
Transformations in International Law of the Sea: Governance of the “Space” or “Resources”?

1.1. Introductory remarks

In researching primary legal issues, and the legal instruments promoted by them enabling the governance of seas and oceans, the International Law of the Sea occupies an extremely important place. In both its ancient and current forms, it represents a foundation of rules and solutions utilized by States with coastal borders to impose maritime controls on marine waters. This Law of the Sea has almost wholly determined the current structure of administrative and legal divisions traced on the waters by governments and certain organizations. In this exercise, the concept of “marine spaces”, and especially of “marine spaces” to which Law of the Sea is applicable, has been essential. A very large portion of governments’ rights to act on the surface and beneath the seas depends on these spaces (section 1.2), and, most often, what is done with resources located in the seas (living or mineral resources) is also a result of them (section 1.3). The link between these two aspects must be explained, as they are increasingly intertwined. It is a transformation that involves considerable concerns regarding marine resources.

1.2. The importance of marine spaces in International Law of the sea

It is advantageous for us to define Law of the Sea, which determines the legal governance of seas and oceans, (section 1.2.1). This will help us to show the difference instilled between “marine” zones and “maritime” zones (section 1.2.2) and, whether it is public or private intervention on the seas and oceans that is intended, this slight difference is a fully operational one. The evolution of the Law of the Sea and the usages made of it by governments reveals the ongoing legal hold of coastal States over marine spaces; this is practised in various, rhizomatic forms – that is spread out and sometimes creeping, but in which the distance to the coast (via the legal concept of the “baseline”) remains an essential point, and the horizontal division of marine waters both under the jurisdiction of States or beyond it, a strong constant (section 1.2.3).

1.2.1. Definitions of International Law of the sea: a keystone of the governance of maritime spaces

The question of governance of maritime spaces cannot be set without a definition exercise. In a restricted sense, it is a set of institutions, legal rules and processes enabling the adoption of an institutional and legal framework for action, and then the development of related public or private interventions, on the delineated space. Despite its importance, the International Law of the Sea is often poorly defined, or defined by default by differentiating it from other, more sector-specific legal disciplines pertaining to activity at sea. It is related in particular to maritime law, a very ancient concept used in the past to address issues arising both from private laws having to do with maritime activity and international public law for marine activities [PON 97]. This has resulted in widespread (and quite understandable) confusion. Today, however, maritime law pertains mostly to the specific commercial activity of maritime shipping, and is defined as “all legal rules pertaining to navigation on the seas” [ROD 97] or as “all legal rules pertaining to private interests engaged at sea”¹ [SAL 01]. More rarely,

1 [SAL 01, p. 389].

some specialists attribute a broader definition to maritime law, seeing it, for example, as “all rules pertaining to the various relationships having to do with the utilization of the sea and the exploitation of its resources”² [LÓP 82a], or study it in parallel with International Law of the sea³. However, the two subjects are separate. The International Law of the Sea addresses seafaring activities in a more complete manner; these naturally include navigation, but from another angle, which can bring the two types of law together and render them complementary. The International Law of the Sea, widely referred to as such since the first Geneva Conference on the Law of the Sea in 1958, is more relevant to matters of governance of spaces at sea. With it, oceans and seas are not without legal rules and arguments; on the contrary, a field of law is specifically dedicated to them [DAU 03].

One of its definitions presents it as “all rules of International Law pertaining to the determination and subsequent status of maritime spaces, and pertaining to the system of activities framed by the marine environment”⁴ [SAL 01]. A more geopolitically oriented definition presents it as “Law regulating relations between States concerning the utilization of the sea and the exercise of their power over maritime spaces”⁵ [LÓP 82b]. Both of these definitions emphasize a *spatial* element that is highly determinative of the holding of rights by governments and of the exercise of these rights in relation to other governments.

The context of the Law of the Sea involves the pre-eminent position of the “State” in several senses. The central government is a favored subject in International Law, alongside the various international organizations in which this quality is recognized⁶ [DAI 02]. Because it is situated under the aegis of general International Law, the Law of the Sea obeys the same operating principles, those of an “international legal order” in which States remain vital actors but are very free for the creation of multilateral or bilateral legal rules. It results from this that the State is the vector of the rules making up a system of governance applied to its continental, applied to its continental or island territory, and to the marine spaces that are extensions of these

2 [LÓP 82a, p. 77 and s.], cited by Rodière, Pontavice [ROD 97].

3 See the highly exhaustive book by Beurier [BEU 14].

4 [SAL 01, p. 375].

5 [LÓP 82b, p. 49] cited by Rodière, Pontavice [ROD 97].

6 Daillet and Pellet refer more extensively on this point [DAI 02].

(adjacent maritime spaces). It is vector directly influenced by International Law or by its own inventiveness and (most often) within the limits of action permissible by written (conventional) or customary International Law. Outside of these marine the vector spaces under State control, concepts such as “right to fly flag and flag law” or recourse to “nationality” are all forms of extension – on the high seas – of the national Law of a State (or an institution such as the European Union (EU)) over often far-flung waters which are no longer linked by geographic proximity and legal bonds “of sovereignty” or “of jurisdiction” between the State and these marine spaces.

1.2.2. Marine spaces considered by law: the interest of qualifying maritime zones

All marine spaces, as far as they are able to be distributed, identified and described by life sciences or biogeography, for example, are not all spaces considered by law. The existence of seas and oceans is a fact that can be understood scientifically, but the existence of a Law of the Sea associated with these bodies of water does not necessarily follow from this. For this to occur, a shift is required between the term “marine zones” and the concept of “maritime zones”. In geographical terms, a “marine” or “maritime” zone – the terms are used almost interchangeably – may designate any part of the sea of some geographic sector in which a given activity takes place; this means that we see for example that gulfs, coastal areas, and shorelines are designated but without any legal consequence [LUC 03]⁷. When the desire or obligation for public intervention and regulation of an area of marine zones arises, legal definition exercises take place.

In legal terms, the concept of a “maritime zone” designates a marine zone or marine space to which a legal system is applicable. The legal term “maritime zone” is applicable only to marine spaces, each corresponding to its own legal system⁸ [LUC 03]. Thus, via various successive conventions and conferences on the Law of the Sea, a large number of maritime zones have been established by coastal States according to the legal marine spaces predefined in the conventions, of which the most recent and consequential was the United States Convention on the Law of the Sea (UNCLOS)⁹ of

7 According to Lucchini [LUC 03, p. 11].

8 According to Lucchini [LUC 03, p. 12].

9 United Nations Conference of the Law of the Sea.

December 10, 1982, sometimes also known as the Montego Bay Convention (MBC). In addition to common maritime zones which have now become relatively classic, such as internal waters¹⁰, territorial seas¹¹, contiguous zones¹², exclusive economic zone (EEZ)¹³, continental shelves¹⁴, high seas¹⁵ and the international zone of seabed called “the Area”, there are now maritime zones arising from the first zones and thus from least ambitious rights of establishment according to the legal adage “he who can do more can do less”, such as fishing zones, ecological protection zones (EPZs), and possibly integrated management coastal zones (IMCZs) [GHE 13], etc. To all this, we must also add specific configurations of marine spaces which the Law of the Sea has sanctioned and to which it has granted, subject to compliance with certain conditions, a legal status that gives rise to specific legal effects: islands¹⁶, bays¹⁷, straits¹⁸, international canals, low-tide elevations¹⁹, archipelagic waters²⁰, etc. (such as in the Philippines or Indonesia; see Figure 1.1). The definition of these marine spaces is not only a simple typology conveniently available for coastal States wishing to have them recognized or established for their own benefit; but, it is always accompanied by a legal system of rights and obligations regarding maritime zone x for the State concerned (coastal State, port State, flag-holding State, with adjacent coasts, etc.) [PAN 97]. These situations can be more complex; a double legal system can exist in one maritime space, with the typical case being that of territorial waters (or two adjoining territorial seas) containing a strait used for international navigation, such as the Strait of Bonifacio between France and Italy. If the analysis of spaces greatly affects the delimitation of fishing activity or navigation (two activities that are particularly highly developed and sanctioned in the Law of the Sea [LUC 90, LUC 96b]), the question of marine resources, their protection and their development also plays a role.

