administering international justice. Moreover, the order places the general duty to cooperate at the core of its system and requires compliance with it through provisional measures. It makes this a minimal, but fundamental rule, which in matters of urgency can define the limits of the dispute, and in any case prevent damage to the environment⁷⁴.

SUMMARISED SCHEMATIC DIAGRAM OF INTERNATIONAL OCEAN GOVERNANCE STRUCTURE, SHOWING SECTORAL APPROACH AND PLETHORA OF ORGANISATIONS



The Commission of the European Communities reproached Ireland with having initiated proceedings under the jurisdiction of the OSPAR convention, as well as that of the International Tribunal for the Law of the Sea, concerning a dispute between two Member States of the European Community. The Court of Justice ruled in its favour⁷⁵. For the first time, the Court of Justice interpreted and applied Article 292 of the Treaty establishing the European Community; like Article 192

⁷⁴ ITLOS, Order of 3 December 2001, Case n° 10, called The MOX plant case (*Ireland v. United Kingdom*), provisional measures, § 84, <https://www.itlos.org/en/cases/list-of-cases/case-no-10/>; NOUZHA, C. (2002), «L' affaire de l'usine MOX (Irlande c/ Royaume-Uni) devant le Tribunal International du droit de la mer: Quelles mesures conservatoires pour la protection de l'environnement?», *Actualité et Droit International - Revue d'analyse juridique de l'actualité internationale*, <http://www.ridi.org/adi/articles/2002/200203nou.htm>.

⁷⁵ ECJ 30 May 2006, case C- 459/03, *Commission v Ireland*; KERBRAT, Y., and MADDALON, Ph. (2007), «Affaire de l'Usine MOX: la CJCE rejette l'arbitrage pour le règlement des différends entre Etats membres», *Revue trimestrielle de droit européen*, 2007, 165-182.

of the Treaty establishing the European Atomic Energy Community (EAEC), it requires that Member States not submit a dispute relating to the interpretation or application of the Treaty to a method of settlement other than those provided for by the Treaty. Therefore, the Court of Justice has exclusive jurisdiction, despite the dispute-settlement system provided for under the United Nations Convention on the Law of the Sea.

11. NORMATIVE FRAGMENTATION

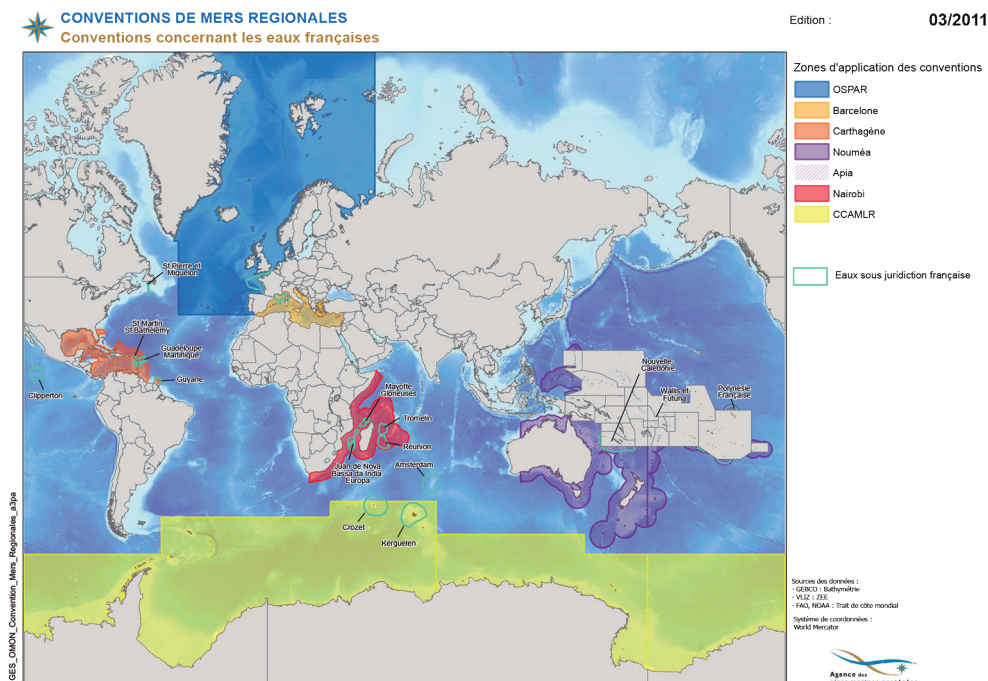
Human activities at sea have significant adverse effects on the marine environment, rich in biodiversity but fragile. In particular, the ocean is the spillway for all human waste generated on land such as plastic and heavy metals. The five continents of plastic identified at sea, notably the «The Great Pacific Garbage Patch», made up of almost a million of plastic pieces per km², is hazardous, but it is not the result of human activity at sea. It rather derives from onshore discharges released by rivers⁷⁶. Part XII in the 1982 United Nations Convention on the Law of the Sea, also called the Montego Bay Convention, addresses the protection and preservation of the marine environment. It stipulates States shall develop, individually or jointly as appropriate, integrated sustainable development management policies aimed at protecting the marine environment⁷⁷.

