ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών
ΙΔΡΥΘΕΝ ΤΟ 1837

ΝΟΜΙΚΗ ΣΧΟΛΗ

ΕΝΙΑΙΟ ΠΡΟΓΡΑΜΜΑ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ
ΚΑΤΕΥΘΥΝΣΗ: **ΔΗΜΟΣΙΟΥ ΔΙΕΘΝΟΥΣ ΔΙΚΑΙΟΥ**
ΠΑΝΕΠΙΣΤΗΜΙΑΚΟ ΕΤΟΣ: **2017-2018**

ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

Του Θεμιστοκλή Καρβουνίδη

Α.Μ.: 7340011917007

"Marine Protected Areas (MPAs) in Areas Beyond National Jurisdiction"

Τριμελής Επιτροπή:
1) Λέκτορας Αναστάσιος Γουργουρίνης (επιβλέπων)
2) Επίκουρος Καθηγητής Γεώργιος Κυριακόπουλος
3) Καθηγήτρια Φωτεινή Παζαρτζή

Αθήνα, Νοέμβριος 2018

Acknowledgements

I would like to specially thank Associate Professor Maria Gavouneli, Lecturer Anastasios Gourgourinis, Assistant Professor George Kiriakopoulos and Professor Photini Pazartzi, all teaching in the University of Athens, as well as Dr. Efthimios Papastavridis, Fellow of Athens Public International Law Center (University of Athens), for their contribution in the writing of this thesis.

TABLE OF CONTENTS

List of Abbreviations

ABMT	Area-based Management Tool
ABNJ	Areas Beyond National Jurisdiction
APEI	Areas of Particular Environmental Interest
APM	Associated Protective Measures
ASMA	Antarctic Specially Managed Areas
ASOC	Antarctic and Southern Ocean Coalition
ASPA	Antarctic Specially Protected Areas
ATCM	Antarctic Treaty Consultative Meeting
ATS	Antarctic Treaty System
BBNJ	Biodiversity Beyond National Jurisdiction
CAMLR	Convention on the Conservation of Antarctic Marine Living
CBD	Convention on the Biological Diversity
CCAMLR	Commission on the Conservation of Antarctic Marine Living Resources
CMM	Conservation and Management Measure
CDEM standards	Construction, Design, Equipment, Manning standards
CEP	Committee on Environmental Protection (Antarctic Treaty)
CITES	Washington Convention on International Trade in Endangered Of Wild Flora and Fauna
CLCS	Commission on the Limits of the Continental Shelf
CMS	Convention on the Conservation of the Migratory Species and Wild Animals
COFI	Commission on Fisheries (FAO)
COLREG	Convention on the International Regulations for Preventing Collisions at Sea
COP	Conference of the Parties
CPPS	Comisión Permanente del Pacifico Sur
CROP	Council of Regional Organizations of Pacific
EBSA	Ecologically or Biologically Significant Areas
ECJ	European Court of Justice
ECS	Extended Continental Shelf
EEZ	Exclusive Economic Zone

FAO	Food and Agriculture Organization
FFA	Forum Fisheries Agency
FRA	Fisheries Restricted Areas
GEF	Global Environmental Facility
GFCM	General Fisheries Commission for the Mediterranean
ICCAT	International Commission for the Conservation of the Atlantic Tuna
ICES	International Council for the Exploration of the Ocean
ICJ	International Court of Justice
IMLI	International Maritime Law Institute
IMO	International Maritime Organization
ITLOS	International Tribunal for the Law of the Sea
IUCN	International Union for the Conservation of Nature
IUU	Illegal, Unregulated and Unreported (fishing)
MAP	Mediterranean Action Plan
MARPOL	International Convention for the Prevention of Pollution from Ships
MEPC	Marine Environment Protection Committee
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
NAFO	North-west Atlantic Fisheries Organization
NEAFC	North-East Atlantic Fisheries Commission
NGO	Non-Governmental Organization
OILPOL	International Convention for the Prevention of Pollution of the Sea by Oil
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
PCA	Permanent Court of Arbitration
PICTs	Pacific Island Countries and Territories
PIF	Pacific Island Forum
PNA	Parties to the Nauru Agreement
PrepCom	Preparatory Committee
PROG	Partnership for Regional Ocean Governance
PSSAs	Particularly Sensitive Sea Areas

RFMO	Regional Fisheries Management Organization
SAC	Special Areas of Conservation
SC-CCAMLR	Scientific Committee of CCAMLR
SDG	Sustainable Development Goals
SIDS	Small Island Developing States
SOLAS	International Convention for the Safety of Life at Sea
SPA	Special Protection Areas
SPA/BD Protocol	Specially Protected Areas/Biodiversity Protocol
SPA/RAC	Regional Activity Centre for Specially Protected Areas
SPAMI	Specially Protected Areas of Mediterranean Interest
SPREP	Secretariat of the Pacific Regional Environmental Programme
SRFC	Sub-Regional Fisheries Commission
TFEU	Treaty on the Function of the European Union
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environmental Programme
UNFSA	United Nations Fish Stock Agreement
UNGA	United Nations General Assembly
UNICPOLOS	United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea
UNTS	United Nations Treaty System
VCLT	Vienna Convention on the Law of the Treaties
VME	Vulnerable Marine Ecosystems
WCPFC	Western Central Pacific Fisheries Commission
WFD	Water Framework Directive
WSSD	World Summit on Sustainable Development

Introduction

For centuries most of the world's oceans were too far, too deep, too cold or too dangerous for human activities to take place. States engaged primarily into fishing in coastal areas and areas in proximity, thus vast marine areas remained intact from any human intervention. The marine seascape and its sustainability changed (and still is changing) dramatically during the last and present century, when the enormous development of technology extended activity in the ocean way beyond fishing and made every part of the oceans accessible to exploitation. Vessels are now able to navigate all over the world, including the Arctic and Antarctic regions, as well as to fish in depths of several kilometres. Also, companies are advancing new technologies, in order to drill and mine in deep seabed. As a result, currently there is no marine space where the life contained in oceans remains unaffected.

It is estimated that more than 60 percent (or nearly two thirds) of the oceans lies in areas beyond national jurisdiction (ABNJ), legally considered as high seas. This vast area contains marine resources and biodiversity of major ecological, socio-economic, scientific and cultural significance. All States, whether coastal or landlocked, enjoy therein the traditional freedoms codified by the Constitution of the Oceans, i.e. the 1982 United Nations Convention on the Law of the Sea. However, the cumulative effect of their activities seriously threatens the marine species, habitats and ecosystems, i.e. the key components of marine biological diversity. Overfishing and destructive fishing methods, marine pollution from shipping or land-based sources, anthropogenic noise, in combination with phenomena, such as ocean warming and acidification, are some of the factors leading to degradation of ocean's biodiversity.

Apart from these freedoms, the Convention obliges all States to protect and preserve the marine environment, and ultimately to conserve and sustainably use the marine biodiversity. Unfortunately, though, the balance between the long-term viability of marine life and major economic interests in open ocean leans towards the latter. Indeed, activities on ABNJ which may adversely affect marine biodiversity, such as fishing, shipping and dumping, seabed mining and excavation, are all regulated by global international organizations, presenting an international unanimity on the need to regulate them, in order such activities to take place. On the other hand, interesting action has been undertaken towards the conservation and sustainable use of marine biodiversity in ABNJ only at the regional level.

As a response to the adverse effects of human activity to the ocean as a whole, the concept of Marine Protected Areas (MPAs) as an area-based management tool came to the center of the international dialogue. The use of this tool was a neither modern nor innovative idea, though. Even

during antiquity,[1] it was not uncommon to establish spatially defined areas or parks where birds and wild animals are bred and protected, named sanctuaries. During Enlightenment, vast sections of land were protected, where hunting was prohibited to all but royalty and privileged. The first recognized modern environmental sanctuary, established by a State and not by individuals, was established on the West Indian island of Saint Vincent[2] in 1791, while the first dedicated MPA followed approximately a century later with the Fort Jefferson National Monument in Florida, USA, in 1935. In recent years, the development of MPAs took place mainly as part of national environmental policies in coastal areas. However, it was soon realized that the use of the tool in such areas could only conserve a very small percentage of marine biodiversity, while most of ocean's biodiversity remained exposed to human threat.

In light of the United Nations Sustainable Development Goal 14 (SDG 14: Life Below Water) and the ongoing negotiations in the United Nations towards a new international legally binding instrument on the conservation and sustainable use of marine biodiversity in ABNJ, this thesis addresses the question whether this objective can be more effectively dealt with at the global or regional level. More specifically, it is asked whether a new global body should be established with the task to conserve marine biodiversity by establishing MPAs in ABNJ or emphasis should be placed on the existing regional bodies. To do so, it will be demonstrated that both the existing global legal framework and the relevant initiatives under regional schemes regarding the establishment of MPAs as a tool for the conservation and sustainable use of marine biodiversity in ABNJ present jurisdictional, institutional and geographical gaps, which have led to the historic decision to convene discussions on a new Implementing Agreement under the United Nations Convention on the Law of the Sea. However, despite its gaps, the existing structure presents interesting elements not to be neglected by any future instrument, as well.

[1] Gillespie, Alexander. *Protected Areas and International Environmental Law*. Leiden: Nijhoff, 2007, pp.7-8
[2] Grove, Richard H. "Origins of Western Environmentalism." *Scientific American* 267, no. 1 (1992), p.25.

Part I: The Conservation of Marine Biodiversity

A. Approaches to the Conservation of Marine Biodiversity

The concept of biological diversity (biodiversity) is comprehensively defined in Art.2 of the 1992 Convention on Biological Diversity (CBD) as "the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, including diversity within species, between species and of ecosystems". According to the International Union for the Conservation of Nature (IUCN) guide for the 1992 Convention on Biological Diversity, biological diversity is the variability among and within ecosystems, species and genetic material, therefore an attribute of life, in contrast with biological resources which are tangible biotic components of ecosystems. Hence, the term is conceptually defined as ecosystem diversity, species diversity and genetic diversity.[3] It could be said that biodiversity is a conceptual way of depicting diversity as a core attribute of life on Earth in its complex ecological domains, including their natural regenerative processes. However, biodiversity cannot be treated in isolation both in terms of its natural complex, but also in relation to its impact and practical translation to broader environmental considerations. In this sense, the line between biological diversity and biological resources is blurred.[4]

Notwithstanding its legal definition, the fundamental value of biological diversity is twofold: on the one hand, it supports the survival of mankind through the maintenance of biosphere in a condition which supports human or other life. On the other hand, it has unique both scientific and aesthetic value, as it records the evolutionary events on the earth.[5] Therefore the conservation of (terrestrial and marine) biological diversity could be described as a community interest of the international community as a whole. However, the biological diversity is rapidly declining, and the marine biodiversity is no exception. The accelerating pressures of land-, coastal zone-based and offshore human activities gravely threaten the resilience of marine ecosystems, especially those placed in ABNJ,[6] i.e. the high seas and the deep seabed Area[7], which represent major

[3] Birnie, Patricia W., Alan E. Boyle, and Catherine Redgwell. *International Law & the Environment*. 3rd ed. Oxford: Oxford University Press, 2009, p. 588.

[4] Oguamanam, Chidi. "Biological Diversity" In *Routledge Handbook of International Environmental Law*, edited by Shawkat Alam, Jahid Hossain Bhuiyan, Tareq M.R Chowdhury, and Erika J. Techera. London and New York: Routledge Taylor Francis Group, 2013, pp. 210-211

[5] Tanaka, Yoshifumi. *The International Law of the Sea*. 2nd ed. Cambridge: Cambridge University Press, 2015, pp.312-313

[6] Regarding the ocean as a whole, Scelle has described oceans as "*domaine public international*". Tanaka, Yoshifumi. "Zonal and Integrated Management Approaches to Ocean Governance: Reflections on a Dual Approach in International Law of the Sea." *The International Journal of Marine and Coastal Law* 19, no. 4 (2004), pp.489-490

[7] UN Convention on the Law of the Sea, concluded on 10 December 1982 and entered into force on 16 November 1994, 1833 UNTS 396; 21 *ILM* 1982, pp. 1261-1354, also available at <www.un.org> [UNCLOS]; Art. 1(1) defines the "Area" as "the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction;" Art. 86

components of the world's marine biodiversity, such as seamounts, cold-water coral reefs, hydrothermal vents and sponge fields. Overfishing, navigation, marine scientific research, bioprospecting, ocean dumping, exploration and exploitation of non-living resources are but few of the documented threats. Furthermore, it is well established that climate change with its subsequent effects (rising temperatures, melting glaciers, ocean acidification etc.) modifies the ecosystems structure and functioning. Hence, marine biological diversity deserves to be examined under the scope of the law of the sea.

The adverse effects of human activities against marine biodiversity were not realized until recently. International policy on biodiversity conservation has emerged from various sources, starting from the 1972 Stockholm Declaration, according to which "the natural resources of the earth including the air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate" and "man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperiled by a combination of adverse factors".[8] Later, the 1982 World Charter for Nature affirmed that "…special protection shall be given to unique areas, to representative samples of all different types of ecosystem, and to the habitats of rare or endangered species",[9] while the Agenda 21, adopted together with the Rio Declaration by the 1992 UN Conference on Environment and Development, requires States "to identify marine ecosystems exhibiting high levels of biodiversity and productivity and other critical habitat areas and provide necessary limitations on use in these areas, through, *inter alia*, designation of protected areas".[10]

Thus, the conservation of biological diversity has been explicitly or implicitly the subject of various instruments, which although non-legally binding, they play a significant role in international relations and in the international legal order. Being considered as "soft law", these instruments create political commitments to be followed and provide the proof of existence of States' opinio juris, possibly leading to the emergence of customary international law.[11] As a

---

defines the "high seas" as "all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelago State;"

[8] Stockholm Declaration on the Human Environment, 11 *ILM* 1972, pp. 1416-1420; Principles 2 and 4, respectively. (http://www.un-documents.net/unchedec.htm)

[9] UN General Assembly, *World Charter for Nature.*, 28 October 1982, A/RES/37/7; §.3 (http://www.un.org/documents/ga/res/37/a37r007.htm)

[10] Agenda 21: Programme of Action for Sustainable Development, 14 June 1992, UN Doc. A/Conf.151/26.; Chapter 17.85

[11] *Inter alia*, "soft law" instruments are useful guidelines for both the interpretation and the implementation of a treaty. Dang, Vu Hai. *Marine Protected Areas Network in the South China Sea Charting a Course for Future Cooperation*. Edited by David Freestone. Vol. 18. Legal Aspects of Sustainable Development. Leiden: Martinus Nijhoff Publishers, 2014, p.93

matter of fact, the use of the term "conservation" in many international environmental instruments includes the association with or moderation by anthropogenic objectives, such as sustainability, economic, social and development considerations.[12] In addition, the treaty law-making is mainly characterized by three approaches regarding the conservation of (marine) biodiversity. First, the regional approach seeks to conserve marine ecosystems in a specific space or habitat, taking environmental and ecological elements of a region into account.[13] Second, the species-specific approach seeks to conserve a certain category of species, which have an unfavorable conservation status and require international initiative for their conservation and management (e.g. migratory species of wild animals).[14] Third, the activity-specific approach regulates activities which threaten the survival of endangered species, in a way that the conservation objective is achieved through the regulation of certain human activities.[15]