10 Art. 8 CNUDM.

11 Art. 2 and 4 CNUDM.

12 Art. 33 CNUDM.

13 Part V of the CNUDM, art. 54-75.

14 Art. 76 to 85 CNUDM.

15 Part VII CNUDM.

16 Art. 121 CNUDM.

17 Art. 10 CNUDM.

18 Part III, CNUDM.

19 Art. 13 CNUDM.

20 Art. 46-49 CNUDM.

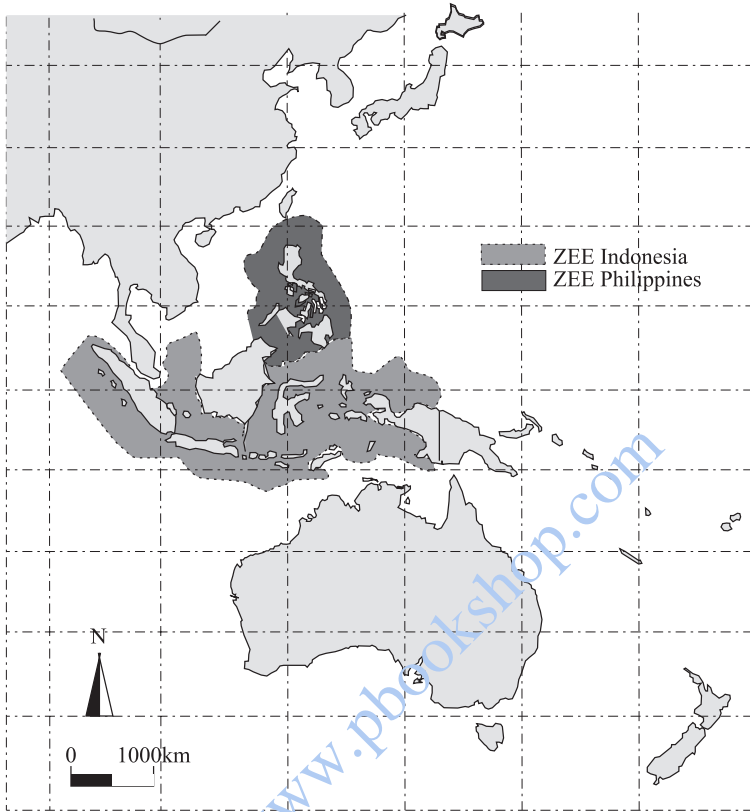


Figure 1.1. Archipelagic waters and exterior limits of the two EEZs of two archipelagic States in the sense of International Law of the Sea (Indonesia and the Philippines, 2013) (source: www.vliz.be, adapted from Thema Map software, 2012, <https://themamap.greyc.fr/>) (document does not presuppose any support for the claims of governments), from [GAL 15]

1.2.3. Development of legal control over certain marine spaces: a phenomenon both ancient and renewed

The Law of the Sea is a very ancient consideration, and a perennial discipline marked with key historic points. This historic link between the sea as a route of transport and the securitization of commercial activities was already present in the Roman period and is contained in the expression *Mare nostrum*; the end of the 15th Century saw intercessions centered on the sharing of the oceans (the 1494 Treaty of Tordesillas between Spain and Portugal, typically with an Atlantic partition), and spatial oppositions

between protagonists concerning access and use of the seas; first in the 16th Century with Spanish authors, and the burgeoning 17th Century has remained notorious for its famously controversial proclamation by James I, King of England, prohibiting access to the North Sea for foreign vessels (a recurring problem in English seas), which was greeted by two opposing doctrines on the possible appropriation of sea spaces and the applicability of prohibitions of this type, Hugo De Groot's "Mare Liberum" in 1609 and John Selden's "Mare Clausum" in 1635. Though it did not prevent control over areas quite distant from the coasts (for example, the 18th Century Hovering Acts in England), the principle of freedom of the seas has been triumphant in relative terms (all States were given the minimum right to navigate and trade, as described in Philip Meadows's 1689 treatise) since the late 17th Century and remains in effect even today, as it is applied to modern activities conducted by countries and their nationals on the seas (the six freedoms of the high seas).

The 20th Century was characterized by the affirmation of the sovereignty of States over spaces and natural resources located further and further away from the coasts, a trend first seen in matters of customs, or what we would qualify as customs today (for example, the Liquor Treaties of the United States in the early 20th Century), and then more generally beginning in 1937, and clearly used by States after 1945. In the United States, President Truman's proclamation on American policy concerning the resources of the soil and subsoil of the continental shelf and in territorial waters (known as the Truman Proclamation and dated September 28, 1945) represented a public declaration of the maritime control that national governments could have, express and exercise [APO 81]. This was taken up and furthered by regionalist expansionist doctrines, so to speak, including those of several South American States, beginning in 1947 and continuing today. With decolonization, marine space, with its exploitable resources and consequent ability to guarantee the economic development of new States, has become a strategic concern for both developing and developed countries [GAL 11]. The latter are witnessing a reduction in maritime zones not under the jurisdiction of a government, and consequently must both rethink legal relationships controlling access to these spaces that have now been taken over by others, and step up their own controls over marine spaces situated in such a way as to be extensions of their land territory. The view, however, inexact in a legal sense, that maritime expansion is simply an extension of maritime territories as a prolongation of a state's sovereignty over its continental land holdings [QUE 97] has been used to justify tendencies toward ever-widening control. This, for water columns,

involves an outside limit of a State's EEZ that has now reached 200 NM²¹ from the baseline and an of a State's EEZ outside limit of the continental shelf also set at 200 NM for general cases, barring (in a generalized manner) a request for extension of the continental shelf to 350 NM or even slightly more, in the event that certain geomorphological characteristics are present [TAS 13].

The appearance and development of interest in marine spaces beyond areas of national jurisdiction seem to be characteristic of the 21st Century so far; or perhaps it is more correct to say that the current century has reawakened them [DEM 09, MAR 14], particularly via questions regarding the effectiveness of collective governance measures undertaken for rezoning in maritime zones on the high seas for specific purposes (for example, fishery areas and the competence of institutions associated with this zoning and this sector of activity overall), or having to do with the opportunity for the evolution of the Law of the sea in order to enable the future creation of new maritime zones within the high seas (zoning for the purposes of environmental protection). Yet, this focus on marine spaces beyond jurisdiction zones originated in the 1970s, with the initiative introduced by Arvid Pardo in the United States to include on the agenda for the 22nd session of the UN General Assembly, the question of the peaceful use of seabeds and their exploitation outside jurisdiction zones (August 17, 1967). This was followed by a number of transformations: the creation of the "International seabed zone" called the Area, mandate of the International Seabed Agency²², responsible for regulating this zone (the ISA is headquartered in Jamaica) and the legal system governing these seabeds and activities of exploration and later of exploitation that went along with it. These changes are sometimes later criticized by authors and practitioners of law of exploitation of the sea because they are fairly remote from the philosophy of the conservation, protection and development of common heritage of humankind, which was upheld at the start but of which little remains today. However, they are all part of this heritage, in which the consideration of spatial elements has taken priority of place to the detriment of other factors.

21 One marine mile = 1,852 m = one nautical mile = 6,076 feet. Here, M. is used as an abbreviation for the marine mile used in marine maps. The abbreviation Nq is also used for nautical miles. French-language books on the Law of the Sea usually use the abbreviation M.M. (marine mile) and English-language books use N.M. (nautical mile).

22 ISA – International Seabed Authority.

1.2.4. Maritime zones near and far from coasts: a distinction established between systems of sovereignty and those of jurisdiction

1.2.4.1. Origins

The impossibility of establishing a single legal system for the oceans has led to a fragmentation of spaces. This situation, described both above and below, is in part the product of so-called “customary” International Law, but above all of the “conventional” International Law of the Sea. The conventional or written source, with the increase in international conventions and in the numbers of signatories to them, has supplanted the traditional source: in 2014, there were 166 States or organizations that had ratified or were adhering to the UNCLOS, for example. It remains the case that some States, and not the lesser ones in terms of their maritime capacity, still function for the most part under customary International Law (for example, the United States). The two sources of law have converged as a result of the effort made by written International Law to codify a number of practices and translate them into written provisions, and of efforts made in practice to comply with or move closer to the written provisions, which are becoming increasingly universal, pertaining to maritime zones, maritime delimitations, etc.