The 1972 United Nation Conference in Stockholm was followed by further efforts to implement a global approach. Regional conventions were developed to target specific ecosystems and taking into account region-specific hazards, allowing riparian states to impose a binding framework. There isn't one ocean but diversified seas. The Helsinki Convention on the Protection of the Baltic Sea Area of 22 March 1974 initiated this regional approach. When revised on 9 April 1992, the precautionary principle and the «polluter pays» principle were introduced. The 1992 OSPAR Convention for the Protection of the Marine Environment of the North-East East Atlantic established the OSPAR Commission. Since 2010, the Convention has adopted protection measures aimed at high sea biodiversity and marine areas (Mont Milne). The Barcelona Convention of 16 February 1995 for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, a semi-closed sea, was amended on 10 June 1995. The Convention and its protocols constitute a system that other regional conventions strive to implement, strongly backed by the United Nations Environment Program. There are now 12 international regional conventions that cover the Persian Gulf, the Red

⁷⁶ Sur la diversité des pollutions marines, BEURIER, J. P. (2014), *op. cit.*, n° 371-375, 211-213.

⁷⁷ GAUTIER, Ph. (2013), «Les vertus pratiques des obligations générales relatives à l'environnement dans la Convention des Nations Unies sur le droit de la mer», in BOSCHIERO, N. *et al.*, *International Courts and the Development of International Law - Essays in Honour of Tulio Treves*, Springer, 365-382; ORAL, N. (2013), «Implementing Part XII of the UN Law of the Sea Convention and the Role of International Courts», in BOSCHIERO, N. *et al.*, *ibid.*, 403-423; PINESCHI, L. (2013), «The Duty of Environmental Impact Assessment in the First ITLOS Chamber's Advisory Opinion: Toward the Supremacy of the General Rule to Protect and Preserve the Marine Environment as a Common Value?», in BOSCHIERO, N. *et al.*, *ibid.*, 425-439.

Sea, the Aden Gulf, western and central Africa, the Caribbean, the South-east Pacific Ocean, Eastern Africa, the North-west Pacific, the North-east Pacific, South Pacific, Eastern Asia and the Black Sea⁷⁸.



The 1982 United Nations Convention on the Law of the Sea more particularly developed the rights and the responsibilities of coastal States. It includes expanding the area of waters under their sovereignty (Art. 21) and the creation of the exclusive economic zone under their jurisdiction (Art. 56).