It is evident from the above-mentioned piecemeal approach that possible *lacunae* in the conservation of marine biodiversity would be inevitable. These *lacunae* were attempted to be filled by the ecosystem-based approach, which was introduced by the UN 1972 Stockholm Declaration and later reaffirmed by the UN 1992 Rio Declaration and Agenda 21, as well as the 2002 World Summit on Sustainable Development.[16] A variation of ecosystem-based approach definitions is provided by commissions and (non)governmental organizations (e.g. Conference of Parties in the 1992 Convention on Biological Diversity,[17] OSPAR Commission,[18] International Council for the

[12] *Supra* note 4, pp.211

[13] According to Art.I(1), the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CAMLR Convention) applies to the Antarctic marine living resources of the area south of 60° South latitude and to the Antarctic marine living resources of the area between that latitude and the Antarctic Convergence which form part of the Antarctic marine ecosystem (https://www.ccamlr.org/en/organisation/camlr-convention-text#II)

[14] The 1979 Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS) seeks to protect migratory species of wild animals, which cyclically and predictably cross one or more national jurisdictional boundaries, Art.I(1) (https://www.cms.int/en/convention-text)

[15] The 1973 Washington Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)

[16] Plan of Implementation of the World Summit on Sustainable Development" in *Report of the World Summit on Sustainable Development*, Johannesburg, South Africa, August 26-September 4, 2002, A/CONF.199/20 (New York: United Nations, 2002). (available at: http://wedocs.unep.org/handle/20.500.11822/19097)

[17] The CoP of CBD defines as ''*a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way*.'', CBD Decision V/6, Ecosystem Approach, in Annex III. Decision adopted by the Conference of Parties to the Convention on Biological Diversity at its 5th Meeting (Nairobi, May 2000) UNEP/ CBD/COP/5/23, at 103–104. (Available at: https://www.cbd.int/decision/cop/?id=7148)

[18] The OSPAR Commission, jointly with Helsinki Commission defines as "*the comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity''*, OSPAR Commission, 'Statement on the Ecosystem Approach to the Management of Human Activities-''Towards an Ecosystem Approach to the Management of Human Activities''', First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions (JMM) (Bremen German 25–26 June 2003) Agenda item, ANNEX 5, Ref. §6.1

Exploration of the Sea,[19] Food and Agriculture Organization[20]), however, none of these has been widely accepted. Instead, these definitions reveal the core elements of the approach. Thus, ecosystem-based approach requires the integrated management of human activities recognizing the interconnectivity of all ecosystems' components and ecosystem dynamics for the purpose of conservation and sustainable use of the marine environment.[21] These elements are proved difficult to be applied mainly due to the absence of available scientific knowledge, especially regarding the interconnectivity and dynamics of high seas ecosystems. Therefore, it has been suggested (in the CAMLR Convention context) that considerations simply on the connectivity between target species and non-target species should be enough for achieving the ecosystem-based approach objective, based on the target and associated measures management.[22]

Apart from these approaches, it is necessary to examine the conservation of marine biodiversity under a global legal framework which provides the basis for the development of customary international law in the field of marine biodiversity and is amplified by regional treaties taking specific circumstances of a region into consideration.[23] This global legal framework is universally provided by the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and the 1992 Convention on Biological Diversity (CBD). Thus:

1) United Nations Convention on the Law of the Sea (1982)

At the global level, a comprehensive legal framework for the protection of the marine environment was introduced, for the first time, with the adoption of the 1982 United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS is the only international instrument that deals with the protection of marine environment in a holistic way, addressing marine pollution from all sources.[24] The provisions of the relevant Part XII are complex, as they combine the

[19] ICES defines as "*the integrated management of human activities based on knowledge of ecosystem dynamics to achieve sustainable use of ecosystem goods and services, and maintenance of ecosystem integrity*.'', (submitted by the Norway delegation) UNICPOLOS, 'Marine Environment, Marine Resources and Sustainable Use: Implementing the Ecosystem Approach, fourth meeting, UNGA, 20 May 2003, A/AC.259/7, at 1 (http://www.un.org/Depts/los/consultative_process/consultative_process.htm)

[20] FAO defines as "*an ecosystem approach to fisheries strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic, and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries*", FAO, 'Implementing the Ecosystem Approach to fisheries, Including deep-sea fisheries, biodiversity conservation, marine debris and lost or abandoned gear,' Committee on Fisheries, December 2006, COFI/2007/8. (available at: http://www.fao.org/tempref/docrep/fao/meeting/011/j8993e.pdf)

[21]Kim, Jung-Eun. "The Incongruity between the Ecosystem Approach to High Seas Marine Protected Areas and the Existing High Seas Conservation Regime." *Aegean Review of the Law of the Sea and Maritime Law* 2, no. 1-2 (2012), pp.8-9

[22]Molenaar, Erik Jaap. "Ecosystem-Based Fisheries Management, Commercial Fisheries, Marine Mammals and the 2001 Reykjavik Declaration in the Context of International Law." *The International Journal of Marine and Coastal Law* 17, no. 4 (2002), p.575

[23]*Supra* note 5, p. 316

[24] Beyerlin, Ulrich, and Thilo Marauhn. *International Environmental Law*. 1st ed. London: Hart/Beck, 2011, p.122.

jurisdictional rules of the law of the sea and the principles of international environmental law, developing the international environmental law of the sea.[25] This assumption reaffirms the Convention's traditional sectoral or zonal approach, according to which the management of the oceans is divided into maritime zones based on the principle of sovereignty and the principle of freedom of the sea.[26]

(a) Part XII on the protection and preservation of marine environment

Part XII starts with the general obligation to protect and preserve the marine environment under Art. 192. The scope of this provision covers the ocean as a whole, including the high seas, as the term "marine environment" is not defined in the Convention and it does not distinguish between marine areas within and beyond national jurisdiction. Furthermore, the qualification of Art. 193[27] indicates that the legal duty to protect and preserve the marine environment includes other human activities that may cause environmental damage, such as physical degradation from hydrocarbon extractive activities or bottom trawling from fisheries.[28] Hence, the conservation of living resources is included in the term "protection and preservation of the marine environment", as indicated in the *Southern Bluefin Tuna* order of International Tribunal for the Law of the Sea (ITLOS).[29]

Art.194 further elaborates the general provision of Art.192 by setting out duties for States to "take all measures necessary using the best practicable means at their disposal and in accordance with their capabilities, in order to prevent, reduce and control pollution of the marine environment from any source", while Art.194(2) incorporates the principle of prevention as provided in Principle 21 of the 1972 Stockholm Declaration and in Principle 2 of the 1992 Rio Declaration. It is noteworthy that the principle of prevention not only reflects general international law reaffirming the *sic utere tuo ut alienum non laedas* doctrine (no-harm principle) as expressed in the international case law,[30] but also attempts to progressively develop this area of law by

[25] Frank, Veronica. *The European Community and Marine Environmental Protection in the International Law of the Sea: Implementing Global Obligations at the Regional Level*. Boston: Martinus Nijhoff Publishers, 2008, p.9.
[26] Tanaka, Yoshifumi. "Zonal and Integrated Management Approaches to Ocean Governance: Reflections on a Dual Approach in International Law of the Sea." *The International Journal of Marine and Coastal Law* 19, no. 4 (2004), pp.483–488
[27]Art.193: "States have the sovereign right to exploit their natural resources pursuant to their environmental policies and *in accordance with their duty to protect and preserve their marine environment*" (emphasis added)
[28]Jakobsen, Ingvild Ulrikke. *Marine Protected Areas in International Law: An Arctic Perspective*. Edited by Malgosia Fitzmaurice, Phoebe Okowa, and Sarah Singer. Vol. 25. Queen Mary Studies in International Law. Leiden: Brill Nijhoff Publishers, 2016, p.75
[29]*Southern Bluefin Tuna* cases (New Zealand v. Japan, Australia v. Japan), ITLOS Provisional Measures, Order of 27th August 1999, §70
[30] *Trail Smelter* arbitration (United States v. Canada) 16 April 1938 and 11 March 1941, III RIAA 1905*; Corfu Channel* case (United Kingdom v. Albania), ICJ Reports 1949*;* both deal with responsibility not to cause transboundary damage on other States

introducing the responsibility of States not to cause damage to areas beyond national jurisdiction.[31] In other words, the provision of Art.194 goes beyond the older customary rule based on the *Trail Smelter* arbitration and extends to global common areas contemplated by the Principle 21 of the 1972 Stockholm Declaration. Hence, the general obligations of Part XII Art.192-194 apply in all maritime zones, including areas within and beyond national jurisdiction.

Even though the provisions of Part XII are mostly focused on marine pollution, the general duty of Art.192 encompasses the protection from threats to the environment from other sources and human activities than marine pollution, as well. The term "protection" is understood as a reference to prevention of prospective damage, while "preservation" is considered to have a broader meaning, including a duty to take active measures to maintain or improve the present condition of the marine environment. The latter implies that the duty to protect the marine environment relates more broadly to the regulation of threats. This meaning is in conformity with the Preamble of the Convention, which states that "the problems of ocean space are closely interrelated and need to be considered as a whole".[32] It follows that Art.207-212, which are based on a sectoral approach to the regulation of activities (land-based sources, seabed activities, activities in the Area, dumping, pollution from vessels or atmosphere) should be read in an integrated manner by emphasizing on the cumulative effect of pollution sources. A strictly sectoral approach would fail to protect and preserve the marine environment.[33] This is supported by Art. 194(3) which contains a non-exhaustive list of types of measures and implies that States in determining measures for specific sources have to consider the cumulative effect of different sources.[34]

There is little doubt about the customary nature of the UNCLOS general provisions regarding the protection of marine environment. Overall, Art.192-194 are based on the extended version of the principle of prevention as introduced in Principle 21 of the 1972 Stockholm Declaration and subsequently reaffirmed in Principle 2 of the 1992 Rio Declaration. The International Court of Justice (ICJ) has recognized the principle of prevention as part of general international law[35] and

[31]https://edisciplinas.usp.br/pluginfile.php/520713/mod_resource/content/1/Cap.3_International%20Environmental%20Law%20%281%29.pdf [Course notes on "Basic principles of international environmental law, Bachelor of Laws programme, University of Santo Tomas (accessed on October 2018)]

[32] *Supra* note 26

[33] Oude Elferink, Alex G. "Governance Principles for Areas beyond National Jurisdiction." *The International Journal of Marine and Coastal Law* 27, no. 2 (2012), pp.230-232

[34]Art.194(3): "The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, *inter alia*, those designed to minimize to the fullest extent […]

[35] *Legality of the threat or use of nuclear weapons*, Advisory Opinion, ICJ Reports 1996, § 29; *Gabčikovo-Nagymaros* (Hungary/Slovakia) ICJ Reports 1997, §140

has identified its origins in the no-harm principle.[36] Furthermore, Chapter 17 of Agenda 21 recognizes the provisions of UNCLOS regarding the protection of marine environment as "the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources".[37] Even though not legally binding, this instrument has gained wide support by many States, which have endorsed the view that the Part XII of UNCLOS reflects customary international law. The arguments in favor of the customary nature of the Part XII general provisions are further reinforced by the view that the wide acceptance of multilateral treaties dealing with marine pollution (e.g. the 1972/96 London Dumping Convention, the 1973/8 MARPOL Convention) in combination with the consensus expressed by States in negotiating the environmental provisions of UNCLOS suggest a strong measure of opinio juris accompanied by widespread state practice pursuant to treaty and national rules which address particular sources of marine pollution.[38]

(b) Biodiversity under UNCLOS

In contrast, UNCLOS does not refer to marine biodiversity per se, as at the time of its negotiations the term was not widely utilized and understood, especially regarding ABNJ. A fundamental reason for the lack of any reference is the emphasis put to the reconciliation of economic, strategic and political interests of maritime and coastal States during the Third UN Conference on the Law of the Sea.[39] Hence, little attention was paid to the protection of community interests, which are vital for the survival of humankind, such as the protection of marine biological diversity.[40] A relevant question is whether the term "marine environment" used in the provisions of UNCLOS encompasses the concept of "biological diversity". Despite the comprehensive legal framework that UNCLOS provides, the traditional zonal and sectoral approach of the Convention to the regulation of human activities is proved limited when it comes to solving environmental problems. On the one hand, the zonal approach and the subsequent spatial definition of marine areas based on the distance from coast does not take the fluid and dynamic nature of the ocean into

[36] *Pulp Mills on the River Uruguay* (Argentina v. Uruguay) (Judgment) General List No. 135, 20 April 2010, §107 and 185

[37] *Supra* note 10, Chapter 17.1

[38] Birnie, Patricia W., Alan E. Boyle, and Catherine Redgwell. *International Law & the Environment*. 3rd ed. Oxford: Oxford University Press, 2009, p.387; and Sands, Philippe, Jacqueline Peel, Adriana Fabra Aguilar, and Ruth Mackenzie. *Principles of International Environmental Law*. 3rd ed. Cambridge, United Kingdom: Cambridge University Press, 2018, p.350.

[39] Tanaka, Yoshifumi. "Reflections on High Seas Marine Protected Areas: A Comparative Analysis of the Mediterranean and the North-East Atlantic Models." *Nordic Journal of International Law* 81, no. 3 (2012), p.296

[40] It seems difficult to *a priori define* the concept of the "common interest of the international community as a whole" or "community interests" in abstract. In this regard, Simma tentatively defines "community interests" as "a consensus according to which respect for certain fundamental values is not to be left to the free disposition of States individually or *inter se* but is recognized and sanctioned by international law as a matter of concern to all State". B. Simma, 'From Bilateralism to Community Interest in International Law', 250 *RCADI* (1994-1V) p. 233.

account and ignores the ecological interactions between species as well as the ecological conditions of the physical surroundings. On the other hand, the species-specific and sectoral approach ignores the interrelationships between marine issues,[41] even though the problems of ocean space are closely interrelated and need to be considered as a whole, according to the Preamble of the Convention.[42] This explains to a large extent the significant development of the laws and regulations concerning the protection of the marine environment, including the obligation of conserving marine biodiversity by establishing marine protected areas (MPAs) or other area-based management tools.