The process of codifying International Law was first undertaken in 1924 and continued by the Hague Conference in 1930. Subsequent benchmark events are well known; in the domain of the Law of the Sea and fishing, they occurred in 1958, 1960, 1973, 1982, 1994, etc., dates which correspond to the 1st United States Conference on the Law of the Sea, held from February 24 to April 27, 1958 in Geneva, and to the four associated international conventions signed on April 29, 1958: the 1958 Geneva Convention on Territorial Sea and Contiguous Zone (CTS)²³, the April 29, 1958 Geneva Conference on Fishing and the Conservation of Living Resources on the High Seas (CFCLR)²⁴, the 1958 Geneva Convention on the High Seas (CHS)²⁵ and the 1958 Geneva Convention on the Continental Shelf (CCS)²⁶. Subsequent dates correspond to the 2nd United States Conference on the Law

23 Entered into force on September 10, 1964.

24 Entered into force on March 20, 1966.

25 Entered into force on September 30, 1962.

26 Entered into force on June 10, 1964.

of the Sea, held from March 16 to April 26, 1960, and to the 3rd United Nations Conference on the Law of the Sea, the highly exhaustive work of which, lasting from 1973 to 1982, resulted after 9 years of exchanges between States in the United States Convention on the Law of the Sea of December 10, 1982 (UNCLOS), which did not become effective until November 16, 1994. This period from 1973 to 1982 corresponded to a rewriting of the Law of the Sea into a monumental text: the “Constitution of Oceans” (followed by related agreements). This shaped what has since usually been referred to as the “new Law of the Sea” [QUE 94].

1.2.4.2. Confirmation

This “new Law of the Sea”, which has been approved by a growing number of the world’s States, includes legal marine spaces [VIN 08] that have been rendered more uniform:

– concerning first coastal zones in the broad sense; these include “internal waters” and then “territorial sea” with a current maximum breadth of 12 NM, or 22.2 km, under the sovereign governance of a State. Sovereignty rights are attached to these two maritime zones and are recognized as belonging to coastal States; they include a wide range of powers allocated to governmental bodies competent in the maritime domain;

– possibly followed by the “contiguous zone”, the span of which toward the sea must not exceed 24 NM from the baseline²⁷, and, very commonly, the EEZ, the span of which toward the sea must not exceed 200 NM from the baseline (an EEZ must have a span – in the direction of the open sea – of 200 NM that is less than or equal to 370 km drawn from the baseline). These are the so-called waters “under jurisdiction”, subject to the recognized jurisdiction rights of coastal States. Fishing zones of x NM, ecological protection zones of x NM or zones of various appellations of x NM are thus incorporated into waters under jurisdiction, provided that they are situated outside the exterior limit of territorial waters and within a distance of less than 200 NM toward the open sea, measured from the baseline (Figure 1.2, in white). Here the challenges for coastal States in establishing and causing to be recognized a baseline²⁸ as far as possible from the coastline become

27 In the hypothetical event that territorial waters of 12 NM. remain 12 NM. maximum of open sea for a contiguous zone.

28 Baselines are addressed in the United Nations Convention on the Law of the sea (UNCLOS) in articles 5, 7, 14, 47, etc.

understandable, as this means so much maritime mileage gained in the direction of the open sea when the baseline diverges from the coastline;

– next comes the “high seas”. This zone, in the hypothetical event of maximum maritime control exercised by a coastal States, begins after the exterior limit of the EEZ, at more than 370 km from the baseline. However, in the hypothetical event of maritime control reduced to simple territorial waters with no other zone established by the States as an extension, the high seas may begin immediately at the outside limit of the territorial waters, thus beginning very near the coast; distances between the baseline and the start of the high seas can thus be variable depending on the configuration of maritime coasts and the expansionist desires of States;

– the “(legal) continental shelf”²⁹, which is a separate configuration from the water column, can be considered a legal marine space. It has been progressively acknowledge that this can be recognized for up to 200 NM, thus generating sovereignty rights for the States that holds it – but only up to this maximum of 200 NM. It is of little importance that the geomorphological continental shelf extends beyond these 200 NM. In reality, the legal continental shelf begins after the outside limit of a territorial sea/territorial waters, which goes back to the statement that the soil and subsoil of territorial waters, while forming the start of a geomorphological continental shelf, are not tied to the legal reasoning of the International Law of the Sea with regard to the legal continental shelf. This does not affect their fate because, since the soil and subsoil of territorial seas are in territorial waters, the State exercises incontestable sovereignty rights over them. Their legal system of internal law varies according to States³⁰. After territorial waters, the next part of the geomorphological shelf begins to be considered as the legal continental shelf, which initiates the application of the legal system of the continental shelf and the States’s sovereignty rights over this shelf. In the end, there is, therefore, no break in the treatment of this geomorphological continental shelf of between 0 and 200 NM in span, because a system of sovereignty rights is applicable, from the start to the outside legal limit of this shelf, but the same fundamental legal principles are not used.

29 The adjective is almost always omitted, but it is important for avoiding confusion with the geomorphological shelf.

30 In France, for example, the soil and subsoil of territorial seas constitute elements of the maritime public domain and are covered by the Law of the maritime public domain, while the marine waters of territorial seas do not form part of that domain.



Figure 1.2. View of territorial waters and EEZ (white) forming waters under sovereignty and under jurisdiction, as opposed to zones outside jurisdiction (light gray) (source: www.vliz.be, adapted from Thema Map software, 2012, <https://themamap.greyc.fr>). Document does not presuppose any support for the claims of governments, from [GAL 12]

A rarer situation is the one allowed by the new international Law of the Sea in which a state, or several states jointly, may request to extend its (or their) legal continental shelf to the outer edge of the continental margin (a geomorphological concept); that is up to 350 NM (= 648,200 km) measured from the baseline, or by 100 additional NM (= 185,200 km) calculated from the 2,500 m isobath linking all points situated at 2,500 m of depth. The system applied is still the one of sovereignty over the legal continental shelf. In the event of agreement granted by the Commission on the Limits of the Continental Shelf (CLCS) to several States following their joint request, all that remains for these States is to mark out among themselves the lateral portions of the shelf belonging to each of them.

1.2.4.3. Principles of more uniform outlines but with varying configurations

From the previous considerations, there results a marking-out of maritime spaces that is never exactly the same, if only because of the geography of coastlines and the skill needed to trace the baseline and to have this outline accepted by other States. It is chosen by the State, which remains free, but within the limits of the legal possibilities offered by current international Law of the Sea – as well as, importantly, the (geopolitical) risks arising from overly ambitious maritime claims. With regard to the definition of limits of

territorial waters, States have generally extended the limit of their territorial seas from 3 NM or 6 NM to 12 NM, not hesitating to take advantage of the possibilities offered by 20th Century Law of the Sea. The end of the old system of narrow territorial seas was planned, but exceptions remain; Greece has a territorial sea of only 6 NM, as does Turkey. With regard to the contiguous zone, almost 75 States have claimed an extension of 24 NM measured from the baseline, with this zoning composed of 12 NM of territorial waters and 12 NM of the contiguous zone. Other States have proven less ambitious, such as Venezuela, whose territorial waters and contiguous zone do not exceed 15 NM in total, while others have taken greater spans (for the contiguous zone) or represent specific cases (notably, North Korea, with its military strip of 50 NM). As for the marking-out of the high seas, this always begins at a minimum distance from the coastline which varies depending on whether a state does or does not desire maritime zones outside its territorial waters. Finally, certain differences are due to the geographical and legal constraints provided for by the Law of the Sea itself; this is the case for semi-enclosed seas [GAL 15a], distinguished from large oceanic spaces in the UNCLOS text (articles 122 and 123). In article 122, semi-enclosed seas are those “surrounded by several states and linked to another sea or to an ocean by a narrow passage, or composed entirely or in part of territorial waters and the zones of economic exclusivity of multiple States” (Figure 1.3).