The additional Protocol of the 1976 Barcelona Convention, signed in Geneva on 3 April 1982 addresses specially protected areas in the Mediterranean. Areas located in zones under riparian State sovereignty, the parties to this protocol shall maintain and/or restore animal and plant to satisfactory levels in areas of scientific, historic or cultural interest; adopt comparable regulations in terms of navigation, operation and environmental protection. It is necessary to further develop scientific research so as to gain a better understanding of the marine environment, and increase public information and cooperation among riparian States. Scientific monitoring of specially protected areas was made mandatory. This Protocol was replaced by the 10 June 1995 Protocol which governs protected marine ar-

⁷⁸ Sur les conventions régionales de protection de l'environnement marin, v. BEURIER, J. P. (2017), *op. cit.*, n° 422-455, 239-256; BEURIER, J. P. (dir.) (2014), *Droits Maritimes*, Paris Dalloz Action, 3^{ème} éd., spécialement, Livre 8, «La protection de l'environnement marin», 1119 et s.

eas in coastal and high sea waters, and wetlands⁷⁹. When an area has a particular value, States can create Specially Protected Areas of Mediterranean Importance (SPAMI)⁸⁰.

The notion of protected marine areas was generalized by the Convention on Biological Diversity (CDB), an international treaty adopted during the Earth Summit in Rio de Janeiro in 1992. It has three main objectives including: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from genetic resources. The convention recommends the adoption of specific measures to protect specially threatened coastal and marine areas —this is what most regional conventions on marine environment protection advocate for in the creation of such protection areas—. Marine protected areas (MPA) are areas at sea that have been defined in order to achieve the long-term conservation of nature. The Environmental Code of France recognizes 15 types of marine protected areas⁸¹.

New categories can be recognized by ministerial decree. Most marine protected areas allow reconciling protection measures and sustainable development of activities. Governance methods involve users, elected officials and experts in the management of a classified marine area. The French Biodiversity Agency supports MPA managers. It manages or co-manages certain MAPs such as natural marine parks, Natura 2000 areas, the specially protected area Agoa in the French Antilles for the protection of marine mammals as per the declaration put forward by France in 2010, and recognized by the 2012 Specially Protected Areas and Wildlife protocol and the Cartagena Protocol on specially protected areas and species, to protect the natural reserve of Belle Henriette (Vendée) between Tranche-sur-Mer and La Faute-sur-Mer, and the natural reserve of Iroise in the Finistère.

Marine protected areas need to be seen as sustainable marine and coastal environment management tools. By involving all actors, these defined areas were

⁷⁹ BEURIER, J. P. (dir.) (2014), *Droits Maritimes*, Paris, Dalloz Action, 3^{ème} éd., spécialement n° 813.45, 1152.

⁸⁰ SCOVAZZI, T. (2000), «Marine specially protected areas and present International Law of the Sea», in *Nouvelles technologies et droit de l'environnement marin*, Kluwer Law, 2000, 179; SCOVAZZI, T. (2003), «Le protocole Méditerranée sur les aires spécialement protégées», *Annuaire de Droit Maritime et Océanique*, Université de Nantes, t. XXI, 350 et s.

⁸¹ Au titre du code de l'environnement (Article L. 334-1), la France dispose de neuf catégories d'aires marines protégées, qui répondent chacune à des objectifs propres tout en étant complémentaires. Il s'agit: des parcs nationaux, des parcs naturels régionaux, des réserves naturelles, des aires de protection de biotope, des sites Natura 2000, ayant une partie maritime, des parties du domaine public maritime confiées au Conservatoire du littoral, des parcs naturels marins, des zones de conservation halieutiques, des réserves nationales de chasse et de faune sauvage ayant une partie maritime.

C'est ainsi une diversité de concepts et régimes, très large à laquelle il faut ajouter des AMP «internationales» telles que: les réserves de biosphère (UNESCO), les Biens inscrits sur la liste du Patrimoine mondial, (UNESCO), les zones humides d'importance internationale (convention Ramsar), les aires spécialement protégées de la convention de l'Antarctique, les zones marines protégées de la convention Oslo-Paris (convention OSPAR), les aires spécialement protégées d'importance méditerranéenne (convention de Barcelone), les aires spécialement protégées de la convention de Carthagène (exemple: sanctuaire Agoa), les zones marines protégées de la convention de Nairobi.

created to achieve the long term conservation of nature, inclusive of structured economic development. As a result, management measures were defined and implemented. If the protection of species or habitats listed in documents is common to all MPAs, they each pursue a specific objective. The size of marine protected areas depends on why it was first created. The mode of governance, especially who is selected as stakeholder in the decision-taking process, is based on the local content of the project⁸².