UNCLOS provides in Art.194(5) the duty "to take measures necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or species and other forms of marine life", which, contextually interpreted in light of Art.192, covers also ABNJ.[43] However, environmental principles and concepts such as the precautionary principle, sustainable development, the protection of biodiversity and integrated management of marine areas were developed after the adoption of UNCLOS and are introduced to the Convention through the Chapter 17 of Agenda 21 and the Convention on Biological Diversity, both adopted by the 1992 United Nations Conference on Environment and Sustainable Development. Since these subsequent environmental instruments call for a holistic ecosystem-based approach to the regulation of human activities and an understanding of the natural variations of species and ecosystems, a dynamic interpretation of the term "marine environment" that encompasses the concept of biological diversity" based on Art.31 (3) (c) of the 1969 Vienna Convention on the Law of Treaties[44] (VCLT) is warranted.[45] This evolutive interpretation is also supported by the international case law[46] in relevant fields of international law. Art.31(3)(c) VCLT does not include any temporal qualification. Hence, the "relevant rules of international law applicable in the relations between the parties" taken into account when interpreting a treaty may be either rules in force when the treaty was adopted or the rules in force at the time of its application. The language used by the negotiators will determine the inter-temporality of a term.[47] So, it can be possibly argued that the

[41] *Supra* note 26, pp.486-488
[42] Preamble of the United Nations Convention on the Law of the Sea, §3
[43] *Supra* note 5, p.316
[44] Art.31(3)(c) of VCLT: *"*There shall be taken into account, together with the context: (c) Any relevant rules of international law applicable in the relations between the parties*".*
[45] *Supra* note 26, pp. 137-138
[46] *Gabčikovo-Nagymaros* (Hungary/Slovakia) ICJ Reports 1997, § 140; *Arbitration regarding the Iron Rhine ('IJzeren Rijn') railway*, (Belgium v. The Netherlands), Award of 24 May 2005 [PCA], §59; *Shrimp/Turtle:* United States – Import Prohibition of Certain Shrimp and Shrimp Products (Report of the Appellate Body) WTO (12 October 1998) Doc. WT/DS58, §127; *Oil Platforms* (Islamic Republic of Iran v. United States of America), Judgment, ICJ Reports 2003
[47] Report of the Study Group on Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, UNGA, 58th session, UN Doc A/CN.4/L.682 (18 July 2006).

terms used in the introductory provisions of Part XII seem general and non-static enough to allow their interpretation under the light of subsequent, legally or non- legally binding, though taken by consensus, instruments.

Since the conservation of biological diversity is encompassed by the term "protection and preservation of the marine environment" under Art.192, it is concluded that the traditional zonal management approach applies also in this field. Therefore, the coastal State can adopt laws and regulations relating to the innocent passage through the territorial sea in respect of the conservation of the living resources of the sea and the conservation of marine biodiversity and the prevention, reduction and control of pollution thereof, as long as it does not hamper the innocent passage of foreign vessels, while it may undertake physical inspection of the vessel, and if the evidence so warrants, institute proceedings, including detention of the vessel, in case these laws and regulations are violated during the passage.[48] Furthermore, the duty to conserve the marine biodiversity extends to the Exclusive Economic Zone (EEZ), where the coastal State has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, as well as jurisdiction with regard to the protection and preservation of the marine environment[49]. Based on the zonal approach of UNCLOS and in line with diminishing power of the State the further away from coast one gets, both the prescriptive and enforcement jurisdiction of the coastal State is equally reduced; the coastal State may adopt laws and regulations conforming to and giving effect to generally accepted international rules and standards established through the competent international organization or general diplomatic conference,[50] while the enforcement jurisdiction remains in principle a request for information about the vessel and examination of documents (identity, port of registry, last and next port of call), so as to establish whether a violation has actually occurred.[51] Even though coastal States, when exercising their sovereign rights and jurisdiction, shall have due regard to the freedoms of navigation, overflight and laying of submarine cables and pipelines that all States maintain in EEZ,[52] it seems that they may regulate navigation in order to protect the marine environment, including its biodiversity, by acting through the competent international organization or general diplomatic conference and promoting the adoption of routeing systems designed to minimize the threat of accidents which might cause pollution to the marine environment.[53] Moreover, regarding the continental shelf, the

[48] Art.21(1)(d)(f), 24(1), 211(4), 220(2) of UNCLOS
[49] Art.56(1)(a) - (1)(b)(iii) of UNCLOS
[50] Art.211(5) of UNCLOS
[51] Gavouneli, Maria. "State Jurisdiction in Relation to the Protection and Preservation of the Marine Environment." In *The IMLI Manual on International Maritime Law*, edited by David Joseph Attard, Malgosia Fitzmaurice, Martínez Gutiérrez Norman A., and Riyaz Hamza. Vol. 3. Oxford University Press, 2016, p.19; Art.220(3) of UNCLOS
[52] Art.56(3) of UNCLOS
[53] Art.211(1) of UNCLOS

coastal State can regulate the course for laying cables and pipelines for the purpose of the conservation of marine biodiversity, as the delineation is subject to the consent of the coastal State, while it has the exclusive right to authorize and regulate drilling on the continental shelf for all purposes, including the prevention from adverse impact on ecosystems there.[54] Even though the coastal State has only the sovereign right to explore and exploit its non-living natural resources together with living resources belonging to the sedentary species without any explicit right to conserve and manage,[55] the exercise of the sovereign right is subject to the duty to protect the marine environment, including the conservation of marine biodiversity.

UNCLOS does not explicitly provide for the conservation of the marine biodiversity in ABNJ. It places conditions upon the unfettered exercise of the high seas freedoms by all States, whether coastal or landlocked, i.e. discharging certain responsibilities. Hence, based on Art.87(2) the exercise of the high seas freedom is subject to the general obligation to protect and preserve the marine environment. Art.197 provides for an obligation to cooperate for the protection of the marine environment according priority to the global-level cooperation[56] and highlighting that the cooperation should take place by taking characteristic regional features into account. As implied by the duty to cooperate on a global level, the scope of the provision extends also to ABNJ.[57] As a matter of fact, the duty to cooperate in environmental issues has been recognized as part of general international law.[58] The right to fish in the high seas is also subject to the duty to cooperate, according to Art.63 and 118. These provisions are further elaborated through the Fish Stock Implementing Agreement (UNFSA),[59] whose Art.5 states that States fishing on the high seas shall protect marine biodiversity and assess the impacts of fishing and other human activities.

Given that there is no centralized authority governing the high seas, the flag State jurisdiction remains in all cases the predominant method of regulating activities on the high seas. The principle of flag State jurisdiction plays a dual role. First, it prevents other States from interfering with vessels not flying their flags, thus ensuring their exercise of high seas freedoms. Second, the flag State solely has the responsibility to ensure compliance with national and international laws of

[54] Art.79(3) and 81 of UNCLOS, respectively.
[55] Art.77(4) of UNCLOS
[56] Art.197: "States shall cooperate on a global basis and, *as appropriate*, on a regional basis, directly or through competent international organizations……" (emphasis added)
[57] *Supra* note 5, p.266
[58] *MOX Plant* case (Ireland v. United Kingdom), ITLOS Provisional Measures, Order of 3rd December 2001, §82.
[59] Agreement for Implementation of the provisions of the provisions of the UN Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of straddling fish stocks and highly migratory fish stocks, Opened for signature in New York on 4 December 1995, it entered into force on 11 December 2001; 34 *ILM* 1995, pp. 1542-1580.

vessels flying its flag on the high seas[60]. Even though the duties of flag States are limited to administrative, technical and social matters over their vessels,[61] flag States are also under an obligation[62] to take the necessary measures to ensure that their nationals and vessels flying their flag are not engaged to activities adversely affecting the marine environment.[63] However, the genuine link required by Art. 91 between the flag State and its vessels is reduced to a strictly formalistic procedure of registration, which is frequently carried out online while the ship is somewhere in the high seas with no other connection to the registry than the will of its owner.[64]

2) Convention on Biological Diversity (1992)

Along the Rio Declaration and the Agenda 21, the Convention on the Biological Diversity (CBD) was adopted during the 1992 United Nations Conference on the Environment and Sustainable Development, as the first international environmental agreement which comprehensively deals with the conservation and sustainable use of biodiversity. CBD differs from earlier relevant environmental instruments on its holistic approach towards the conservation of nature, as it focuses on the intrinsic values of biodiversity to the humankind and its survival as such and it includes the sustainable use of biodiversity, as an element of conservation. In this way, it does not address specific threats, habitats or species, but instead establishes an inclusive regime for the conservation of biodiversity as such. An important innovation of the Convention is that it includes the definition of the term "biological diversity",[65] which applies also to marine areas, in a three-level dimension, i.e. within species, between species and of ecosystems.[66] However, as biodiversity is a dynamic and difficult to be applied legal term, the definition leaves enough space for subjective interpretation, while it has been also described merely as "an ideal, something that can never be completely realized".[67]

[60] The legal basis of the principle was previously explained by the theory of territoriality based on the concept that vessels on high seas are considered as "floating islands" or detached part of the territory" of the States whose flag they fly. Instead, the principle should be regarded as corollary to the freedoms enjoyed by all States on the high seas. *Supra* note 5, pp.152-153

[61] Art.94§1 of UNCLOS

[62] The "responsibility to ensure" constitutes a "due diligence obligation of conduct" rather than an "obligation of result". *See* 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), Case No. 17, Advisory Opinion of Feb. 1, 2011, §129

[63] Request for an Advisory Opinion Submitted by the Sub- Regional Fisheries Commission (SRFC), Case No. 21, Advisory Opinion of Apr. 2, 2105, §110,124.

[64] *Supra* note 51, pp. 7-8

[65] Art.2 CBD: "the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, including diversity within species, between species and of ecosystems"

[66] Sands, Philippe, Jacqueline Peel, Adriana Fabra Aguilar, and Ruth Mackenzie. *Principles of International Environmental Law*. 3rd ed. Cambridge, United Kingdom: Cambridge University Press, 2018, p.449.

[67] Verschuuren, Jonathan, and Timon Oudenaarden. "The Role of Ideals in Legal Development: Sustainable Development and the Conservation of Biological Diversity as Cases in Point." In The Importance of Ideals. Debating

The above is depicted in the introductory Article of CBD, which recognizes the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the genetic resources as the objectives of the Convention, according to which the relevant obligations are to be interpreted. On the one hand, based on the definitions of Art.2, i*n-situ* conservation (Art.8) focuses on measures for the conservation and maintenance of ecosystems, natural habitats and populations of species in their natural surroundings or where they have developed their distinctive properties, while *ex-situ* conservation (Art.9) complements the *in-situ* measures outside their natural surroundings. On the other hand, the definition of sustainable use, which is part of the concept of sustainable development introduced by Principle 4 of the Rio Declaration and was further specified at the Johannesburg Summit on Sustainable Development incorporates the inter-generational equity principle, as a demonstration of the Convention's anthropocentric approach.[68] However, the prevention of the long-term decline of biological diversity as an element of sustainable use is also open to subjective interpretation by the Contracting States, as it is not indicated which level of use is sustainable and thus, the standard would depend upon the state of the component or species used. Even though the Preamble indicates that the objectives of the conservation of biodiversity and sustainable use are highly interrelated, it is argued that the conservation of biodiversity is pointed as the main objective of the Convention,[69] while the sustainable use is included in the notion of maintenance,[70] which is a part of the *in-situ* conservation.

An important element of CBD is the affirmation in its Preamble that the conservation of biological diversity is a common concern of humankind, implying that the conservation obligations contained in the Convention may have erga omnes status, or, in other words, they may be owed to and be enforced by any State or the international community of States, as described by ICJ.[71] An argument like this could be described as far-fetched. It is argued that the concept of common concern merely gives to all States "an interest and right to conserve biodiversity and observe upon the progress of others in fulfilling their respective obligations and responsibilities for this purpose, both within and beyond their own national jurisdiction".[72] Thus, the conservation of the biodiversity and the sustainable use of its components are not entirely up to each Contracting

Their Relevance in Law, Morality, and Politics, edited by Wibren Van Der Burg and Sanne Taekema. Bruxelles: P.I.E.-Peter Lang, 2004, pp.231-263

[68] *Supra* note 28, p.92

[69] *Supra* note 3, p.622

[70] Burhenne-Guilmin, Françoise, and Susan Casey-Lefkowitz. "The Convention on Biological Diversity: A Hard Won Global Achievement." *Yearbook of International Environmental Law*, vol. 3, no. 1, 1992, pp.49–50

[71] *Case concerning the Barcelona Traction, Light and Power Company Limited* (Belgium v. Spain) Second Phase, ICJ Reports 1970, §33.

[72] *Supra* note 3, p.619

State[73] and the interest of international community must be taken into account. It should be mentioned that the notion of the concept is not in isolation or at random but is a part of the package of measures adopted by the 1992 Rio UN Conference on Environment and Sustainable Development, as a coherent set of global policy initiatives. In fact, the Preamble concept of common concern of humankind is manifested by the Convention's rapid universal acceptance.[74] In contrast, questions may arise regarding the compatibility of the concept with the principle sovereignty over natural resources included in Art.3. Being accepted as a customary rule and stated similarly to the respective provision of UNCLOS (Art.193), the principle of Art.3 seems unlimited, as it is not qualified by a duty to conserve biodiversity. In addition, its position just after the objectives and definitions of the Convention and right before the substantive obligations of the Contracting States reinforces the argument that the following provisions must be interpreted in light of the sovereignty principle. However, Art.3 neither provides for an absolute right nor its textual position in the treaty transforms it into one. In fact, the sovereignty principle should be interpreted under both the Preamble, which also encompasses the ecosystem approach[75] and the concept of sustainable development,[76] and the objectives of the Convention.

Despite its quasi-universal acceptance, CBD is often criticized about its vagueness and lack of setting out clear obligations. The "as far as possible and as appropriate" qualifier is used in most of the obligations provided in the Convention, making it doubtful whether the Contracting States are in fact obliged to do anything at all.[77] It has been also argued that CBD merely defines in its whole objectives for States instead of clear-cut obligations.[78] However, some guidance can be found in State practice; for example, under the Norwegian Nature Diversity Act,[79] the terms "as far as possible" and "as appropriate" refer to the duty to perform and the level of performance respectively, supporting the existence of legally binding obligations to conserve and sustainably use biodiversity and clarifying the evaluations to be made each time by the Contracting States. An opposite interpretation of the qualifier, i.e. that it reduces the binding character of the obligations which incorporate it, even though the Convention was concluded as a legally binding instrument,

[73] *Supra* note 28, pp.89-90
[74]Fitzmaurice, Malgosia A., David M. Ong, and Panos Merkouris. *Research Handbook on International Environmental Law*. Edward Elgar, 2014, p.504
[75] Preamble of CBD, §9
[76] Preamble of CBD, §23
[77] Boyle, Alan. "The Rio Convention on Biological Diversity." In International Law and the Conservation of Biological Diversity, edited by Michael Bowman and Catherine Redgwell. London: Kluwer Law International, 1996, pp.48-49
[78] Kimball, Lee A. "The Biodiversity Convention: How to Make It Work." *Vanderbilt Journal of Transnational Law* 28, no. 765 (1995), pp.763-775
[79] Norwegian Ministry of the Environment, NOU 2004:28, *Lov om bevaring av natur, landskap og biologisk mangfold.* (Official Norwegian Report) Oslo 2004

would not be reasonable.[80] It is also supported that the formulation of the qualifier is based on the principle of common but differentiated responsibilities, which remains one of the underlying principles of CBD, even though not explicitly adopted in the treaty or indicated as the legislative background of its adoption during the negotiations. The use of qualifier acknowledges the contextual differences and the differing capabilities and responsibilities between developed and developing States regarding the conservation and sustainable use of biodiversity, rather than reduces the binding effect of the Convention's obligations.[81] Therefore, the binding effect of the obligations to conserve and sustainably use biodiversity remains intact. The terms of the qualifier clarify the evaluations and considerations to be made, which are necessary, in order the Contracting States to discharge their obligations.