Figure 1.3. *Semi-enclosed seas in the sense of article 122 of the UNCLOS (source: Méditerranée et mer Noire, adapted from Demis NL software, 2014, www.demis.nl). Document does not presuppose any support for the claims of governments*

In comparison to oceanic spaces adjoining the coasts of states that can claim them, here the particular characteristics of semi-enclosed seas have led to the consideration of legal systems better suited to the exercise of the competences of coastal States. Unilateral action on the sea by bordering states was allowed with increasingly frequency throughout the 20th Century. This has been combined with the idea of shared seas (which is not the sharing of seas). Sharing is not synonymous with appropriation that excludes use by others. In international texts, the idea of sharing has been maintained as a way of ensuring the freedom of a maximum number of users to develop activities. Today, sharing often means joint responsibility for deteriorations and for the instruments to be mobilized, two points underlying the International collaboration required from states and the ways in which they are required to participate in collective forms of marine resource management. Thus, cooperation between States is explicitly recommended by article 123: they “must cooperate with one another in the exercise of the rights and the execution of obligations belonging to them under the terms of the Convention”. In this context, bordering States and those with adjacent coasts have often limited themselves with regard to control, due to lack of space and in order not to relinquish the smallest share of space on the high seas. This attitude is in the process of changing, for example in the western Mediterranean, with the recent EEZ declared in 2012 by France and in 2013 by Spain [GAL 12], which have created significant legal problems (with regard to both the plotting of outlines and to rights) and are undoubtedly harbingers of an acceleration of this phenomenon, and the possibility of the disappearance of the high-seas maritime zone in the Mediterranean [ROS 12a]. This would be a revolution in the history of the theoretical conception and practice of the Law of the Sea; in the meantime, what is happening is a rebalancing, for the benefit of States bordering semi-enclosed seas, spatial situations inherited from the 3rd United States Conference (1973–1982) and encouraged by it, which marked “the triumph of the oceanic State” [LUC 84].

This approach of the Law of the Sea using maritime space and zoning is vital. It has been so historically (as it has provided an opportunity for numerous full point developments), pacifically (as it goes back to the origins of tension among States and has contributed to the resolution of disputes between States³¹), and above all in relation to the more environmental forms

31 Resolutions unremittingly pursued by the Law of the Sea under the aegis of the International Court of Justice (ICJ), the International Tribunal on the Law of the Sea (ITLOS), courts of arbitration and “temporary arrangements” between States.

of governance of activities at sea and to the consideration that will be given in future to marine ecosystems and marine resources.

1.3. Place accorded to resources located at sea in the International Law of the Sea

The question of natural resources is a difficult one to address in itself, somewhat like environmental law, the core of which is relatively easy to define but in which the difficulties begin when the outlines must be pinned down. This has to do with the variety of sea resources; the initial opposition in the Law of the Sea between mineral resources and living or biological resources constitutes the fundamental dichotomy (section 1.3.1). The challenges posed by the increasing scarcity of resources are conducive to detailing them. The analysis also becomes one of the intertwining of resources, even though they appear to be of the same nature. One trend in the analysis and evolution of law is to separate fishery resources from other living resources, or to differentiate – or even set against one another – targeted fishery resources from non-targeted species, or bycatch, resulting from an initial fishing operation (single-species or multi-species) conducted as part of a legally defined fishing activity (deep-water fishing, tuna halieutic, etc.). Catch from non-targeted species or bycatch may make up products derived from fishery products. Finally, the analysis is one of (supposed) ease of exploitation, with differentiations according to simple biological resources (for access, consumption or development) or complex ones such as genetic resources, and for all resources necessitating highly specialized techniques (for example, fishing in extremely deep water and techniques for exploration and the exploitation of non-living resources).

1.3.1. *Separate treatment for non-living marine resources and fished living marine resources*

One of the fundamental principles of the Law of the Sea is that it ensures the contribution to economic development of states bordering marine spaces and holding marine and coastal resources susceptible to appropriation. It is this principle that has legitimized the Law of the Sea – legal discipline – and which explains the fact that it was massively followed in the 20th Century. The productivist nature of this discipline of law is highly marked, as it enables multiple expansions, such as those of strategic EEZ, to control the

legal fate applied to pelagic and benthic resources in the water column and on the continental shelf. The advantage of this EEZ lies in the extension of territorial waters; the extent of the rights conferred on a coastal state by an EEZ is clear. The origin of the modern EEZ must not be forgotten. It began in the 1970s, spurred by two sources of pressure – one, the claim by seven Latin American States in favor of an exclusive exploitation zone of 200 NM (the Montevideo Declaration of 1970); and two, Kenya's claim in 1971 before the United States of an EEZ, which marked the first time this new zone was referred to as such.

By declaring an EEZ, a State obtains for itself rights of sovereignty and jurisdiction, but not for the same interventions. Rights of sovereignty are acquired for the management of biological and non-biological resources (conservation art. 61 UNCLOS and details of exploitation art. 62 UNCLOS are relevant) in a water mass and on the bottom of the seabed and subsoil of the sea and for activities of exploration and exploitation (including economic exploitation), based on the currents and tides in the declared EEZ. Rights of jurisdiction are acquired in order to build artificial islands (criminal and civil jurisdictions); to set up or position establishments for fishing or energy production; to enable scientific research; to protect the environment and to establish security zones. These rights are not only civil in nature, but also criminal when they are caused to be respected, and often administrative in matters of authorizing access to and use of the sea floor and subfloor.

Because of this, and without focusing on the EEZ alone, because the legal continental shelf also represents a source of development well understood by States, it has become usual to consider mineral and biological resources separately. They are not at all of the same nature, and the questions they evoke are strongly opposed (even though they are now often grouped together due to the environmental impact inflicted by the exploitation of one on the other). In addition, since the early 2000s, the search for legal and operational manifestations of sustainable development has separated them even further given that the prescriptions for sustainability for non-renewable and renewable natural resources are laid out very differently in International Law and the internal/national law of individual State.

1.3.1.1. *Consideration of certain living marine resources*

The UNCLOS includes a lengthy part XII devoted to biological renewable resources, entitled “Protection and preservation of the marine environment” (art. 192 to 237, UNCLOS), which has influenced the situation of these resources to an extent. However, this part XII is oriented mostly toward questions of multiform pollution (art. 194, 195, 196, 199, 204 to 234 virtually) rather than toward biological resources themselves. One section, “Part VII – Section II – Conservation and management of biological resources on the high seas” is dedicated to these biological resources, and its provisions cover various maritime zones, including the high-seas zone. To the “triumph of the coastal nationalism” [ROS 14]³² it sanctions, UNCLOS also emphasizes the responsibility of states in the management and future fate of marine biological resources. The rights and obligations of individual states in this management are hammered home, and collective and cooperative ways of managing certain marine resources are specified above and beyond the actions of one State alone.

An example of this may be seen in the text below, which is connected to the UNCLOS and considered an applicative text of it: “Agreement for the purposes of the application of the provisions of the United States Convention on the Law of the Sea of December 10, 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks³³”, from August 4, 1995 [MOM 95] and with an effective date of December 11, 2001. As of 2014, this accord had received 82 ratifications or cases of adherence.

In it, the legal obligation is mentioned to cooperate internationally or regionally by means of commissions and management organizations for certain halieutic activities and marine spaces located partially or wholly

32 [ROS 14, p. 871].