12. THE PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

The principles laid down in the Stockholm Declaration of 1972, reaffirmed and built upon in the Rio Declaration on Environment and Development in 1992, have played a major role in the development of international environmental law over the past thirty years. Although only unequally and partially recognised as binding, they have become inevitable landmarks in negotiations for new convention-based rules. They have also spread into most national laws and influenced, even implicitly, decisions in international jurisdictions. The structuring role of these principles has been all the more important in that normative development in this matter has been quite rapid and continuous⁸³.

The precautionary principle, or precautionary approach is emblematic. This principle is one of the key components in the Rio Declaration, as stated in Principle 15: «In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation». This is distinct from the obligation to protect and preserve the marine environment, developed in Part XII of the United Nations Convention on the Law of the Sea.

In European Union law, the precautionary principle now holds a prominent position in disputes concerning sciences and techniques. The principle is mentioned in the founding treaties dealing with the protection of the environment and has been extended through case law to the field of health⁸⁴. Following that, it has

⁸² DELFOUR-SAMAMA, O. (2013), «Les aires marines protégées, outil de conservation de la biodiversité en haute mer», *Neptunus*, revue électronique, Centre de Droit Maritime et Océanique, Université de Nantes, Vol. 19, 2013/1, <http://www.cdm.univ-nantes.fr>; GARCÍA CÁCERES, D. V. (2018), *Perspectiva jurídica internacional para la conservación de las áreas marinas protegidas del mar Mediterráneo en España*, Valencia, Tirant lo Blanch, 180; GARCÍA CÁCERES, D. V. (2018), *La conservación des milieux marins en droit international et droit de l'Union européenne*, Paris, L'Harmattan.

⁸³ KERBRAT, Y., and MALJEAN-DUBOIS, S. (2014), «Les juridictions internationales face au principe de précaution, entre grande prudence et petites audaces», in *Unité et diversité du droit international/Unity and Diversity of International Law, Ecrits en l'honneur du Professeur Pierre-Marie Dupuy/Essays in Honour of Professor Pierre-Marie Dupuy*, Brill - Nijhoff, <https://halshs.archives-ouvertes.fr/halshs-01225913/document>.

⁸⁴ EU CJ, 5 May 1998, United Kingdom v Commission, Case. C-80/96, Rec. I-2265 and EU CJ, 5 May 1998, National Farmer's Union, C-157/96, Rec. I-2211.

been considered in case law as an «autonomous» principle constituting a «general principle of Community law»⁸⁵. When conditions are met to implement the precautionary approach, it particularly justifies that restrictions be applied to the free movement of goods and/or freedom of trade and industry.

In the international legal order, the precautionary principle has spread to the realm of conventions. It is stated, notably, in the United Nations Framework Convention on Climate Change (Art. 3, § 3), the Convention on Biological Diversity (Preamble) and its Cartagena Protocol on Biosafety (Art. 9 and 10), some conventions on the marine environment, the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Art. 5), the International Agreement on the River Scheldt (Art. 3), the Protocol on the implementation of the 1991 Alpine Convention in the field of transport (Art. 1), the Convention on the Protection of the Rhine (Art. 4), or the Nagoya-Kuala Lumpur supplementary protocol on liability and redress to the Cartagena Protocol on Biosafety. But in spite of the principle being reiterated in treaties, its status and particularly its customary authority remain a subject of controversy. It is true that in this matter, as Pierre-Marie Dupuy revealed in 1997, specifying that the following comment was especially relevant for the precautionary principle, the frontiers between soft law and *lex lata* are fluctuating ones: «It is inherent to the process forming customary law that States are informed, most often quite inadequately, of the moment when, with respect to some normative terms, there is a transition from the proposals phase to addressing the prescriptions phase»⁸⁶. Confronted with these uncertainties, judges have traditionally been prudent. But far from being stabilised as yet, over the past few years case law has evolved from an attitude of ignorance, or even defiance, to one of «hesitant receptiveness»⁸⁷.