B. Marine Protected Areas as a conservation tool

1) Definition

A wide range of environmental tools has been developed under international law and policy enabling the adoption of measures for the conservation and sustainable use of marine biodiversity. Among them, marine protected areas (MPAs) have been repeatedly identified as a comprehensive area-based management tool for the protection of marine areas of high ecological importance and *in-situ* conservation.[82] On the one hand, MPAs protect habitats and ecosystems by safeguarding the life-support processes of the sea and providing major benefits to local communities, such as tourism, recreation, opportunities for scientific research and education.[83] On the other hand, they have been proved effective, along with fisheries management tools in rebuilding partly damaged or endangered fish stocks and in giving all stocks some stability. Species within the boundaries of MPAs have much bigger densities and biomass, whereas fisheries outside their boundaries could also benefit from the MPAs species via spill-effect.[84] Furthermore, a less well-known, but worth

[80] *Supra* note 28, p. 148
[81] Supra note 3, p.132-133
[82] Diz, Daniela. "Unravelling the Intricacies of Marine Biodiversity Conservation and Its Sustainable Use: An Overview of Global Frameworks and Applicable Concepts." *SSRN Electronic Journal*, 2016, p.9
[83] Stolton, Sue, and Nigel Dudley. *Arguments for Protected Areas: Multiple Benefits for Conservation and Use*. London: Earthscan, 2010, p.195
[84] Dang, Vu Hai. *Marine Protected Areas Network in the South China Sea Charting a Course for Future Cooperation*. Edited by David Freestone. Vol. 18. Legal Aspects of Sustainable Development. Leiden: Martinus Nijhoff Publishers, 2014, pp.12-13

to mention, role of MPAs is to resolve border disputes and promote stable cooperation between neighbouring States.[85]

The concept of MPAs cannot be understood without reference to the general concept of protected areas, as many elements of an MPA derive from that one. In fact, the idea behind protected areas is not an innovative one. At the global level, while IUCN defines a protected area as "a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values", an MPA is defined as "any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna, historical and cultural features, which has been preserved by law or other effective means to protect part or all of the enclosed environment".[86] The definition provides elements which distinguish MPAs from general protected areas. Therefore, a protected area is characterized as MPA, when the total area of sea it encompasses exceeds the area of land within its boundaries or the marine part of a large protected area is sufficient in size to be classified as an MPA in its own right. An MPA is in some form legally protected, without the degree of protection being necessarily the same throughout the area. Moreover, the establishment of an MPA should cover not only the seabed, but also the superjacent water column, as well as its flora and fauna or cultural features, such as wrecks, historic lighthouses and jetties.[87] The long-term conservation of nature element applies also to the MPA definition of IUCN, thus areas seasonally closed for a specific purpose (e.g. fish spawning, whale breeding, etc.) in the absence of any additional biodiversity protection or primary nature conservation objective are not considered MPAs, but may be useful components of management in an MPA.[88]

At the same time, a definition of protected areas, which undoubtedly encompasses MPAs, is provided in Art.2 of CBD.[89] This one, which broadly reflects the IUCN definition of protected areas, should be viewed as the "lowest common denominator" for any such definition.[90] Along with this, the Ad hoc Technical Expert Group on Marine and Coastal Protected Areas explicitly

[85] Secretariat of the CBD, *Protected Areas in Today's World: Their Value and Benefits for the Welfare of the Planet*, Technical Series No. 36 (Montreal: Secretariat of the Convention on Biological Diversity, 2008) 1. (Available at: https://www.cbd.int/doc/publications/cbd-ts-36-en.pdf)

[86] IUCN General Assembly Recommendation 17.38 *Protection of the coastal and marine environment* (1988); Recommendation 19.46 *Marine and Coastal Area Conservation* (1994)

[87] Kelleher, G. (1999). *Guidelines for Marine Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK, pp.16-17

[88] The definition of MPA provided by IUCN is stricter than the respective UN Food and Agriculture Organization (FAO) definition, which defines MPA as "any marine geographical area that is afforded greater protection than the surrounding waters for biodiversity conservation Por fisheries management purposes", FAO, *Fisheries Management. 4. Marine Protected Areas and Fisheries*, FAO Technical Guidelines for Responsible Fisheries No. 4, Suppl. 4 (Rome: FAO, 2011) 9 [Fisheries Management. 4. Marine Protected Areas and Fisheries].

[89] Art.2 CBD: *"*Protected area means a geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives*"*

[90] Supra note 1, p.27

defines MPAs as "any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings".[91]

The practice of networks of MPAs is even more critical given the features of marine environment, i.e. the fact that sea is open with many species migrating at various stages of life due to the actions of waves, winds, freshwater inflows or tidal currents. Marine mobile species like fish, marine mammals and turtles move in three dimensions and over much greater distances than common terrestrial species.[92] According to IUCN, a network of MPAs is defined as *"*a collection of individual marine protected areas operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels, in order to fulfil ecological aims more effectively and comprehensively than individual sites could alone*".*[93] Hence, it is evident that the establishment of a representative network of MPAs is more likely to implement the ecosystem approach, as it extends the protection from a single species approach to the preservation of the whole ecosystem as a unit considering all its processes and linkages.[94]

The focus of IUCN on MPAs is substantiated by its widely accepted protected areas classifications, also applied in marine areas.[95] The categories neither imply a hierarchical order, for example the degree of human intervention or naturalness nor are all categories equal in the sense that they will all be equally useful in any situation. In fact, all categories contribute to the conservation purposes, but objectives should be chosen with respect to the particular situation. At the same time, not all categories are equally useful in every situation. This implies that a well-balanced protected area system would consider using all the categories, although it may not be the case that all of the options are necessary or practical in every region or country. Management approaches and categories are not necessarily fixed forever and can change if conditions change or one approach seems to be failing. However, changing the category of a protected area should

[91] Marine and Coastal Biodiversity: Review, Further Elaboration and Refinement of the Programme of Work", *Report of Ad hoc Technical Expert Group on Marine and Coastal Protected Areas*, 8th Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, Montreal, Canada, March 10–14, 2003.
[92] National Research Council, Committee on the Evaluation, Design, and Monitoring Marine Reserves and Protected Areas in the United States
[93] IUCN General Assembly Recommendation 17.38. *Supra* note 86
[94] Supra note 84, pp.16-17
[95] The classifications Categories include Strict Nature Reserves (Ia), Wilderness Area (Ib), National Park (II), Natural Monument or Feature (III), Habitat/Species Management Area (IV), Protected Landscape/Seascape (V) and Protected area with sustainable use of natural resources (VI). https://www.iucn.org/theme/protected-areas/about/protected-area-categories (accessed October 2018)

be subject to procedures as vigorous at least as those involved in the establishment of the protected area and its category in the first place[96].

2) Legal foundations for the establishment of MPAs

MPAs have been the subject of great political initiative, as depicted in non-legally binding instruments of great importance for international environmental law. The 1972 Stockholm Declaration did not explicitly refer to MPAs, however terms like "careful planning and management" of "representative samples of natural ecosystems" recognize the role of area-based management in the protection of (marine) environment. In contrast, the 1992 Agenda 21 encompassed many MPA stipulations in its chapter 15 and 17, while the 2002 Johannesburg Implementation Plan[97] calls for "the development [through national and regional strategies] of representative networks of MPAs and time/area closures by 2012". The latest 2012 "The Future We Want" document[98] renews the commitment of governments to apply *inter alia* MPAs for the conservation of biodiversity and sustainable use of its components. Apart from the above-mentioned documents adopted by UN Conferences, MPAs were referred by UN General Assembly (UNGA) Resolutions on the Law of the Sea,[99] whereas the UN Millennium Development Goals[100] refer to the proportion of MPAs as an indicator of the reduction of biodiversity loss. Regarding responsible fisheries, MPAs implications exist both in UNGA Resolutions on Sustainable Fisheries[101] and in instruments of the relevant UN forum, i.e. FAO, such as the FAO Code of Conduct for Responsible Fisheries or its Technical Guidelines.

In the treaty law-making context, there are international frameworks which provide for area-based approach for the protection of the marine environment even without explicitly using the "protected area" or "MPA" terminology.[102] Their specific scope, however, suggests that sound MPAs legal bases should be searched in the following global ocean environment regimes. Thus:

---

[96] Day J., Dudley N., Hockings M., Holmes G., Laffoley D., Stolton S. & S. Wells, 2012. *Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas*. Gland, Switzerland: IUCN. 36, p. 15.
[97] *Supra* note 16
[98] UN General Assembly Resolution A/Res./66/288, "The Future We Want," (27 July 2012).
[99] UN General Assembly Resolution A/RES/67/78 *Ocean and the Law of the Sea*, Agenda item 75 (a), (2012), §192-195
[100] UN General Assembly Resolution A/RES/55/162 *United Nations Millennium Declaration*, Agenda Item 60(b), UN (2000); UN General Assembly Resolution A/RES/55/162 *Follow-up to the Outcome of the Millennium Summit*, Agenda item 182, December 18, 2000
[101] E.g. UN General Assembly Resolution A/RES/67/79 *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instrument* (2012)
[102] *Convention Concerning the Protection of the World Cultural and Natural Heritage*, 6 November 1972, Art. 2-3 [World Heritage Convention]; *Convention on Wetlands of International Importance especially as Waterfowl Habitat*, 2 February 1971, Art.2 [Ramsar Convention]; *Convention on the Conservation of the Migratory Species and Wild Animals*, 23 June 1979, Art. I(f) [CMS]; *International Convention for the Regulation of Whaling*, 2 December 1946,

(a) UNCLOS

First, UNCLOS, even though it is unanimously recognized as the overarching legal regime for the management of human activities in the oceans, does not include any explicit reference to the use of MPA as area-based tool for the conservation of marine biodiversity. MPAs seek to protect marine species, habitats, ecosystems and the intricate relationship between them in an integrated manner, thus it may be said that MPAs are considered to implement the ecosystem approach.[103] As already explained, UNCLOS, unlike more modern treaty regimes, does not explicitly include principles like the ecosystem-based management and precautionary approach, which are considered to be basic elements of the MPA concept.[104] Based on the evolutionary interpretation of UNCLOS and the development of international environmental law subsequent to its adoption, it has been already stated that Part XII of the Convention includes the protection of marine biodiversity, in a way that the general customary obligation to protect and preserve the marine environment also encompasses the marine biodiversity. Highly relevant is Art.194(5) which refers to measures necessary to protect and preserve rare or fragile ecosystems and habitats of depleted, threatened or endangered species and other forms of marine life.[105] The establishment of MPAs is proved to be effective as an area-based measure to this direction. Even though the heading of Art.194 and the content of (1) refer to measures against damage by pollution from any source, one may argue that the provision of (5) is not limited to measures against pollution, but rather that it is a duty of its own to protect fragile ecosystems and habitats.[106] The wording of (5) is quite different compared to the wording of the rest of Art.194, leading to the conclusion that if measures other than the regulation of pollution sources are needed, such measures should be taken. As Art.194(5) is not limited in its geographical scope extending its duty also to ABNJ, it is presumably supplementary to the general obligation of Art.192. Therefore, the establishment of MPAs is a tool

Art. V [International Whaling Convention]; *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, 3 March 1973, [CITES]

[103] Supra note 39, p.298

[104] Nordtvedt Reeve, Lora, Anna Rulska-Domino, and Kristina M. Gjerde. "The Future of High Seas Marine Protected Areas." *Ocean Yearbook Online* 26, no. 1 (2012), p.273

[105] It is supported that the scope of 194(5) includes specifically measures on ecosystems, habitats and other marine life excluding living resources. Although the meaning of marine life is not clarified, it seems to refer to non-commercially exploitable species of flora and fauna, such as marine mammals and corals. The argument is based on the definition of pollution in Art.1(4) of the Convention, which seems to distinguish between the terms "marine life" and "living resources", the latter being used in the Convention to indicate commercially exploitable stocks of marine living resources. Fragile or sensitive ecosystems and habitats are identified based on criteria and scientific evidence included in other treaty frameworks linked with the Convention pursuant to Art.237 and 311(2), Veronica Frank, *The European Community and Marine Environmental Protection in the International Law of the Sea: Implementing Global Obligations at the Regional Level (2007)*, Martinus Nijhoff Publishers, p.358

[106] Owen, D. "The Application of the Wild Birds Directive beyond the Territorial Sea." *Journal of Environmental Law* 13, no. 1 (2001), p. 61.

consistent with the legal development of international environmental law evolutionarily interpreted within the context of UNCLOS.[107]

Despite the fact that UNCLOS does not explicitly refer to the ecosystem-based management and MPAs as its tools for the conservation of marine biodiversity, it includes two specific area-based management tools for the protection of marine environment against pollution from vessels, which enhance coastal State's jurisdiction and illustrate exceptions to the "due regard" point of balance between the freedom of navigation of flag States in EEZ and the protection of the environment.[108] Art.234 authorizes the coastal State to adopt and enforce non-discriminatory laws and regulations in ice-covered areas within its EEZ limits regarding marine pollution from vessels based on the best available scientific evidence, without any reference to the "competent international organization". Thus, coastal State unilaterally estimates the need for and the content of its regulatory action,[109] and as a result, neither its prescriptive jurisdiction is limited to generally accepted international rules and standards[110] nor its enforcement jurisdiction is qualified by the provisions of Art.220. However, it is also argued, that Art.234 does not add any particular feature to the protection of marine environment regime against vessel-source pollution, as it is already developed in the Convention, regarding the coastal States jurisdiction in EZZ.[111] On the other hand, Art.211(6) describes a complex mechanism,[112] by which a coastal State has the possibility to go further than the generally accepted international rules and standards in clearly defined areas within its EEZ after consultation with any State concerned through the competent international organization and approval by it, i.e. IMO, given that the general accepted rules and standards are inadequate to protect the area's oceanographical and ecological conditions against vessel pollution. Once approved, the concerned coastal State may adopt laws and regulations implementing the international rules and standards or navigational practices as are made applicable by IMO for the defined area, while any other additional laws and regulations should not require foreign vessels to observe construction, design, equipment or manning (CDEM standards) other than the generally accepted international ones.