33 *The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of December 10, 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*. The title of this accord is often shortened to the “New York Accord of 1995 on straddling and highly migratory fish stocks”; the category of “highly migratory” fish includes: white albacore tuna (*Thunnus Alalunga*), red tuna (*Thunnus thynnus*), bigeye fatty tuna (*Bigeye tuna or patudo*), stripe-belly bonito (*Listao*), yellowfin tuna (*Thunnus albacares*), black tuna (*Thunnus afianticus*), skipjack tuna (two species), bluefin tuna (*Thunnus maccoyii*), frigate tuna (two species), sea bream (gray dorade), marlin (nine species), sailfish (two species), swordfish, saury, or balao (four species), coryphene or tropical dorade (two species), sharks (six species) and cetaceans (whales and porpoises: six species).

outside zones of water under national jurisdiction (art. 197, UNCLOS). This is both a remit and a request:

– directed toward institutions; all competent international organizations are concerned, on both the regional and global levels, mandated in the areas of fishing, marine environmental protection or even navigation and maritime security; regional fisheries management organizations (RFMOs) are naturally wholly concerned, whatever the spatial jurisdiction (extent) of their competences or the number of species for which they are responsible (single-species or multi-species competence, or for all species) and depending on the strength of the competences they hold, whether they cover one or more marine spaces;

– directed toward conventions and agreements, whether they have access to institutions for the application of its provisions or not. This call for contribution to the application of the rules of UNCLOS to the seas and oceans, including by means of other conventions dedicated to the marine environment, fishing activities or maritime law, shows the superiority of UNCLOS over other legal instruments, which should be understood as complementary to it. Thus, conventions and institutions (instituted before or after UNCLOS) must be in accordance with its spirit, a requirement that is not without difficulties in terms of consistency and cohabitation [IND 13], but it is also equivalent to a sort of general delegation of application, giving the impression that the new Law of the Sea between 1982 and recent years has minimized its involvement in the marine environmental governance of seas and oceans. A significant reawakening on this subject is in progress, with a sort of academic and practical rediscovery of the environmental potentialities of the UNCLOS text (320 articles) and the texts that have flowed it [AND 12, CAS 12].

1.3.1.2. Consideration of mineral marine resources and the international seabed

With regard to non-renewable resources, UNCLOS includes a long part XI entitled “The Zone” (art. 13 to 191, UNCLOS). The “Zone”, always written with a capital, is here an abbreviation for the International Seabottom Zone. Part XI begins with a definition (art. 133), according to which (1) “resources” are given to mean all *in situ* solid, liquid or gaseous mineral resources which, in the Zone, are found on seabeds or in their subsoil, including polymetallic nodules; (2) resources once extracted from the Zone are called “minerals”.

For countries, including some developing ones, the challenges of negotiations to create such a Zone legally and access it were double. On the one hand, it was necessary to allow access to mineral resources (ores, polymetallic nodules, cobaltiferous encrustations on underwater mountains and polymetallic sulfurs in volcanic areas, and oceanic ridges marked by hydrothermal processes) and their reservation; and, on the other hand, access to living resources, such as organisms located on hydrothermal sources and in deep-sea trenches with implications for genetic engineering. Beginning in 1967, the fundamental tenets of a legal system for the Zone and the exploitation of seabeds were established.

The meaning of a Zone such as this, initially created to reduce imbalances in conditions between states, support the less endowed and redistribute the wealth, has developed over time. This system, first based on the concept of the common heritage of mankind and the prevention of the appropriation of mineral resources by individual States, has been transformed. This has occurred through revised provisions (the Agreement of July 28, 1994, which prioritizes Part XI of UNCLOS); there are many authors who view this July 28, 1994 Agreement as a loss for developing countries of advances to their benefit, which promised them negotiations and disappeared from the final text. The adoption of this Agreement was accompanied by compromises making it possible to gather the number of signatories necessary for a text to become effective. Since 1994, the status of spaces *beneath* the high seas, situated beyond the 200 NM mark, has been considered in tandem with that of the Zone, with the International Seabed Authority (ISA) supervising and permitting prospecting activities for the future extraction of mineral, solid, liquid and gaseous resources. The controls provided by the Authority and the financial and technical constraints influencing the filing of requests have not prevented a competitive race to access and share these resources; this involves few requesting parties, but prospecting contracts have been signed since 2000 and their number is growing (in the Clarion-Clipperton fracture zone, for example, as well as the Indian Ocean). The “Enterprise”, a mechanism of the Authority, is permitted to operate on behalf of developing countries and Least Developed Countries (LDC), but except for these cases, the possibilities for LDC remain highly theoretical, since they are always difficult in terms of access to technological transfer, or simply given the current cost of submitting a case for examination by the ISA (approximately \$500,000 in 2014).

The most urgent question concerns compatibility between activities exploiting mineral resources and the protection of the marine environment. If

we look more closely at this issue, it becomes one involving the way in which the Authority can and will ensure that compatibility measures are taken regarding activities involving ores and the protection of the fragile and little-understood marine environment by operators and requesting parties. This assumes that this compatibility, mentioned in article 145 of UNCLOS, is even possible, which is in no way certain when exploration/extraction and conservation of living organisms must be organized on the same site. Compatibility with other activities carried out in the marine environment (art. 147 UNCLOS) (maritime traffic, etc.) is another form of the question, though a less difficult one. The fact that the ISA has a direct mandate only for mineral resources and not for living resources directly is a complication, and the lack of legal status of marine biodiversity as a whole, are also real pitfall.

This lack does not affect only the field of the exploitation of mineral resources and its immediate and localized environmental consequences. The whole issue of the protection of marine biodiversity is burdened by this lack of legal regulations; above all, it is the portion of these activities qualified as fishery resources that is currently bound by, and its extractions regulated by, fishing laws. Moreover, only a very small fraction of marine flora and fauna species are listed and protected under environmental law on the protection of species.

1.3.2. Biological resources at the heart of the overlap between environmental law, biological diversity law, the Law of the Sea and fishing law

Since the Convention on Biological Diversity (CBD) came into effect, biological or living resources have been understood from very specific modern legal points of view (section 1.3.2.1). These do not sit in great harmony with an aging Law of the Sea, though the environments and the management of activities belonging to it go progressively back to the center of the concerns of the modern Law of the Sea. The latter is indeed inevitable, given the dependence of marine resources on the spatial element, and the fact that their legal fate is increasingly determined by it, and the highly spatial character of the Law of the Sea, which remains an unavoidable component of the issue (section 1.3.2.2). This general legal context is also valid for a specific type of resources, fishery resources, and for the fishing activity it has overseen for many years (section 1.3.2.3).

1.3.2.1. *A biological or living resource treated from very specific perspectives*

It is customary to turn to classic instruments of International Environmental Law protecting regional zones, environments or species when a question of biological diversity arises in general, and when one concerning faunistic and floristic resources arises in particular. Successive environmental conventions and agreements have generated obligations and motivations (soft law) for the rational and sustainable management of living resources utilized by States and their citizens. The number of conventions signed and ratified bears witness to States' willingness to submit to a legalized organization of access to resources and to the legal processes applied to it. For the management of species, and later for their protection, some texts are quite old, such as the International Whaling Convention of December 2, 1946, or highly mediatized, such as the Convention on international trade in endangered species of wild flora and fauna of March 3, 1973 (CITES³⁴) and the Bonn Convention on migratory species of June 23, 1979³⁵ and the agreements resulting from it³⁶. Incontestably, the Convention on biological diversity, adopted following the Rio Conference in June 1992 and made effective very rapidly on December 29, 1993, has modified perspectives and relationships with regard to biological diversity. It shares the designation of universal convention with UNCLOS and boasts more signatory States than the latter (167 Parties for UNCLOS and 193 for CITES). Each of these has given rise to true progress with regard to the definition of terms vital to the standardization of public interventions in the space; with regard to the elements composing biological diversity³⁷; and with regard to the new questions that they pose. With the CBD, and especially the events that followed it (conferences among Parties to the CDB), the conservation of biological resources is becoming a global objective shared

34 175 States; it includes three appendices: appendix 1: species threatened with extinction or the effects of commerce; appendix 2: species that may become endangered due to commerce; appendix 3: species declared by one of the parties to be subject to regulation in order to prevent or reduce exploitation.

35 110 States.

36 Example: ASCOBANS Cetaceans: Agreement on the protection of small cetaceans in the Baltic and North Seas (March 17, 1992); ACCOBAMS Cetaceans: Agreement on the protection of cetaceans in the Black and Mediterranean Seas and the adjacent Atlantic zone (1996).

37 Biological diversity: "variability of living organisms of all origins, including terrestrial, marine, and aquatic ecosystems, and the ecological complexes of which they are a part; this includes diversity within species and between species as well as that of ecosystems", art. 2 CDB.

by all countries that hold, supply or explore for biological resources. The CBD, which became effective before the UNCLOS, initially refrained from extending its competence to areas outside the jurisdiction of individual States except in specific hypothetical cases [PRO 07], but in recent years it has continuously placed this question at the center of legal forums and advances to be made. The CBD pursues three principal objectives: the conservation of biological diversity at the national and international levels in order to halt the decline of biological diversity as a whole; the sustainable utilization of its elements; and the fair and equitable sharing of the benefits resulting from the utilization of biological resources, particularly in genetics. Since 2010, multiple subobjectives have been introduced during conferences among parties to the CBD, but they are simply offshoots of these three initial objectives.