In 1999, in the Southern Bluefin Tuna Cases, the International Tribunal for the Law of the Sea expressed in its order indicating provisional measures that the «parties should [...] act with prudence and caution to ensure that effective conservation measures are taken to prevent serious harm to the stock of southern bluefin tuna»⁸⁸. The formula was used again and further developed three years later in the order of provisional measures in the Mox Plant Case; this time the ITLOS indicated that «prudence and caution require that Ireland and the United Kingdom cooperate»⁸⁹. The reference to caution here echoes the first reference, but has become an obligation, as shown by going from «should» to «require». And yet, at

⁸⁵ Court of First Instance of the European Communities, 21 October 2003, *Solvay Pharmaceuticals BV v. Council of the European Union*, Case T-392/02, Rec. II-04555, §121-122.

⁸⁶ DUPUY, P. M. (1997), «Où en est le droit international de l'environnement?», *RGDIP*, 889, repris in *Ordre juridique et désordre international*, Paris, Pédone, 2018, sp., 264-289. Translator's note: non-authentic translation.

⁸⁷ BOISSON DE CHAZOURNES, L. (2002), «Le principe de précaution: nature, contenu et limites», in LEBEN, Ch., and VERHOEVEN, J. (dir.), *Le principe de précaution, aspects de droit international et européen*, Paris, Ed. Panthéon-Assas, 87.

⁸⁸ Order of 27 August 2012, Southern Bluefin Tuna Cases (New Zealand v. Japan; Australia v. Japan), provisional measures, § 77.

⁸⁹ Order of 3 December 2001, Mox Plant Case (Ireland v. United Kingdom), provisional measures, § 84.

the same time, the ITLOS rejected Ireland's request to apply the precautionary principle and refused to order the provisional measures it requested.

The lack of an explicit reference to a principle and the assimilation of «prudence» with «precaution» could, moreover, be interpreted as a way for the Tribunal to refuse to approve this sort of principle. However, the ITLOS does make a precautionary approach quite clearly part of its two orders⁹⁰. It should be noted that the Southern Bluefin Tuna Cases were much more marked by a context of uncertainty. The context of the Mox Case is entirely different, calling more for an approach of prevention rather than precaution per se. Later, in its order in the case concerning land reclamation, the ITLOS abandoned the reference to caution to target «circonspection et prudence» in the French version, circumspection seeming to be weaker than caution, while continuing to refer to «prudence and caution» in the English version⁹¹. Do provisional measures lead to ruling practically on the merits of a case?⁹² The result was conflicting interpretations and vagueness in the Tribunal's approach.

On February 1, 2011, the opinion expressed by the Seabed Disputes Chamber was a significant step⁹³. Asked to rule on the question of whether States are obliged to apply a precautionary approach when they sponsor an enterprise pursuing activities of exploration or exploitation in the Area, including when outside of the scope of the two regulations concerning the prospection and exploration for polymetallic nodules and polymetallic sulphides which mention it expressly, the Chamber observed that «it is appropriate to point out that the precautionary approach is also an integral part of the general obligation of due diligence of sponsoring States, which is applicable even outside the scope of the Regulations» concerning nodules and sulphides.

Since due diligence is a customary obligation, notably as approved by the ICJ in its judgment on Pulp Mills, and since the precautionary approach is part of due diligence, it can be inferred that precaution is compulsory since it stems from a customary rule. The consequence is obvious: «due diligence requires that sponsoring States take all appropriate measures in order to prevent damage which could result from the activities of the contractors they are sponsoring,» including in «situations where scientific proof as to the scope and possible negative effects of the activities in question is insufficient, but where there are plausible indica-

⁹⁰ KERBRAT, Y., and MALJEAN-DUBOIS, S. (2014), «Les juridictions internationales face au principe de précaution, entre grande prudence et petites audaces», in *Unité et diversité du droit international / Unity and Diversity of International Law, Ecrits en l'honneur du Professeur Pierre-Marie Dupuy / Essays in Honour of Professor Pierre-Marie Dupuy*, Brill - Nijhoff, <https://halshs.archives-ouvertes.fr/halshs-01225913/document>.