Although UNCLOS is an umbrella convention which encompasses the overall management of the oceans, it is observed that the conservation of marine biodiversity by the use of MPAs tool is jurisdictionally limited under its framework. The reliance solely on the flag State jurisdiction on

[107] *Supra* note 28, p. 142
[108] *Supra* note 51, pp. 19-20
[109] Gavouneli, Maria. Functional Jurisdiction in the Law of the Sea. Vol. 62. Publications on Ocean Development. Leiden: Martinus Nijhoff Publishers, 2007, p.71
[110] Art.211(5) of UNCLOS
[111] *Supra* note 5, p.305
[112] The mechanism described in Art.211(6) has never been used. *Supra* note 51, p.20

the high seas has as a result that it ultimately depends on that State and not to other States, such as e.g. adjacent coastal States, to ensure protection of the marine environment and subsequently, the conservation of marine biodiversity. In contrast to areas within national jurisdiction, where the Convention confers sovereignty (territorial sea) and jurisdiction (EEZ, continental shelf) regarding the protection of marine environment, both Part VII and Part XII which refer to high seas aim to control conservation by controlling human activities. Therefore, the conservation and management of the living resources of the high seas regime (Section 2 of Part VII) obliges States to manage the exploitation of living resources, while Part XII obliges States to protect marine environment by controlling human activities' pollution. States have no right to directly conserve the components of high seas ecosystems.[113]

On the other hand, under the UNCLOS umbrella, the International Seabed Authority (ISA) is vested with the responsibility to ensure the effective protection of the marine environment from harmful effects of activities, such as drilling, excavation, disposal of wastes, operation of installations, in the Area.[114] This does not extend to a comprehensive responsibility to protect deep sea environment from all threats.[115] ISA Council has also the power to disapprove areas for exploitation by contractors or the Enterprise in cases where substantial evidence indicates the risk of serious harm to the marine environment.[116] The wording of the relevant provisions seems broad enough to allow the establishment of MPAs, closed to mining activities. In fact, the Authority's Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area states that if a contractor applies for exploration, it shall propose areas to be set aside and used exclusively as impact and preservation reference zones. These impact or preservation reference zones provided in Regulation 31(7) could arguably be presumed to be MPAs against mining activities in the Area. Similarly, in 2012, the ISA Council adopted an environmental management plan for the Clarion-Clipperton Zone (CCZ-EMP) in the Eastern Central Pacific, which provided *inter alia* for the designation of a network of Areas of Particular Environmental Interest (APEIs).[117] In the fisheries context, the UNFSA duty to protect and preserve the marine environment through precautionary management strategies for both harvested species and associated or dependent species is

[113] *Supra* note 21, p.12-13
[114] Art.145(b) of UNCLOS
[115]Warner, Robin. "Conserving Marine Biodiversity in Areas beyond National Jurisdiction: Co-evolution and Interaction with the Law of the Sea." Edited by Karen N. Scott and Tim Stephens. In *The Oxford Handbook of the Law of the Sea*, edited by Donald Rothwell and Alex G. Oude Elferink. Oxford, United Kingdom: Oxford University Press, 2017.
[116] Art.162 (2) (x) of UNCLOS
[117] International Seabed Authority, Assembly, *Decision of the Assembly relating to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area*, 6th session, Doc. ISBA/6/A/18 (2000); International Seabed Authority, Council, *Decision of the Council relating to an environmental management plan for the Clarion-Clipperton Zone*, 18th session, Doc. ISBA/18/C/22 (2012)

implemented by the establishment of Regional Fisheries Management Organizations (RFMOs). UNGA has stressed the need for RFMOs to protect vulnerable marine ecosystems (VMEs) from the adverse effects of bottom fisheries and close such fishing areas, unless conservation and management measures are in place.[118] Criteria for such VMEs include uniqueness or rarity, the functional significance of the habitat, fragility, structural complexity and life-history traits of component species that make recovery difficult. Also, it is argued that the establishment of marine reserves should be the basis of fishery management reform, as it promotes resilience and recovery of species that create complex bottom structures and also facilitates multispecies management which is the centre of ecosystem-based fisheries management.[119] Hence, closure areas or marine reserves/no-take zones may also constitute a category of MPAs under the UNCLOS regime.

(b) CBD

As far as CBD is concerned, it is widely recognized that is one of the two global treaties[120] that explicitly provide for a positive legal duty to create protected areas.[121] Indeed, Art.8 explicitly refers to the legal duty of the Contracting States "to establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity*", "*develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity" and "regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use".[122] As the Convention's objective of conservation of biodiversity encompasses terrestrial and marine and aquatic ecosystems, MPAs are undoubtedly included in the *in-situ* measures of Art.8.

Although it could be argued that the word "or" indicates that "protected areas" and "areas where special measures need to be taken" are distinct alternatives when implementing the obligation, in fact the two alternatives are not very different given that the areas where special measures are needed are to be identified the same way as required by the Art.2 "protected area" definition. On the other hand, the term "system" entails an obligation to establish a network of MPAs contributing

[118] UN General Assembly Resolution A/RES/61/105 *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments,* adopted on 8 December 2006 (2007), paras. 80–91.; UN General Assembly Resolution A/RES/64/72 adopted on 4 December 2009 (2010), paras. 112–130.
[119] Roberts, Callum. *The Unnatural History of the Sea: The past and Future of Humanity and Fishing*. London: Gaia, 2007, p.376-377
[120] The other being the Ramsar Convention. *Supra* note 25, p.342
[121] Art.2 pf CBD defines a protected area as "a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives".
[122] Art.8 (a)(b)(c) of CBD, respectively.

to a coherent protection of biodiversity and ensuring that there is connectivity among them. Therefore, the Contracting States do not meet this obligation by establishing ad hoc MPAs as a random response to the identification of critical habitats or harmful activities.[123] However, the establishment of individual MPAs in order to protect certain specific areas is supported by other provisions of Art.8. The establishment of an individual MPA is a measure to meet the obligation to promote the protection of ecosystems, natural habitats and viable populations of species in natural surroundings,[124] to rehabilitate and restore degraded ecosystems[125] or regulate and manage processes and categories of activities which have a significant adverse effect on biodiversity determined pursuant to Art.7.[126] Hence the legal duty to establish MPAs exists in two levels; a general duty to develop a system or network of interconnected MPAs and a duty to establish individual MPAs in cases where specific marine areas or habitats contain degraded ecosystems or threatened species.

The primacy of CBD in the field of protection of marine biodiversity is further affirmed by the fact that the Conference of the Parties (CoP) in the Convention provides Contracting States with targets, principles and guidance in their efforts to meet the MPA obligation of *in-situ* conservation. The CoP, as the governing body of the Convention, has elaborated upon the obligations to conserve and sustainably use the marine biodiversity through the legally binding decisions it adopts. Coastal and marine biodiversity has been the center of its activities since its beginning. With the "Jakarta Mandate on Marine and Coastal Biological Diversity",[127] adopted on consensus at its 2nd meeting, the CoP considered the integrated marine and coastal area management as the most suitable framework for addressing human impacts on area's biodiversity and for promoting the objectives of the Convention by developing integrated management, plans and strategies within national development plans.[128] In 2004, a newly elaborated programme of work on marine and coastal biological diversity was adopted aiming to achieve, *inter alia*, significant reduction of marine and coastal biodiversity loss by 2010,[129] while in 2006 the CoP adopted decision VIII/15 relating to

[123] *Supra* note 28
[124] Art.8(d) of CBD
[125] Art.8(f) of CBD
[126] Art.8(l) of CBD
[127] The Jakarta Ministerial Statement on the implementation of the Convention on Biological Diversity" in UNEP, *Report on the 2nd Meeting of the Conference of the Parties of the Convention on Biological Diversity*, UN Doc.UNEP/CBD/COP/2/19, November 30, 1995, Appendix.
[128] *Conservation and Sustainable Use of Marine and Coastal Biological Diversity*, Decision II/10,2nd Meeting of the COP to the CBD, Jakarta, Indonesia, November 6–17, 1995.
[129] "[…] the establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to a global network or marine and coastal protected areas, building upon national and regional systems, including a range of levels of protection, where human activities are managed, particularly through national legislation, regional programmes and policies, traditional and cultural practices and international agreements, to maintain the structure and functioning of the full range of marine and coastal ecosystems, in order to provide benefits to both present and future generations". Marine and Coastal Biological Diversity, Decision VII/5, 7th

the framework for monitoring implementation of the achievement of the 2010 target stressing that at least 10 percent of each of the world's ecological regions should be effectively conserved and areas of particular importance to biodiversity protected. MPAs are simply referred as one of the outcome-oriented indicators to measure progress towards the 2010 target. A new Strategic Plan for Biodiversity 2011-2020 was adopted at the 10th meeting of the CoP in 2010,[130] which includes new strategic goals to be achieved through new strategic targets (Aichi Biodiversity Targets).[131] Aichi Target 11 for the improvement of the biodiversity status by safeguarding ecosystems, species and genetic diversity is particularly important for the development of MPAs, as it requires that *"*by 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas […] are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes*"*. By this, it is obvious that CoP considers MPAs as the main tool, and not just a mere indicator, for the conservation of biodiversity and the protection of ecosystem services.[132]

Even though MPAs are an environmental tool highly acclaimed in the CBD context, the relevant provisions of the Convention and the CoP's decisions guiding the Contracting States in their implementation are jurisdictionally limited, as well. In fact, there is no difference in the jurisdictional scope between the CBD and UNCLOS in terms of the exclusive flag State jurisdiction in Part VII and the environmental protection regime of Part XII of UNCLOS.[133] Although Art.4 of CBD encompasses both the direct conservation of biodiversity components and the management of human activities (i.e. processes and activities) as methods for the protection of marine environment, the first one is only applicable in areas within national jurisdiction, whereas in ABNJ the Contracting States have only rights and obligations to regulate the processes and activities conducted by their nationals not to cause environmental harm.[134] Hence there are no rights or obligations of States to directly conserve the components of biodiversity on the high seas,

Meeting of the Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, February 9–20, 2004, Annex [Decision VII/5].

[130] *Strategic Plan for Biodiversity 2011–2020*, Decision X/2, 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity, Nagoya, Japan, October 18–29, 2010

[131] https://www.cbd.int/sp/targets/default.shtml (accessed on October 2018)

[132] Spalding, Mark D., Amy Milam, Imèn Meliane, Claire Fitzgerald, and Lynne Z. Hale. "Protecting Marine Spaces: Global Targets and Changing Approaches." *Ocean Yearbook Online* 27, no. 1 (2013), p.219

[133] The IUCN Environmental Law Center, The convention on biological diversity—an explanatory guide, draft text (1993), p.30

[134] According to Art.4 of CBD: ''Subject to the rights of other States, and except as otherwise expressly provided in this Convention, the provisions of this Convention apply, in relation to each Contracting Party: (a) in the case of components of biological diversity, in areas within the limits of its national jurisdiction; and (b) in the case of processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction.''

and consequently, CBD sets a jurisdictional obstacle in the establishment of high seas MPAs.[135] It has been argued that, due to the conservation of biodiversity being the prime objective of CBD, the term "components of biological diversity" may have different meaning from the components of marine environment in UNCLOS. However, since the components of biodiversity include both living resources and the non-living environment, it cannot be presumed, that the jurisdictional limitations to components of biodiversity are particularly narrower than the ones to components of marine environment.[136] As MPAs are included in the *in-situ* conservation measures, it follows that the conservation of deep-sea features as components of high seas biodiversity can be effective if the environmental degradation in the area is caused by *in-situ* processes and activities. In other words, the location of biodiversity components to be protected and the location of the threatening human processes and activities should overlap, in order high seas biodiversity to be conserved by the establishment of high seas MPAs consistent with the jurisdictional limitations of Art.4. CBD does not cover cases when human activities and processes disturb distant ecosystems (e.g. distant mining sites) or when the source of threat is not human activities or processes (e.g. increased number of predators or increasing temperature). Furthermore, the ecosystem approach could not be used as an argument[137] to overcome the Convention's jurisdictional obstacles, as a critical element of the approach is the integrated management of human activities, which could be achieved only if an *in-situ* requirement for MPAs did not exist in the Convention.

As the jurisdictional obstacle seems difficult to overcome, the CoP of CBD focuses on providing scientific and technical knowledge and data on high seas marine biodiversity. Since 2006 and in response to the Johannesburg Plan of Implementation call to establish protected areas globally, CBD has sought to develop through workshops a broad suite of criteria for identifying ecologically or biologically significant marine areas in need of protection in open ocean waters and deep-sea habitats (EBSAs criteria). The CoP of the Convention adopted in its 9th meeting the EBSAs criteria and the scientific guidance for selecting areas to establish a representative network of MPAs[138], which were consolidated by the Expert Workshop on Ecological Criteria and

[135] The CoP of CBD adopted the ecosystem approach in 1995 in Decision II/8, while Decision VII/5 in 2004 emphasized the need to cooperate for the establishment of high seas MPAs especially regarding to deep-sea features, such as seamounts, hydrothermal vents and cold-water coral reefs. The connection between the ecosystem approach and high seas MPAs was announced in Decision VIII/24 in 2006.

[136] *Supra* note 21, p.16

[137] CBD, 'Marine and Coastal Biodiversity: Review, Further Elaboration and Refinement of the Programme of Work—Study of the Relationship between the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea with regard to the Conservation and Sustainable Use of Genetic Resources on the Deep Seabed (Decision II/10 of the Conference of the Parties to the Convention on Biological Diversity)' (2003) UNEP/CBD/SBSTTA/8/INF/3/Rev.1, paragraph 70 and 87.

[138] CBD CoP Decision IX/20, para 14, and Annex 1 and Annex 2, respectively. The 7 EBSAs criteria provided in Annex I are a) uniqueness or rarity, b) special importance for life history of species, c) Importance for threatened, endangered or declining species and/or habitats, d) vulnerability, fragility, sensitivity, slow recovery, e) biological productivity, f) biological diversity, g) naturalness. Annex II refers as properties and components of a network of

Biogeographic Classification Systems for Marine Areas in Need of Protection held in Azores in 2007.[139] The separation of site-level criteria and network-level approaches established a process that allows CBD to focus on site-level description of EBSAs, prior to any consideration of management regimes such as networks of MPAs.[140] It has been stressed by the relevant forums that the description of an area as ecologically or biologically significant is a scientific exercise that should not be conflated with any potential management requirements and that the EBSAs process does not imply any further obligation to establish MPAs in the area. Even though the work on EBSAs criteria originally focused on the establishment of MPAs in ABNJ, it was broadened to encompass also other types of area-based measures and areas within national jurisdiction. The EBSAs process is thus not limited to the use of MPAs.[141]

(c) IMO Instruments

MARPOL 73/78[142] addresses the problem of vessel-source pollution of the marine environment as a response to the rising environmental awareness in the aftermath of the 1972 UN Stockholm Conference and the deficiencies of the previous relevant[143] regime resulting in large tanker accidents, such as the grounding of the Torrey Canyon in 1967. MARPOL 73/78 general rules are to be found in the Convention's text and protocol, however, only the six accompanying Annexes make the framework work in practice, each of which provides a unique source-specific regulatory approach towards the protection of marine environment. Specifically, the Annexes deal with the prevention of pollution by oil, noxious liquid substances in bulk, harmful substances carried by sea in packaged form, sewage, garbage from ships, and air pollution from ships.

The most important similarity of the Annexes is the provision for special areas granting a higher level of protection to specific vulnerable oceans parts, similar to the prohibition zones introduced by the predecessor regime of the 1954 OILPOL Convention.[144] The concept of special areas is included in Annex I, II, IV and V and requires oceanographical and ecological conditions, as well

MPAs the following: a) ecologically and biologically significant areas, b) representativity, c) connectivity, d) replicated ecological features, e) adequate and viable sites.