In reality, the text of the CBD, on which so many expectations – often very general ones – rest, is intended for the very precise and complex organization of a set of incentives and then legal obligations around access to biological resources and around compensation for this access. To achieve this, the CBD relies on two tools: contract Law with its reciprocal obligations for both parties, which is well suited for redesign; and intellectual property rights (IPRs). The first tool has not yet been perfected, and remains limited in practice, while the second tool has an uncertain future due to the significant arguments opposing it based on the ability to patent a living thing, the protection of inventors' rights, the fair remuneration of provider states, etc. – bearing in mind that IPR, as well as all legal treatment of biodiversity, falls under the multilateral system of trade and commerce organized by the World Trade Organization (WTO), and must come up against it. Moreover, the prevention of conducting trade and the assurance of the most fluid traffic possible of natural resources are impossible except in quite exceptional cases requiring extensive verification before the Dispute Settlement Body (DSB) of the WTO in the event of conflict between States involving these preventions and barriers to the exportation/importation of products. Sea products are subject, like others, to these requirements of International Economic Law.

1.3.2.2. Recurrence of the dependence of marine “resources” on the spatial element

How can the fact be explained that the legal consideration of natural resources remains so dependent on the space in which it is found or that

holds it? The legal discipline composed of various subjects (Law of the sea, coastal Law, environmental Law, public economic Law, etc.) and their subdivisions (such as the very recent biological diversity Law incorporated into environmental Law, of which it is only a small part, and International fishing Law, which is part of the larger international Law of the sea, etc.) has chosen not to address biological diversity head-on, or in all its aspects. The reaction is not uniform. Law responds to the diversity of biological resources composing it with a variety of legal systems applicable to one type of biological resources and not another. In general, major types of biological resources (for example, “marine” biological resources as opposed to forest biological resources), provided that they have been identified by law (existence of a text defining the “biological” resource, whether it is fishery, genetic, etc.), are distinguished by the possible utilizations that may be made of them: marine resources become “fishery resources” because they are extracted as part of fishing activities for commercialization; other marine resources become “genetic” because they are researched and utilized for pharmaceutical purposes, etc.

At the outset, the principle – taken from International Law – of “the sovereignty of the state over its natural resources” is applicable to natural biological and mineral resources (the state has rights of collection, use, management, destruction, commercialization and control of activities conducted around the biological resource). It possesses them without having to claim them, and it is the state which, via its own internal law, decides whether or not to organize and allow private appropriation (establishment of a system of public or private ownership of these resources on national territory; conditions of compensation in the event of damage to these resources, etc.). However, on the basis of this principle of the sovereignty of a state over its natural resources, which is mentioned in article 193 of UNCLOS, a variety of legal systems have been dedicated to certain resources, leaving others in total or relative legal escheat.

We have also previously seen how the space-distance element at sea determines the legal system of zones and volumes. Faced with marine biological resources in a maritime territory that is divided into several dimensions, the important and recurring question becomes: what is the location of the marine resource and what is the catch location of this marine resource? The fact that the marine resource, or the conflict involving it, is

located in territorial waters, a zone of economic exclusivity, on the high seas, or elsewhere, changes both reasoning and treatment. Based on this, marine fishery resources will be subject to a legal system taken from national legislation in matters of fishing (for waters under the sovereignty and jurisdiction of that state) and the prescriptions of International Law in this domain – not to mention, for those belonging to an institution such as the EU, the fishing laws of the EU concerning communal waters belonging to the Member States, or even concerning non-communal waters in which it is desired that European nationals comply with the legal standards set by the EU (high-level standards, or those presented as such). The case of regional fishing organizations (ORGP) participates in the same idea, if we consider the competences they have been granted over functional marine spaces (the perimeters of their competences and control), and the application of the measures they decree when needed. On this basis, it is still advisable to distinguish among the fishery resources listed; those that are more pelagic; those that are highly mobile; and the place where they are located and fished, or the sites they traverse (highly migratory stocks and straddling stocks, which were distinguished by the accord of August 4, 1995, which is as much a part of fishing law as it is of the new Law of the Sea, of which it is an application). The resources listed contrast with forgotten resources, as some of them may be forgotten or ignored by the Laws in effect. If these developments fully overlap with the Law of the sea, reasoning goes well beyond it. For example, taking the case of the collection of genetic resources referred to as *ex situ* (outside of their environment), the preliminary question continues to be: what is the place of origin of the resource, and when did collection occur? Legal treatments will thus vary depending on whether collection took place before or after December 29, 1993, the effective date of the CBD, which introduced new rules.

1.3.2.3. *Fishery resources and fishing rights*

Apart from certain species of marine mammals (art. 65 UNCLOS), resources consisting of so-called anadromous species³⁸ (art. 66), catadromous species³⁹ (art. 67), fish stocks found in the EEZ of multiple

38 Species that reproduce in freshwaters and migrate toward waters or pass through waters located on the outer limits of the exclusive economic zone of a State other than the country of origin, such as salmon.

39 Species with sea reproduction that spend most of their life in freshwaters of a coastal nation and migrate through the zone of economic exclusivity of another country (eels, for example).

coastal States or simultaneously in the EEZ and in an area adjacent to the zone (straddling stocks⁴⁰) (art. 63), highly migratory species (art. 64), and sedentary species of the continental shelf are expressly mentioned (art. 68). The rest of the species are included in references to biological resources. There are thus none of the additional specifications used by naturalists to describe benthic⁴¹, demersal⁴² and pelagic⁴³ [CUR 11] resources and which form, with numerous categories, marine biological diversity.

Fishing zones falling under the Law of the Sea and Fishing range from rivers to inland waters, and from territorial waters to the high seas and the International seabed Zone in the case of resources on oceanic ridges, hydrothermal hydrothermal vents, etc.

Only some of the trends in the international regulation of marine fisheries [BEE 06, ORE 99, VIG 00] will be discussed here. We will neither touch on spaces located in territorial seas, nor those centered on coasts. However, because large numbers of states have established EEZ (around 100 States possess a 200 NM EEZ) in order to ensure fishery exploitation directly or indirectly (exploitation by others according to systems of fishing agreements and licenses, etc.), it has become usual to address and debate mainly spaces formed by waters under jurisdiction and the legal problems pertaining to them. Moreover, it is the law of high-seas fishing (the law in effect *beyond* waters under national jurisdiction) that has evolved the most, and has been discussed greatly in recent publications and debates.

The legal high seas are still characterized by freedom of fishing on the high seas; this is an ancient principle that persists and recognizes the equality of fishing States in terms of both rights and duties, and the equality of flag states and waterside/coastal states. However, it is a principle that has now been reduced, first by the shrinking of the legal “high seas” area, which covers 64% of the ocean surface, in comparison to the 36% covered by “waters under jurisdiction” (see Figure 1.2 for a visual representation of these surfaces). It also cites a freedom that must be questioned. This freedom

40 Halibut, cod and tuna, for example.

41 Species living on the seabed and feeding from the substrate.

42 Species living near the seabed and not far from the coasts and which feed from the seabed or near it (for example, hake).

43 Species living in the surface water layer of oceans (including sardines, anchovies, plankton, etc.).

on the high seas was declared at the same time as its principle was proclaimed, as clearly shown by the texts:

– if we look at the Geneva Conference of April 29, 1958 on fishing and the conservation of biological resources on the high seas, article 1 states that: “All states have the right for their nationals to fish on the high seas”, but expressly taking into account “the interests and rights of coastal states” and “provisions concerning the conservation of biological resources”;

– if we look at article 116 of the UNCLOS of December 10, 1982, the right to fish on the high seas is given subject to the rights, obligations and interests of coastal states in matters of “marine mammals”, particular species (“anadromous” and “catadromous” fish), “straddling fish stocks” and “highly migratory species”, and prevalence is given to RFMOs. States are thus not so free anymore, and its nationals are not either in the face of the historic development of RFMO. This development is a measurable fact, and regional organizations are able to engage in three principal forms of intervention: scientific research; the creation of regulations and measures for fishing; and the possible power of proclaiming fishing bans [BEE 06].