⁹¹ ITLOS, order of 8 October 2003, case concerning land reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore), provisional measures, § 99.

⁹² KAMTO, M. (2005), «Regard sur la jurisprudence du Tribunal international de droit de la mer depuis son entrée en fonctionnement (1997-2004)», *RGDIP*, 823.

⁹³ ITLOS, Advisory opinion of 1st February 2011, Case n° 17, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area (Request for Advisory Opinion submitted to the Seabed Disputes Chamber).

tions of potential risks». To reach this conclusion, the Chamber based it on various elements which taken individually or even as a whole are not sufficient to prove the validity of this solution, but do make up a body of evidence: the order handed down by the ITLOS on 27 August 1999 in the Southern Bluefin Tuna Cases, a standard clause for exploitation contracts in the 2010 Sulphide Regulation adopted by the International Seabed Authority, and the fact that the precautionary principle is an emerging norm of customary law⁹⁴. The Chamber uses precautionary approach and precautionary principle synonymously.

The normativity of the precautionary principle still raises questions, seeing the concept's vagueness, but it will be up to judges to further narrow its interpretation. The European Court of Human Rights specifies that the principle recommends that for States «the absence of certainty, based on current scientific and technical knowledge, must not delay the adoption of effective and proportionate measures aiming to prevent a risk of serious and irreversible damage to the environment». The European Court of Justice adds that the precautionary principle «requires» «the authorities in question, in the particular context of the exercise of the powers conferred on them by the relevant rules, to take appropriate measures to prevent specific potential risks to public health, safety and the environment, by giving precedence to the requirements related to the protection of those interests over economic interests»⁹⁵. Thus, the principle is accompanied by positive obligations for Member States and the institutions of the European Union.

This book examines the preservation of biodiversity, preservation of the marine environment and exploitation of seabeds, and preservation of the marine environment and activities at sea. Beyond the legal frameworks of environmental liability, drawn up by Coastal States or the International Seabed Authority, we feel that marine protected areas (MPA) are iconic marine areas. The concept of marine protected areas was generalised by the Convention on Biological Diversity (CBD), the international treaty adopted during the Earth summit meeting in Rio de Janeiro in 1992, with three main objectives: the conservation of biodiversity, the sustainable use of its components and the fair and equitable sharing of benefits arising out of the utilization of genetic resources. This Convention recommends that specific measures be taken to protect particularly threatened marine and coastal areas, for which most regional conventions for the protection of the marine environment advise the creation of this sort of protection zone. Marine protected areas (MPAs) are delimited areas at sea to meet the objective of long-term protection of nature. It is now essential that the law provide the possibility to effectively link the delimitation of MPAs in both the EEZ and in the high sea.

⁹⁴ KERBRAT, Y., and MALJEAN-DUBOIS, S. (2011), «La Cour internationale de justice face aux enjeux de protection de l'environnement: réflexions critiques sur l'arrêt du 20 avril 2010, Usines de pâte à papier sur le fleuve Uruguay (Argentine c. Uruguay)», *RGDIP*, 39-75.

⁹⁵ Judgment of the Court of First Instance of the European Communities, *Solvay Pharmaceuticals BV v. Council of the European Union*, 21 October 2003, *European Court Reports* 2003 II-04555.

Marine protected areas should be seen as tools serving the sustainable management of the marine environment and coastal areas. By integrating all involved stakeholders, they define themselves as an area delimited to meet an objective of long-term protection of nature. This does not exclude controlled economic development, for which management measures are defined and implemented. Although the protection of species or habitats listed in the laws is common to all MPAs, each one has its specific end-purpose. The size of marine protected areas depends on the objectives they were created to achieve. Their form of governance, and more specifically the choice of stakeholders who will take part in decision-making, will depend on the local context and the project. Currently only 6.35% of the oceans are protected.

These marine protected areas must be delimited and regulated, either with no activities authorised or with limited activities. They must be managed and monitored; and prohibited and illegal activities there must be punished. Do the States in question have the means to manage this conservation of the marine environment or should they entrust this supervision and management to private foundations or to non-profit operators who are all the same involved in economic activity?