[139] https://www.cbd.int/marine/doc/azores-brochure-en.pdf

[140] Dunn, Daniel C., Jeff Ardron, Nicholas Bax, Patricio Bernal, Jesse Cleary, Ian Cresswell, Ben Donnelly, Piers Dunstan, Kristina Gjerde, David Johnson, Kristin Kaschner, Ben Lascelles, Jake Rice, Henning Von Nordheim, Louisa Wood, and Patrick N. Halpin. "The Convention on Biological Diversity's Ecologically or Biologically Significant Areas: Origins, Development, and Current Status." *Marine Policy* 49 (2014) p.7

[141] *Supra* note 28, p.202

[142] Adopted on 2 November 1973, in force as from 2 October 1983, as modified by the Protocol of 1978 relating thereto, adopted on 17 February 1978, in force as from 2 October 1983

[143] The 1954 International Convention for the Prevention of Pollution by Oil, Adopted on 12 May 1954, in force as from 26 July 1958. By virtue of Art. 9(1) of MARPOL, it supersedes OILPOL for parties to both conventions. The few states that have ratified OILPOL but not MARPOL remain bound by the rules of the former.

[144] The only prohibition zone described and applied pursuant to the 1954 OILPOL Convention is the Great Barrier Reef in 1971. However, it never entered into force, but was later incorporated in MARPOL Annex I., Cf. Res. A.232(VII), *Protection of the Great Barrier Reef*, adopted on 12 October 1971.

as requirements for vessel traffic characteristics, in order an area to be as special designated.[145] Specific prerequisites for the identification and designation of special areas are included in IMO's Special Areas Guidelines,[146] according to which the designation is carried out by the Marine Environment Protection Committee (MEPC) through amendment of the respective Annex. In the designated area, more restrictive measures can be adopted for the discharge of oil, noxious liquid substances, sewage and disposal of garbage into the sea. For this reason, States seeking the special area status are obliged to submit a proposal to MEPC containing a draft amendment to MARPOL 73/78 as the formal basis for the designation, as well as a background document with all relevant information on the need for designation, such as oceanography, ecological characteristics, social and economic values, scientific and cultural significance, environmental pressures from ship-generated pollution, as well as other environmental pressures, measures already taken to protect the area and the availability of adequate reception facilities in ports within the area for the disposal of harmful substances, otherwise discharged whilst at sea.[147] Currently, only Mediterranean Sea and the Antarctic have been designated as Special Areas in ABNJ. As the provisions for special areas represent "internationally accepted rules and standards" they apply to all vessels in the area, regardless of its flag State being a party to the relevant annex of MARPOL 73/78. Given that the special areas tool does not apply a proactive approach, as it merely gives effect to discharge restrictions by regulating navigation,[148] it cannot be considered an MPA as a conservation management tool from a holistic point of view. In contrast, it can be an effective tool for the protection of an MPA against pollution from ships' discharging activities, especially when the MPA is located in EEZ, pursuant to Art.211(5), where the freedom of navigation is recognized.[149]

Under the auspices of IMO and distinguished from the above-mentioned special areas, there is the concept of Particularly Sensitive Sea Areas (PSSAs)[150]. Even though the general obligations of Part XII and the more specific one of 211(1) of UNCLOS support the establishment of area-

[145] According to the Annexes, special areas are defined as "a sea where for recognized technical reasons in relation to its oceanographical and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by oil [or by noxious liquid substances or by garbage respectively] is required."

[146] IMO Assembly Res. A.927(22), *Guidelines for the Designation of Special Areas under MARPOL 73/78 and Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas*, adopted on 15 January 2002, Annex 1

[147] H.-J. Koch and R. Lagoni (eds.), *The Reception of Oily Waste from Ships in European Ports* (Baden-Baden: Nomos Verlagsgesellschaft 1998) pp. 1-105.

[148] Kachel, Markus J. *Particularly Sensitive Sea Areas the IMOs Role in Protecting Vulnerable Marine Areas*. Berlin: Springer, 2008, p. 102

[149] *Supra* note 84, p.89

[150] PSSAs are defined as "an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities", Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas, IMO Assembly Resolution A.982(24), IMO OR, 24th Session, A 24/ Res 982 (2005), paragraph 1.2

based management tools, their legally binding effect is frequently debated. In contrast to the special areas under MARPOL 73/78, which are introduced in the Annexes and come into effect through amendment of the respective Annex, the concept of PSSAs is defined in IMO Assembly's Guidelines, adopted pursuant to Art.15(j) of IMO Convention, which do not entail any legal obligations on IMO member States. The Guidelines aim to determine the IMO's internal conduct for the identification and establishment of PSSAs without recommending any action to be taken by member States.[151] Therefore, the binding effect of Associated Protective Measures (APMs) required for the final designation of a PSSA could not derive from the relevant Guidelines or exist *prima facie*, but instead need an "identified legal basis". This legal basis is a requisite for APMs to acquire binding effect. Thus, discharge and anchoring restrictions under the SOLAS[152] and COLREG[153] conventions, designation of special areas under MARPOL 73/78, traffic separation schemes, ship reporting and routeing systems etc. can function as binding APMs based on IMO instruments.[154] Regarding UNCLOS,[155] APMs could acquire binding effect if interpreted as "internationally accepted rules and standards" pursuant to the rules of reference of the Convention. PSSAs are not to be confused with the special areas of 211(6) in EEZ, as PSSAs are neither confined to address vessel-source pollution nor limited in EEZ and require fewer criteria to be met.[156] These special areas remain just an additional basis for PSSAs, and more specifically an identified legal basis for the adoption of APMs within the scope of Art.211(6). On the other hand, pursuant to the Guidelines, the UNCLOS legal basis for APMs refers to the rules of reference regarding the territorial sea -i.e. Art.21- and EEZ -i.e. Art.211(5)(6). It should be stressed that, only if APMs are adopted by IMO either unanimously or with an overwhelming majority, they may constitute internationally accepted rules and standards, sufficient to be incorporated in the Convention through rules of reference and thus acquire legally binding effect, in order to be implemented by States in their respective jurisdictional zones.

Disagreement also exists on whether PSSAs could be considered as MPAs, or specifically high seas MPAs. While many have recognized PSSAs as specialized MPAs,[157] others consider PSSAs

[151] *Supra* note 148, p.251
[152] IMO Convention for the Safety of Life at Sea (SOLAS), adopted on 7 November 1974
[153] IMO Convention on the International Regulations for Preventing Collisions at Sea, adopted on 20 October 1972
[154] Paragraph 7.5.2.3: "The legal bases for such measures are: (i) any measure that is already available under an existing IMO instrument; or (ii) any measure that does not yet exist but could become available through amendment of an IMO instrument or adoption of a new IMO instrument"
[155] *Ibid*. [..] or (iii) any measure proposed for adoption in the territorial sea, or pursuant to Article 211(6) of the United Nations Convention on the Law of the Sea where existing measures or a generally applicable measure (as set forth in subparagraph (ii) above) would not adequately address the particularized need of the proposed area."
[156] *Supra* note 148, p. 257
[157] Agardy, Tundi. *Marine Protected Areas and Ocean Conservation*. San Diego: Academic Press, 1997, p.100; Fayette, Louise De La. "The Marine Environment Protection Committee: The Conjunction of the Law of the Sea and International Environmental Law." *The International Journal of Marine and Coastal Law* 16, no. 2 (2001), p.186; Maria Gavouneli, Functional Jurisdiction of the Law of the Sea (2007), Martinus Nijhoff Publishers, p.79

as single-sector designation not sufficient to be described as an MPA, thus *maritime* protected areas instead of *marine* protected areas.[158] Due to their reactive purpose of managing shipping activities against adverse impacts on marine environment through APMs, PSSAs constitute an additional, yet powerful, layer of protection of marine environment, but not an MPA themselves.[159] Lastly, it should be noted that, that the designation of PSSAs is not jurisdictionally limited.[160] PSSAs of high seas is a feasible concept. However, none has been designated in ABNJ yet. Even though few APMs can be adopted therein, the designation of sensitive high seas areas by IMO has a catalytic awareness-raising character for the international community, even resulting in proactive measures by fora, such as ISA or FAO.[161]

C. Evaluation of the global framework

The primacy of flag State jurisdiction in ABNJ introduced by UNCLOS and affirmed by CBD entails an obstacle for the designation of MPAs in ABNJ. As there is no central authority comprehensively regulating high seas activities and given that high seas are not subject to any national jurisdiction, the legal order of the high seas can primarily be entrusted to the flag States. Even though the need for a higher level of marine biodiversity conservation has been confirmed, the current global framework does not solve the conflict between the adoption of conservation measures, such as MPAs, in ABNJ and the exercise of high seas freedoms. Any unilateral effort to establish MPAs in ABNJ could be perceived as an attempt to hinder other States' rights to navigate and exploit natural resources in the highs seas and the Area. Many aspects of marine biodiversity are dealt with by different sectors (e.g. FAO, IMO and ISA regulating fishing, shipping and exploration and exploitation of mineral resources, respectively), thus resulting in a highly fragmented and uncoordinated global system. However, the current framework has been significantly active in adopting scientific criteria for the identification of areas in need of protection in ABNJ. Even though sectorally aimed and without any legally binding effect, they provide useful guidance and awareness-raising regarding sensitive ocean areas which could be further effectively protected by utilizing the MPA conservation tool.

---

[158] The difference of the terms is better illustrated in German translation ("Maritime Schutzgebiete instead of Meeresschutzgebiete), Detlef Czybulka, "Meeresschutzgebiete in der Ausschließlichen Wirtschaftszone", 14 *ZUR* (2003), p. 331

[159] *Supra* note 148, p. 246

[160] Guidelines, paragraph 4.3. merely states that ""[t]he criteria [used to identify particular sensitivity] relate to PSSAs within and beyond the limits of the territorial sea."

[161] Warner, Robin. "Marine Protected Areas Beyond National Jurisdiction – Existing Legal Principles and Future Legal Frameworks", In Thiel, Hjalmar, and J. A. Koslow, eds. *Managing Risks to Biodiversity and the Environment on the High Sea, including Tools Such as Marine Protected Areas: Scientific Requirements and Legal Aspects; Proceedings of the Expert Workshop Held at the International Academy for Nature Conservation Isle of Vilm, Germany, 27 February - 4 March 2001*. Bonn: BfN, 2001.*)*, p.167

Part II: Regional approaches towards High Seas marine biodiversity and MPAs

Whereas RFMOs for long have been active in the management of marine living resources in ABNJ, regional seas programmes have mainly focused on coastal and near-shore marine environment and just recently expanded their activities into ABNJ. The following regions and the regimes they are covered by present the most advanced current efforts in the regional level towards ABNJ marine biodiversity conservation.

A. The European Region

1) EU Environmental Framework

In the EU context, actions for the protection of marine environment and ocean preservation was traditionally limited due to their subordinate position mostly within areas outside the environmental policy, such as fisheries, agriculture and even transport and internal market,[162] and the absence of an integrated approach towards ocean governance, similar to Common Fisheries Policy. This is affirmed by the limited number of EU law instruments addressing the need for the protection of biodiversity and ecosystems and the designation of MPAs in the marine areas of Member States. However, the situation is not a paradox. Given the vital role of oceans and marine resources in the economy of Member States, they have opposed any direct involvement of EU in marine environmental issues, which are strongly connected with their national interests and sovereignty.[163] Hence, the EU and Member States have shared competence on the conservation of marine biodiversity, as implied by the EU Treaties.[164]

To begin with, the Birds[165] and Habitats[166] Directives form the main EU instruments for the implementation of the Bern Convention[167] by the EU and its Member States. One the one hand, the Birds Directive obliges Member States to designate Special Protection Areas (SPA) for bird species included in its Annex I, as well as for migratory species regularly occurring within their

[162] *Supra* note 25, p.79-80
[163] *Ibid*, p.82
[164]Art.191(4) of the Treaty on Functioning of the European Union (TFEU): "*Within their respective spheres of competence*, the Union and the Member States shall cooperate with third countries and with the competent international organizations. The arrangements for Union cooperation may be the subject of agreements between the Union and the third parties concerned. The previous subparagraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements". (emphasis added)
[165] Directive 2009/147/EC of the European Parliament and the Council of 30 November 2009 on the conservation of wild birds; this is the codified version of Council Directive 79/409/EEC of 2 April 1979 as subsequently modified
[166] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
[167] Convention on the Conservation of European Wildlife and Natural Habitats [Bern Convention] (opened for signature in 19th September 1979, entered into force on 1st June 1982)

jurisdiction. On the other hand, under the Habitats Directive Member States have the obligation to designate Special Areas of Conservation (SAC) in order to achieve or maintain a favourable conservation status of natural habitats and species listed in its Annex I and II, respectively. The SPAs and SACs form the ecologically coherent European network of protected areas NATURA 2000. The geographical scope of the Directives extends to all marine areas under the jurisdiction of EU member States, thus including their EEZs.[168] According to the European Commission, the two Directives oblige the Member States to deliver a favourable conservation status for species and habitats in both terrestrial and marine environments.[169] As the Birds and Habitats Directives remain at the centre of EU's nature conservation efforts and due to the continuing loss of biodiversity in the European waters, the EU reaffirmed the commitment to the objectives of the Directives by launching the EU Biodiversity Plan in 2006, followed by the EU Biodiversity Strategy to 2020. The Target 1 of the Strategy, adopted in 2011, refers to the full implementation of the Birds and Habitats Directives by completing the NATURA 2000 network in the marine environment, in order to achieve the global commitments towards marine biodiversity adopted in 2010 by the CBD CoP.[170] Thus, by the end of 2012 the NATURA 2000 network had been expanded to cover more than 4 percent of the Europe's seas.[171] However, the network is not equally distributed across regional seas[172], and could be described as coastal habitats-oriented, as the Habitats Directive has only a "limited focus on marine species and habitat types that occur in the offshore marine environment".[173]

In response to the shortcomings of the Birds and Habitats Directives and in order to enhance the further development of NATURA 2000 network, the EU introduced the Marine Strategy Framework Directive (MSFD) as the leading instrument of its newly Integrated Maritime Policy[174]

---

[168] In its case law, the European Court of Justice (ECJ) has recognized that any extension of Member States' sovereignty or jurisdiction according to international law (UNCLOS) implies a respective extension of the application of EU law and policies. C-286/90, *Poulsen* case (1992) §9; C-405/92 *Driftnets Case* (1993) §5; C-61/77 *Commission v. Ireland* (1978). Also relevant is the decision of the High Court of the United Kingdom, *The Queen v. The Secretary of State for Trade and Industry ex parte Greenpeace Limited, High Court of Justice Queen's Bench Division, 5th November 1999 (Greenpeace II).* Particular reference to the scope of the Habitats Directive is made in the decision of Case C-6/04 Commission v. United Kingdom (2005), §117

[169] European Commission, *Guidelines for the Establishment of the Natura 2000 Network in the Marine Environment: Application of the Habitats and Birds Directive (2007)*, p.14

[170] *Supra* note 130

[171] European Environmental Agency Report, *Marine Protected Areas in Europe's seas: An overview and perspectives for the future* (2015), p.14

[172] *Ibid.*, In the Greater North Sea and the Baltic Sea, the network's coverage reaches almost 18 and 12 percent, respectively, while the Mediterranean subregions hardly reach 4 percent. It is not clear whether this is because of different distribution patterns or the extend of listed habitats.,

[173] European Commission, Guidelines for the establishment of the Natura 2000 network in the marine environment. Application of the Habitats and Birds Directives (May 2007), p.14

[174] Markus, Till, Nina Maier, and Sabine Schlacke. "Legal Implementation of Integrated Ocean Policies: The EU's Marine Strategy Framework Directive." *The International Journal of Marine and Coastal Law* 26, no. 1 (2011), p. 60

for the protection of marine biodiversity and its associated ecosystems.[175] The main objective of MSFD is the achievement or maintenance of "good environmental status" in the marine environment by 2020[176] through marine strategies developed and implemented in close cooperation with neighbouring States in their regions and subregions[177] and within specified timeframes[178]. Regarding its geographical scope, it is applied in all marine areas where Member States exercise sovereignty, sovereign rights or jurisdiction, except internal waters where the Water Framework Directive (WFD)[179] applies. In fact, MSFD applies to coastal areas only to the extent that activities therein are not covered by WFD or relevant EU legislation.[180] The MSFD is not intended to replace pre-existing instruments like the Birds and Habitats Directives. Instead, measures adopted under the Directives will be part of the measures to be adopted by Member States under MSFD.[181]

In the context of MSFD, MPAs are one of the few conservation measures explicitly mentioned as spatial protection measures. Pursuant to the Preamble[182] and Art.13(4), this term indicates that it covers areas already designated or to be designated under the Directives and NATURA 2000 network and under international or regional agreements to which the EU and Member States are parties. Furthermore, the term seems to include all types of area-based measures, such as PSSAs and their associated measures for the regulation of shipping, fishing closure areas or safety zones around oil platforms and wind parks which function as de facto nature reserves.[183] Moreover, the spatial protection measures aim "to develop coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems". This objective is in conformity with the principles of international environmental law incorporated in MSFD. Thus, the ecosystem-based approach to the management of human activities and the sustainable use of marine environment are explicitly referred in Art.1(3), while the precautionary principle is listed in paragraphs 27 and 44 of the Preamble among the principles of EU environmental law to be taken into account at the implementation of programmes of measures.