At the same time, articles 117 and following of UNCLOS recall the obligations placed on fishing states in order to ensure the best conservation of species being fished. Some countries interpret these articles “flexibly”; hence the reappearance of the coastal state and its special interests, including on the high seas adjacent to its EEZ, and going so far as the subtle encroaching of the EEZ on the high seas, as the country establishes a presence there to protect the said resources; these attitudes are qualified as creeping or reasoned jurisdiction according to the “presence at sea” doctrine, and are used by some states⁴⁴, including when an RFMO holds competence in the high-seas zone concerned. Some States carry out police operations on the high seas in the International fishing organization zone, such as Canada, for species of straddling demersal fish in the zone belonging to the Northwest Atlantic Fisheries Organization (NAFO). However, fishers and boats may come from the flag State, and thus be submitted to its law. Here again, we may note the increased responsibilities placed on the flag State (both on the fisher State, or on the State allowing fishing to fishermens or

44 Chile for the common and associated species present in the EEZ of Chile; Argentina for straddling demersal fish and species in the food chain of the species of the EEZ; Russia for the isolated high seas – the Sea of Okhotsk Peanut Hole – in particular a moratorium on yellow spaces, etc.

fishing vessels of other nationality, etc.). The fishing police (officers and Fisheries and Ocean policies enforcement), operating under a flag State, may operate on waters near the flag State's land territory, as well as in waters very far from it (Distant Water Fishing Nationals – DWFNs).

International fishing law has developed significantly since the 1990s, particularly through the impetus of the Food and Agriculture Organization of the United States (FAO). Multiple legal acts, in the form of International conventions, treaties and agreements have been concluded for certain parts of the world, targeting various forms of fishing activity. After the 1984 FAO World Conference on fisheries management and development in Rome, the last decade of the 20th Century was characterized by the search for agreements or instruments of a new type, attempting to generate centrifugal force rather than recognizing additional national desires. This was an effort to bring together the interventions of governing bodies in a marine space that was less high traffic in terms of usages and legislations, and thus the choice fell fatally on marine spaces legally characterized as “high seas”. The current challenge is to continue to regulate the treatment there of natural resources moving through these spaces (migratory or straddling fish stocks), or living in them (species localized around sites in the high seas or in the international seabed zone). International initiatives expressed in the legal texts in effect have been a primary argument in favor of acting for states, and a goad to act more quickly. It is in the interest of all of these parties to refer first and foremost to the text of the 1999 FAO code of conduct for responsible fishing, approved by a 4/95 resolution of the October 31, 1995 FAO Conference and with an effective date of December 11, 2001, or to the New York agreement on straddling and highly migratory fish stocks, of the November 24, 1993 FAO agreement of November 24, 1993, effective as of April 24, 2003, aimed at promoting the compliance by high-seas fishing vessels with International conservation and management measures, or to International directives on targeted fisheries and the fight against bycatch of 2010, those on the management of deep-sea fishing on the high seas adopted on August 29, 2008 following a series of FAO technical consultation, and the voluntary ones for the conduct of flag states of February 8, 2013, etc.

These FAO directives, which often appear following advances in industrial technology or new fishing techniques, or following difficulties of definition, such as for deep-water fishing [BES 12], or for illegal, unreported, unregulated (IUU) fishing, and the best knowledge of the effects

and scope of these activities, for example, represents a reference suggesting to States, or to regional fishing management organizations, the formulation, enactment and implementation of management measures, such as: protection of species or habitats; consideration of secondary harvesting; information on risks; data collection processes; use of management instruments as in the development of other fisheries; and propositions for regulatory or legislative measures for management alongside traditional technical, engineering or even economic measures applied to the activity. These directives are not mandatory in legal terms, but compliance with them is recommended and encouraged.

The question of unauthorized fishing, which has been referred to as illegal, unreported, unregulated fishery (IUU) fishing⁴⁵, was addressed as early as the 1970s, mostly in EEZ. The term “IUU” was first mentioned officially for the first time during the meeting of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) in 1997, and then addressed in the UN Secretary General’s report on the oceans and the Law of the sea in 1999, followed by the adoption by the UN General Assembly of a 1999 54/32 resolution including references to the fight against IUU fishing. This was followed by the FAO international plan of action aimed at preventing, forestalling and eliminating IUU fishing (IPA-IUU) of 2001. Three FAO plans on other fishery subjects preceded the 2001 plan (plan for management of fishing capacity, for sharks and for accidental captures of birds by long-line fishing boats between 1999 and 2001). As noted by Leroy [LER 14], this IUU fishing goes back to three different forms of fishing activity involving biological resources, which is important to define clearly [LER 14, ROS 12b]. First, illegal fishing: carried out by national or foreign vessels in waters placed under the jurisdiction of a given state without the authorization of that state, or in contravention of its laws and regulations (for example, fishing equipment, net size, area fished, species, etc.); or by vessels flying the flags of States that are part of a competent RFMO, but which are in infringement of conservation and management measures adopted by this organization, or of national laws or international obligations, including those contractually agreed to by States simply cooperating with a competent RFMO. Next, unreported fishing, which refers to activities that have not been declared to the national authority or competent regional organization, or which have been conducted in a deceptive manner. Finally, unregulated fishing, which includes fishing activities carried out by

45 Illegal, unreported, unregulated fishery.

vessels with no national affiliation or flying the flag of a country that is not part of the regional organization responsible for the fishing zone or species in question.

In the debate over the difficulties affecting RFMO, analyses are not systematically interchangeable or reproducible; single-species RFMOs, for example, are not equivalent to tuna-fishing RFMO⁴⁶, or to RFMO controlling a wide range of fishery resources. Tuna-fishing organizations have been extensively studied and evaluated in comparison with others, due to the economic importance of tuna-fishing industries. However, the difficulties analyzed and the solutions discussed in the context of their activities remain proper to them.

1.3.3. Indirect treatment of resources through ecosystem quality conservation policies

The taking into account of the protection of marine environments is not as recent as the United States media campaigns of the 21st Century would have us believe⁴⁷. Before specific works oriented toward marine biological diversity and the ecosystemic conditions of its maintenance, or toward environmental governance, committed to by the UN Secretary-General, UN institutions, regional commissions of the United States Environment Program, their associated institutional partners, governing bodies and their administrators, and nature protection institutions, it was – internationally

46 Tuna fisheries: Indian Ocean Tuna Commission (IOTC); West Indian Ocean Tuna Fisheries Organization (WIOFO); Commission for the conservation of Southern Bluefin Tuna (CCSBT); Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and central Pacific (WCPOF), etc. Specific species: North Atlantic Salmon Conservation Organization (NASCO); Pacific Commission on Salmon (PCS); North Pacific Anadromous Fish Commission (NPAFC); International Whaling Commission (IWC); etc. Multiple species: Sub-Regional Fisheries Commission (SRFC), an intergovernmental organization created on March 29, 1985 by convention, with seven member states: Cape Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal, Sierra Leone; Regional Fisheries Committee for the Gulf of Guinea (COREP); Southeast Atlantic Fisheries Organization (SEAFO); the International Council for the Exploration of the Sea (ICES) (fish stocks in the northeast Atlantic particularly); Center-East Committee for Atlantic Fishing (CECAF); Latin American Organization for the Development of Fishing (OLDEPESCA), etc.