[175] Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
[176] The term "good environmental status is defined in Art.3(5) of MSFD.
[177] According to Art.4, the MSFD applies to the Black Sea, the North-East Atlantic Ocean, the Mediterranean Sea and the Baltic Sea. The Article also defines the subregions of the North-East Atlantic Ocean and Mediterranean Sea.
[178] The six-step action plan of the marine strategies is provided in Art.5 of MSFD.
[179] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy
[180] Art.2 and 3 of MSFD
[181] Preamble § 6 and 18, as well as Art.13(4) of MSFD
[182] Preamble § 6,18 and 21of MSFD
[183] Trouwborst, Arie, and Harm M. Dotinga. "Comparing European Instruments for Marine Nature Conservation: The OSPAR Convention, the Bern Convention, the Birds and Habitats Directives, and the Added Value of the Marine Strategy Framework Directive." *European Energy and Environmental Law Review* 20, no. 11 (2011): 12, p.147

The MSFD contains an innovative mechanism in the context of the hierarchical structure between international and EU law. More specifically, it divides the marine areas of Member States into "territorially-based public governance units" based on EU law, i.e. marine (sub)regions, while it refers to structures of public international law, i.e. commissions of the respective regional sea conventions, through which Member States should seek its implementation.[184] The MSFD establishes a dual relationship with international law; on the one hand, it implements international non-legally binding instruments and treaties referred to in its Preamble,[185] in which, due to their shared competence, EU individually participates next to its Member States. On the other hand, the MSFD refers to regional sea conventions as "existing regional institutional cooperation structures" or "relevant international fora" through which Members States shall cooperate for its implementation by developing marine strategies, both with each other and with neighbouring third States.[186] In other words, the MSFD not only seeks to implement international instruments, but also seeks implementation by the latter. Thus, instruments adopted by the regional sea commisions in conformity with the MSFD become an integral part of EU legislation, even though they are adopted by structures of public international law. As a result, their binding measures and decisions and non-binding recommendations are submitted in the *rationae materiae* jurisdiction of ECJ and the scrutiny of the European Commission.[187]

To sum up, as shown above, EU has considerably limited legislation concerning the conservation of marine biodiversity. The Birds and Habitats Directives form the basis of its environmental policy, while the MSFD is a complementary, but more integrated, instrument to achieve the international conservation objectives of EU. This is not to be underrated, though. Despite the shortcomings of the EU environmental framework, it should be kept in mind that the NATURA 2000 network remains a remarkable example that a large number of States is bound by the same legal obligation to set up and manage a joint network of MPAs that extends to highly diverse (sub)regional seas.[188] The explicit incorporation of the current international environmental principles through the MSFD renders the network a complementary scheme to the protection of

[184] Hey, Ellen. "Multi-Dimensional Public Governance Arrangements for the Protection of Transboundary Aquatic Environment in the European Union - The Changing Interplay between European and Public International Law." *SSRN Electronic Journal*, 2009, pp.199-200

[185] In §7, 17, 18 and 19 of the Preamble, it is explicit that the MSFD seeks to fulfill the commitments undertaken by WSSD and to implement UNCLOS and its Implementing Agreements, CBD and the regional seas conventions applied to the marine areas of its Member States.

[186] Art. 5(2) and 6(1)(2). The terms used imply that the obligation to cooperate between Member States is an obligation of result, while the obligation to cooperate with third countries is an obligation of effort/conduct., *supra* note 184, p. 206

[187] Case C-239/03, Commission of the European Communities v. the French Republic (Étang de Berre), judgment of 7 October 2004; Case C-188/91, Reference for a preliminary ruling from Finanzgericht Hamburg, Deutsche Shell AG v Hauptzollamt Hamburg-Harburg [*Shell* case] (1993)

[188] *Supra* note 171

ecosystems and habitats in ABNJ under the regional sea conventions and regional fisheries management organizations. Even though the conservation of marine biodiversity in such areas is out of EU's competence, its relevant legal framework makes EU an active actor in international cooperation and coordination initiatives towards this aim.[189]

2) The North-East Atlantic Ocean

On the regional level, a significant progress has been made towards the conservation of marine ecosystems and the establishment of (networks of) MPAs under the OSPAR Convention,[190] which is often described in the legal literature as "the best example of a comprehensive effectively managed and ecologically representative regional system" of MPAs.[191]

(a) The OSPAR Convention

According to Art.1, the geographical scope of the Convention extends to the east coast of Greenland in the west, south to the Straits of Gibraltar and north to the North Pole, while the maritime area is divided into five regions with approximately 40 percent of it situated in ABNJ.[192] In contrast to its predecessors which addressed the adverse effects of specific sources of pollution, OSPAR's broader regime covers also other human activities than those leading to pollution,[193] such as scientific research, cable-laying, deep-sea tourism etc. Hence, except from the specific obligations of Art.3-5 to reduce land -based pollution and pollution by dumping, incineration and from offshore sources, OSPAR contains a general obligation to protect the marine environment and conserve marine ecosystems included in Art.2, which is further elaborated through the legally binding Annexes I-V and Appendices 1-3. When complying with the general obligation, States are required to apply the precautionary approach, which is explicitly provided in the text of the

[189] Long, Ronán. "Legal Aspects of Ecosystem-Based Marine Management in Europe." *Ocean Yearbook Online* 26, no. 1 (2012), p.473

[190] The 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (entry into force 1998) consolidated the 1972 Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircrafts and 1974 Paris Convention for the Prevention of Marine Pollution from Land-based Sources. It consists of 16 members (all coastal States of the North-East Atlantic except for Russia, as well as Finland, Luxemburg and Switzerland as States with watercourses that flow into the North-East Atlantic, and EU)

[191] Lalonde, Suzanne. "Marine Protected Areas in the Arctic." In The Law of the Sea and the Polar Regions Interactions between Global and Regional Regimes, edited by Erik J. Molenaar, Ag. G. Oude Elferink, and Donald R. Rothwell. Vol. 76. Publications on Ocean Development. Martinus Nijhoff Publishers, 2013, p. 105

[192] Its subregions are the Arctic Waters, the Greater North Sea, the Celtic Seas, the Bay of Biscay and Iberian Coast, and the Wider Atlantic. Rochette, Julien, Sebastian Unger, Dorothée Herr, David Johnson, Takehiro Nakamura, Tim Packeiser, Alexander Proelss, Martin Visbeck, Andrew Wright, and Daniel Cebrian. "The Regional Approach to the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction." *Marine Policy* 49 (2014), p. 3

[193] *Supra* note 28, p.114

Convention.[194] OSPAR also includes in its Preamble the concept of sustainable development,[195] while the holistic management of human activities required by the general obligation to conserve marine ecosystems implies the application of the ecosystem approach.[196] Moreover, Art.10 of the Convention establishes the OSPAR Commission as its governing body. Based on a two-step procedure, the Commission is entrusted with the development of programmes and measures through binding decisions and non-binding recommendations, which further develop the substantive obligations of the Convention to be implemented by the Parties[197] while limiting their wide margin of appreciation. The Parties shall periodically report to the Commission on the implementation of the Convention, in order the Commission to assess their compliance.[198]

(b) Biodiversity and MPAs under OSPAR regime

At the 5th Ministerial Meeting in 1998, the Contracting States of OSPAR adopted Annex V, as well as Appendix 3 to the Convention and the Strategy on the Protection and the Conservation of the Ecosystem and Biodiversity.[199] These tools contain the legal basis for the establishment of MPAs in the OSPAR marine region, as Annex V extends the scope of the Convention, in order to cover marine biodiversity, as well. Thus, OSPAR Convention is directly and more specifically linked with CBD. Art.2 of Annex V complements the general obligation of Art.2 of the Convention, as it contains a general obligation to take the necessary measures for the conservation and sustainable use of biodiversity and to cooperate in adopting programmes and measures for those purposes. Art.3 spells out the respective duties of the Commission, while it explicitly requires an integrated ecosystem approach in its action. In particular, it stipulates that the Commission may take measures regulating new forms of utilization, which is one of the few areas

[194] The reference to the precautionary approach in Art.2(a) is differently formulated than its version in Principle 15 of the Rio Declaration and the CBD. Thus, States shall apply [*inter alia*]: (a) the precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects. *Supra* note 28, p.118

[195] OSPAR Preamble, § 3

[196] The ecosystem approach in the OSPAR context is further defined and developed by the Biodiversity Committee of the Convention and Joint Ministerial Meeting of the Helsinki and OSPAR Commissions. Biodiversity Committee, "*Ecosystem Approach to Management of Human Activities*," Meeting of the Biodiversity Committee, 20–24 January 2003, Summary Record 2003, BDC 03/10/01-E, Annex 13, p.6; First Joint Ministerial Meeting of the Helsinki and the OSPAR Commission, "*Declaration of the First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions*," 25–26 June 2003, Record of the Meeting- Annex 8, § 8.

[197] *Frank, Veronica. The European Community and Marine Environmental Protection in the International Law of the Sea: Implementing Global Obligations at the Regional Level. Boston: Martinus Nijhoff Publishers, 2008,* p.350

[198] Art.22-23 of OSPAR Convention

[199] OSPAR Commission, "OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area," (1998) and "The Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area," Ministerial Meeting of the OSPAR Commission, 20–24 July 1998, Summary Record OSPAR 98/14/1-E, Annex 31.

where the Commission is entitled to enact measures.[200] The human activities to be managed by the adoption of measures and programmes are identified according to criteria of Appendix 3. Furthermore, Art.4 imposes a significant restriction to the Commission's mandate, as it excludes measures regarding fisheries or marine transport from its scope, but instead the question should be drawn to the attention of the competent RFMO or IMO, respectively. This could be explained as an effort of OSPAR to avoid conflicts with UNFSA or instruments of IMO, such as MARPOL 78/73. Thus, the Commission is not entitled to regulate "either the most prominent form of extraction of biomass or one of the main sources of marine pollution.[201]

Even though the use of MPAs is not explicitly stated in the text of the Convention and Annex V, the Ministerial Meeting of 1998 encouraged the OSPAR Commission "to promote the establishment of a network of MPAs to ensure the sustainable use and protection and conservation of marine biodiversity and its ecosystems".[202] As a response, the Commission adopted in 2003 the Recommendation 2003/3 on a Network of MPAs and the Strategy on the Protection and the Conservation of the Ecosystem and Biodiversity, along with guidelines on the identification, selection and the management of MPAs,[203] pursuant to which the Contracting Parties committed to the establishment of an ecologically well-managed network of MPAs by 2010. As amended in 2010,[204] the Recommendation and Strategy adopted a new purpose for a network of ecologically coherent MPAs established by 2012 and well managed by 2016 and urged Contracting Parties to propose ABNJ to be selected by the Commission as components of the network. The Recommendation recognizes that Contracting Parties are competent to individually designate MPAs and adopt relevant management measures in areas within national jurisdiction,[205] whereas it only notes that MPAs in ABNJ might be included in the network. Regarding ABNJ, the Strategy requires the Commission to complement the action of the Contracting Parties by considering their

[200] Matz-Lück, Nele, and Johannes Fuchs. "The Impact of OSPAR on Protected Area Management beyond National Jurisdiction: Effective Regional Cooperation or a Network of Paper Parks?" *Marine Policy* 49 (2014), p.5
[201] *Ibid*.
[202] OSPAR Commission, "The Sintra Statement", (1998)
[203] OSPAR Commission, "OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas," (2003); OSPAR Commission, "Guidelines for the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area," (2003); OSPAR Commission, "Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area," (2003); OSPAR Commission, "OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area," (2003)
[204] OSPAR Commission, "OSPAR Recommendation 2010/2 on amending Recommendation 2002/3 on a Network of Marine Protected Areas," Meeting of the OSPAR Commission, 20–24 September 2010, OSPAR 10/23/1-E, Annex 7; OSPAR Commission "The North-East Atlantic Environment Strategy: Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020" (2010), PART II Biological Diversity and Ecosystems.
[205] At the same time, § 3.3(b)(ii) of the Recommendation also recognizes that coastal States are not competent to unilaterally regulate certain matters in areas within national jurisdiction, as is the case with their EU obligation to designate SPAs and RACs under the Birds and Habitats Directives, respectively, under the guidance of European Commission.

reports and assessments on possible components of the OSPAR network and on the need for protection of the biodiversity and ecosystems in ABNJ, and after consultation with the international organizations having the necessary competence. Therefore, the Strategy does not accord the Commission the same role as individual States in areas within national jurisdiction, but instead states that the establishment of MPAs in ABNJ should be carried out in consultation the competent international organizations.[206] The formal Memoranda of Understanding between OSPAR Commission and IMO, ISA and the North-East Atlantic Fisheries Commission (NEAFC) aim both to enhance the holistic approach of the Commission towards coherent conservation of biodiversity and ecosystems and to strengthen the management of MPAs in ABNJ. Indeed, the NEAFC selection process of site proposals for fishing closures pursuant to the UN Resolution 61/105 included an OSPAR member,[207] while the Code of Conduct for Responsible Marine Scientific Research in the Deep Seas and High Seas of the OSPAR Maritime Area affirmed the mutual consultation and cooperation between OSPAR and ISA.[208]

Even though, according to Art.13(b) of OSPAR Convention, the Recommendations of the Commission are non-binding instruments, this does not imply that they are legally irrelevant when interpreting the general obligations of Art.2 of the Convention and Annex V.[209] The Commission's instruments specify the content of the vaguely-stated obligations, which would otherwise allow for Parties' wide margin of appreciation.[210] As Recommendations are adopted unanimously, the Recommendation 2003/03 reflects a strong political force towards the use of MPAs and suggests that Parties are likely to feel committed to interpret their obligations under its light. Also, the timeframes for the establishment and good management of MPAs, as well as for the implementation reports[211] support the normative character of the Recommendation. This, however, does not conclude to a legal obligation of the Parties to establish MPAs in areas within national jurisdiction. The Contracting Parties are required by the Convention and Annex V to adopt the necessary measures to ensure the appropriate protection and conservation of biodiversity and

[206] Molenaar, Erik J., and Alex G. Oude Elferink. "Marine Protected Areas in Areas beyond National Jurisdiction The Pioneering Efforts under the OSPAR Convention." *Utrecht Law Review* 5, no. 1 (2009), pp.15-16

[207] Oleary, B.c., R.l. Brown, D.e. Johnson, H. Von Nordheim, J. Ardron, T. Packeiser, and C.m. Roberts. "The First Network of Marine Protected Areas (MPAs) in the High Seas: The Process, the Challenges and Where next." *Marine Policy* 36, no.3 (2012), p.600; Memorandum of understanding between the OSPAR Commission and NEAFC, extraordinary meeting, OSPAR agreement 2008-04 of 5. September 2008.; Agreement of cooperation between IMO and OSPAR, 1999, OSPAR agreement 1999-15, Doc Nr. 99/8/2.; Memorandum of understanding between the OSPAR Commission and the International Seabed Authority

[208] *Supra* note 200, p.7

[209] Nollkaemper, André. "The Distinction Between Non-Legal and Legal Norms in International Affairs: An Analysis with Reference to International Policy for the Protection of the North Sea from Hazardous Substances." *The International Journal of Marine and Coastal Law* 13, no. 3 (1998), p.360.