47 Annual reports of the UN Secretary-General “Oceans and the Law of the Sea”, “Seas and Oceans” resolution of the UN AG, “Global Conference on the Oceans”, “2012 Pact for the Oceans”, “Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction”.

speaking – the United States Conference on the Environment and Development (UNCED) in June 1992 that resulted in the Rio declaration on the environment and development, Agenda 21 – Chapter 17, Oceans – Seas and Coastlines – 1992. More precisely, from a historical point of view, the UNEP program for regional seas has played this role since 1974. This legal system of mobilization for regional seas (18 currently) has given rise – to name only three – to the Abidjan Convention on cooperation for the protection and development of the marine environment and “West and Central African” coastal zones (1981); the Nairobi Convention for the States of East Africa and the Indian Ocean⁴⁸ (1985); and the Barcelona system for the Mediterranean Sea, developed through the Convention on the protection of the marine environment and the Mediterranean coastline⁴⁹ and its seven protocols⁵⁰, for example. The case of the Mediterranean is considered to be a very successful one, as the high-seas environment in this regional sea can be legally protected, due to the Protocol relative to specially protected areas and biological diversity that has been in effect since late 1999. A SPA/BD zone may include portions of waters under jurisdiction and portions of the high seas. This system of regional seas is associated with partner conventions of the UNEP program for regional seas (the Convention for the Protection of the Marine Environment in the Baltic Sea Area, HELCOM⁵¹, and its five attachments; the Convention for the Protection of the Marine Environment of the Northeast Atlantic, OSPAR (Oslo-Paris) of 1992, and its five attachments⁵², the Bonn Agreement⁵³ for cooperation in the fight against pollution by hydrocarbons and other dangerous substances in the North Sea), and independent conventions: the Convention on the Conservation of Marine Flora and Fauna of the Antarctic (CCFFMA) of May 20, 1980 for an oceanic space, and the Convention for the Protection of

48 South Africa, Comoros, Reunion, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia and Tanzania. Followed by other acts, the Arusha Resolution on the integrated management of coastal and island areas in eastern Africa (1993), Mahé Declaration (Seychelles) (1996), etc.

49 February 16, 1976, revised on June 10, 1995.

50 Including the most recent integrated management protocol for coastal zones in the Mediterranean Sea, effective in 2012.

51 1974 and 1992, bringing together 10 coastal nations of the European Community, which became the European Union.

52 OSPAR Appendix 1: telluric, OSPAR Appendix 2: pollution prevention via incineration and immersion, OSPAR Appendix 3: polluting activities offshore; OSPAR Appendix 4: marine ecological assessment; OSPAR Appendix 5: protection and conservation of BD and restoration of marine zones.

53 1979, 1983.

the Environment of the Caspian Sea of 2003, bringing together the five States bordering that sea, which is also an inland sea (the Law of the Sea is not applicable to inland seas). If we add to this the action plans of commissions and other international or regional institutions, and the major integrated national marine strategies of States, as well as the development and concretization of European maritime policy, it is necessary to address the indirect treatment of resources, which is done through policies aimed at preserving the quality of ecosystems, which rely on specific and operational zoning with appellations different from those of the classic spaces of the Law of the sea, but incorporate or accommodate them. Among these are:

- maritime zones created under the aegis of the EU, with operational spaces to apply the legal instruments of European-derived Law (European directives and regulations): the space of the four marine subregions of the EU for the application of the Marine Strategy Framework Directive (MSFD) *Directive stratégique cadre pour le Milieu marin* (DSCMM) of 2008, for example; the redivision of zoning related to the definition of coastal waters and marine waters of the member states of the EU; the common waters space, etc.;

- maritime zones created under the influence of international environmental law and maritime security; protected marine areas (PMAs) under various legal appellations and statutes; Ramsar zones from the RAMSAR Convention of 1971 on wetlands of international importance; particularly protected sensitive areas (PPSAs)⁵⁴ of the International Maritime Organization (IMO) since 2005; vulnerable marine ecosystems (VMEs) of the FAO, etc.;

- quite recently, but not yet constitutive of functional spaces: the recent ecologically or biologically significant areas/zones (EBSAs), resulting from the 11th meeting of the Conference of Parties (COP) 11 of CBD at Hyderabad in October 2012.

One explanation for the multiplication of these new zoned areas may be technical; they would be more conducive for experimentation with the sectorial policies requiring them.

One of the main ecological objections raised is the overly static character of the protection areas established for coastal or benthic environments and the relatively deskbound resources allocated to them [GAL 14], it being understood that these zones are placed within waters or continental shelves under sovereign

54 OMI, Resolution A.982 (24) Revised guidelines for the identification and designation of Particularly Sensitive Sea Areas of December 1, 2005.

governance or within waters under jurisdiction. For pelagic environments, a series of measures of fishing management, limited to a sector of activity, a technique or an area of application, and always limited in time, exists within many zones intended to support various fisheries, it being understood that, here again, they are placed between the coast and the inner limit of an EEZ, and that they are combined (or sometimes absorbed) in PMAs. However, some types of measures have also been instituted in zones on the high seas in the form of fisheries restricted areas, but they do not benefit from the legal status granted to a PMA in the strict sense of the term. The acceptability of restrictions for States other than those which have agreed to the establishment of these areas of restriction continues to be a highly problematic issue, and weakens these efforts at conservation. Using the term “pelagic PMA” to qualify these areas would, therefore, be incorrect. Some authors argue, however, that they would be forms of PMA, since they contribute to some part of fisheries policing [CAZ 12].

It remains the case that, in order to be necessary and even vital, these changes of scale, for example, from individual PMA to networks of PMA, or from microlocalized protections to the legal protection of vast marine ecological networks that are ecologically connected, composed of marine biological corridors and key habitats for species, distributed throughout seas and coasts, are facing difficulties related to classic law of the sea to usual and classical Law of the Sea and financial constraints for public environmental action [GAL 14, GAL 15].

Developments have been in discussion by the United States since 2004 among authors, with the hope of moving forward with these questions of protection beyond zones under jurisdiction [DEM 09], as well as the details of changes to be made to the Law of the Sea: amendments to UNCLOS; new texts to be applied in the form of an agreement (for example, one which would make it possible to establish marine areas on the high seas); regional experimentations with legal acts that would precede the reform of general International Law, etc. More specifically, between January 20 and 23, 2015, the third meeting of the “Ad Hoc Open-ended Informal Working Group” which is a working group of the United Nations was held to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction of States. Here, it was decided⁵⁵ to

55 Recommendations of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction to the 69th session of the General Assembly January 23, 2015.

develop a legally restrictive international instrument that would make it possible to act on these areas beyond national jurisdiction (ABNJ⁵⁶). A preparatory committee, charged with making the principal recommendations to the United States General Assembly (UNGA) on the text project, will begin work in 2016 to complete its suggestions by the end of 2017 and the seventy-second session⁵⁷ of the UNGA. These recommendations by the preparatory committee will address four themes identified in 2011: marine genetic resources, including those having to do with the sharing of benefits resulting from their exploitation; instruments for the management of ABNJ zones, including PMAs on the high seas; assessments of the impact on the environment of the high seas; and the strengthening of capacities, including the transfer of marine technology. The seventy-second session of the General Assembly may then summon an intergovernmental conference under the auspices of the United States in order to propose an International legal accord. This procedure is not considered to constitute a questioning of pre-existing legal instruments, or of current global, regional and sectorial frameworks, including some described in this chapter. This is why there is no question here of revolution; rather, it is a matter of very considerable progress in terms of principles. In the end, it is the states that are party to UNCLOS; states that are not signatories but have an interest in this question; members of specialized agencies and certain observers, and any resulting accords or arrangements that will reveal the extent of the true possibilities of such a text.

1.4. Conclusion

The Law of the Sea attempts to provide solutions that are “preventive in order to avoid the emergence of a conflict, and curative if a conflict does occur, in order to resolve this conflict temporarily or definitively” [GAL 11]. It has always prioritized spaces and controls, though it has dedicated itself a great deal to fishing activities. In an increasingly strained geopolitical atmosphere regarding natural resources, the risk of conflict has recurred in a permanent manner, or at least that seems to be the case. For example, it is likely that climatic changes are rendering the high seas less favorable for the fishing of tuna species, which have been widely trawled, and that tuna resources have been moving differently since the redistribution of the EEZs

56 Areas beyond national jurisdiction, or ANBJ.

57 2014 marked the 69th session of the General Assembly of the United Nations.

of states and on the high seas known before now (the Indian Ocean may be particularly affected according to various scenarios), which threatens halieutic profits, changes the exploitation and control capacities of the countries concerned and of regional fishing organizations; challenges legal and economic arrangements between coastal States affected; and will require a modification of the forms of fishing agreements agreed upon between states and foreign fleets [GAL 15]. It will be advisable to know how to change from control to management, to use the words of Professor Lucchini [LUC 82], and to the management of activities impacting marine natural resources, if it proves impossible to manage marine species freely – a self-evident fact that is often forgotten.

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