[210] *Supra* note 197 and text

[211] OSPAR Recommendation 2010/2 on amending Recommendation 2002/3 on a Network of Marine Protected Areas," Meeting of the OSPAR Commission, 20–24 September 2010, §5

ecosystems, therefore they may be required to adopt other area-based management tools than MPAs, in order to comply with their obligations. It could be argued, however, that they are under a legal duty to consider the establishment of MPAs, given the strong directive towards their application on the basis of the practice within OSPAR.[212]

In 2009, the OSPAR Commission adopted the Regulatory Regime for establishing MPAS in ABNJ, which affirms its wide mandate to identify and assess specific areas within its marine area in need of protection by establishing MPAs in ABNJ in consistence with UNCLOS.[213] This instrument is neither referred as a decision nor as a recommendation, but instead as merely an "advice", thus its legal value is that of an internal policy document.[214] However, whereas MPAs in ABNJ are established by binding decisions of the Commission, the conservation measures applied therein are adopted through non-binding recommendations, thus not legally binding upon the Parties. Even if the measures were adopted through binding decisions, this would not provide enforcement jurisdiction against vessels flying the flag of third States on the high seas. Moreover, the Regulatory Regime reaffirms the exclusion of fisheries and shipping management from the mandate of the Commission and the collaboration with the respective international organizations, while it states that the establishment of MPAs in these high seas is not hindered by these mandate limitations. This argument assumes that, while relevant limitations occur also in areas within national jurisdiction (especially in EEZ), these have not been an impediment for establishing MPAs therein.[215] It must be kept in mind, though, that UNCLOS grants third States certain rights in order to balance the functional jurisdiction of coastal States in EEZ, while in the high seas grants equal rights to all States. Hence, the zonal approach and the sovereign rights/jurisdiction attributed by UNCLOS could hardly support the unilateral or regional establishment of MPAs in ABNJ.[216]

(c) MPAs in ABNJ and enforcement

Currently there are 10 MPAs sites in the ABNJ under the OSPAR Convention, either collectively established by the Contracting Parties or nationally nominated by individual Parties in areas subject to a submission to the Commission on the Limits of the Continental Shelf (CLCS) for an Extended Continental Shelf (ECS).[217] The sites can be grouped into different categories based on their jurisdictional scope. Firstly, the Charlie-Gibbs South MPA and the Milne Seamount

[212] *Supra* note 28, p. 225
[213] OSPAR Commission, "OSPAR's Regulatory Regime for establishing Marine Protected Areas (MPAs) in Areas Beyond National Jurisdiction (ABNJ) of the OSPAR Maritime Area," Meeting of the OSPAR Commission 22–26 June 2009; Summary Record OSPAR 09/22/1-E, Annex 6, §2
[214] *Supra* note 200
[215] *Supra* note 211, § 2.21-2.22
[216] *Supra* note 200
[217] Art.76(8) of UNCLOS

Complex MPA are situated entirely in ABNJ, while the seabed, the subsoil and the water column are protected collectively by all OSPAR Contracting Parties. Secondly, the Charlie-Gibbs North High Seas MPA is partly situated within an area subject to a submission by Iceland to the CLCS for an ECS. The water column is protected collectively by all Contracting Parties and the seabed and the subsoil remain unprotected. Thirdly, the Rainbow Hydrothermal Vent Field, Hatton Bank SAC and Hatton-Rockall Basin are situated within areas subject to a submission to the CLCS for an ECS. The seabed and subsoil of these sites are protected by the respective Party, while the water column remains unprotected. Lastly, the Mid-Atlantic Ridge north of the Azores High Seas MPA, the Altair Seamount High Seas MPA, the Antialtair High Seas MPA and the Josephine Seamount Complex High Seas MPA are situated within an area subject to a submission by Portugal to the CLCS for an ECS.[218] These submissions created a confusion on how these dual-regime MPAs (the water column under international legislation and seabed and subsoil under national legislation) could work.[219] Despite the difficulty in their co-management, OSPAR and Portugal worked together and agreed to develop common management strategies; Portugal is responsible for the protection and management of the seabed and subsoil, while OSPAR is responsible for the protection and management of the water column.[220]

These pioneer initiative between OSPAR and Portugal has implications about the ECS regime under the light of MPAs in ABNJ. Firstly, Art. 77 of UNCLOS on continental shelf makes no distinction between the continental shelf within 200nm and the ECS, thus coastal State is vested with the exact same sovereign rights to explore and exploit in both cases. Furthermore, the ISA[221] recognizes that the ab initio and ipso jure elements exist regardless the final extent of the continental shelf and a coastal State is entitled to exercise those rights even pending the final recommendation of the CLCS on the final limits.[222] From the OSPAR perspective, any other solution than the collaboration with the interested Contracting Party in order to establish MPAs in certain high seas areas would either fail to apply the precautionary approach if the establishment

[218] OSPAR Commission, "2016 Status Report on the OSPAR Network of Marine Protected Areas", pp.13-16
[219] *Ibid* note 207, p.602
[220] The willingness of Portugal to collaborate with OSPAR was referred by the Secretary-General of UN. UN General Assembly, Report of the Secretary-General, Oceans and the Law of the Sea, A/66/70, § 142 and, particularly, 174 (2011).
[221] International Seabed Authority, *Non-living Resources of the Continental Shelf Beyond 200 Nautical Miles: Speculations on the Implementation of Article 82 of the United Nations Convention on the Law of the Sea*, Technical Study No. 5, 2010, p. 14. Article 82 is about "Payments and contributions with respect to the exploitation of the continental shelf beyond 200 nautical miles".
[222] Ribeiro, Marta Chantal, Marine Protected Areas: The Case of the Extended Continental Shelf, In: *Conference: 30 years after the signature of the United Nations Convention on the Law of the Sea: the protection of the environment and the future of the Law of the Sea', At Faculty of Law, University of Porto, Portugal, 16 November 2012, Volume: '30 years after the signature of the United Nations Convention on the Law of the Sea: the protection of the environment and the future of the Law of the Sea', Coimbra Editora*, 2014, pp.197-201

was postponed till the final recommendation of the CLCS, or would limit the ecological coherence of the MPAs network if adopted in areas not subject to ECS submissions, or would raise legal issues and be unlikely to find the political support of the interested Parties if the OSPAR protection covered only the water column area.[223] This is the case with the Icelandic submission to CLCS for ECS and the establishment of the Charlie-Gibbs North High Seas MPA, which Iceland feared that would have an important impact on the exploitation of resources on its ECS, although the specific management plan does not support this concern.[224]

Despite OSPAR's significant work towards biodiversity conservation in high seas, its effectiveness has been doubted due to the prominence of the flag State principle even between Contracting Parties and the scope limitations placed by Art.4 of Annex V. Whereas the Contracting Parties could have agreed on a system of reciprocal jurisdiction, in order to sanction vessels flying the flag of any other Party engaging in activities contrary to the aims of MPAs, no such provision is included in any of the decisions establishing MPAs in ABNJ. In contrast, it has been argued that the OSPAR regime relies on the fact that Contracting Parties are also represented in respective RFMOs and, thus, would implement measures under OSPAR in the RFMOs organs.[225] Moreover, it has been criticized about its lack of ecological data, deficient surveillance and insufficient research on the socio-economic influences on the marine environment, as well as about not providing a non-compliance procedure for Parties and third States, similar to those introduced by other environmental agreements, such as the Montreal or Nagoya Protocol.[226] Therefore, it has been supported that OSPAR's contribution to MPAs and conservation of biodiversity is that of merely coordination and awareness raising by establishing "paper parks, with a noble name but no real protection".[227]

[223] *Supra* note 218
[224] *Supra* note 200, p.8
[225] Kvalvik, Ingrid. "Managing Institutional Overlap in the Protection of Marine Ecosystems on the High Seas. The Case of the North East Atlantic." *Ocean & Coastal Management* 56 (2012), pp.35–43.
[226] Annex V to the report of the fourth Meeting of the Parties to the Montreal Protocol of 25th November 1992. UNEP/Ozl. Pro.4/15; Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization of 29th October 2010 (not in force), UNEP/CBD/COP/DEC/X/1
[227] Gjerde, Kristina M., and Anna Rulska-Domino. "Marine Protected Areas beyond National Jurisdiction: Some Practical Perspectives for Moving Ahead." *The International Journal of Marine and Coastal Law* 27, no. 2 (2012), p.357

3) The Mediterranean Sea

The Barcelona system contains the most notable example of regional cooperation for the protection of the marine environment of a semi-enclosed sea, i.e. the Mediterranean, pursuant to Art.123 UNCLOS. This complex system, which currently consists of the framework Barcelona Convention and seven Protocols[228], was developed under the Mediterranean Action Plan of 1975 (MAP Phase I) as the first regional seas programme under the auspices of UNEP.[229] In 1995 and in light of the developments at the Rio Conference in 1992, the legal components of MAP of 1975 were amended or complemented by additional Protocols, in order to introduce a sustainable development dimension to its commitments (MAP Phase II).[230] The implementation of the Convention and its Protocols is governed by the Meetings of the Contracting Parties and the Meetings of the Parties respectively,[231] while there are six Regional Activity Centres under the MAP offering a specific area of expertise and assisting Contracting Parties to fulfill their obligations under the Barcelona system.[232]

(a) MPAs under the special features of the region

The geographical features of the Mediterranean basin indicate that any waters beyond the limits of national jurisdiction currently regarded as high seas would disappear, if all the coastal States

[228] The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (adopted in 1976, entry into force in 1978, as amended in 1995) and the following Protocols: The Protocol for the Prevention of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft (adopted in 1976, amended in 1995 – amendments not yet in force); The Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (adopted in 1980, amended in 1996), amendment entered into force in 2008; The Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (adopted in 1995, replacing the related protocol of 1982) and Annexes (adopted in 1996, amended in 2009, 2012 and 2013); The Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (adopted 2002, replacing the related Protocol of 1976), entered into force in 2004; The Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (adopted in 1994), entered into force in 2011; The Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (adopted in 1996), entered into force in 2011; The Protocol on Integrated Coastal Zone Management in the Mediterranean (adopted in 2008)

[229] T. Scovazzi, The Regional Dimension of Environmental Governance: The Case of the Mediterranean Sea (2011), Varstvo Narave, Supl.1, p.16

[230] *Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean* (MAP Phase II), adopted at the Conference of Plenipotentiaries on the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, Barcelona, June 9–10, 1995, Doc. UNEP(OCA)/MED IG.6/8 (1995), Appendix I, pp. 15–128.

[231] Art.18 of the Barcelona Convention. There are currently 22 Contracting Parties to the Convention, all coastal States of the Mediterranean Sea and the EU. The status of signature, ratification and entry into force of each Protocol differs (http://web.unep.org/unepmap/, accessed October 2018).

[232] The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea, Blue Plan Regional Activity Centre, Priority Actions Programme Regional Activity Centre, Specially Protected Areas Regional Activity Centre (SPA/RAC), Regional Activity Centre for Information and Communication and Cleaner Production Regional Activity Centre [*Report of the 16th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols, Marrakesh, Morocco, November 3–5, 2009, Doc. UNEP(DEC)/MED IG. 19/8 (2009), Annex II.*]

established their own EEZ, as no water of the sea is located at a distance more than 200nm from the closest land or island. Thus, the legal status of waters as high seas in Mediterranean has "transitional" character and could be characterized as high seas *lato sensu* or potential EEZ, in contrast to the high seas *stricto sensu* of the OSPAR regime, where the high seas MPAs are entirely located beyond the coastal States' EEZ (with the exception of overlap with coastal States' submission for ECS).[233] At the same time, as the sovereign rights on the continental shelf exist *ab initio* and *ipso iure*, the entirety of Mediterranean basin's seabed belongs to the continental shelf regime of the neighbouring coastal States, thus no seabed having the legal status of the Area exists in the region.

Another peculiarity is the forms of the existing jurisdictional zones of the coastal States. Tunisia, Algeria, Malta, Spain and Libya have declared a fisheries protection zone beyond their territorial waters, while Slovenia and Italy have declared an ecological protection zone. Croatia has established a zone combined for fishing and ecological purposes. France had established an ecological zone in its Mediterranean coasts until the establishment of EEZ in 2012.These zones are conceived as "functional derivatives"[234] of the EEZ regime, which, even though are not directly mentioned in UNCLOS, they are not prohibited either, based on the assumption that the right to do less can be considered as implied in the right to do more (*in maiore stat minus*).[235] In other words, the EEZ regime as provided in UNCLOS is but "the full manifestation of a multi-functional maritime zone", while its width and content is entirely upon coastal States' discretion.[236] Furthermore, only a limited number of EEZ/continental shelf delimitation treaties has been concluded between adjacent or opposite coastal States, and where they have, some of them have not yet entered into force.[237] In cases where only the continental shelf is delimited, it is doubted whether the same boundary should apply also to the superjacent marine area (e.g. as is the case with the continental shelf delimitation agreement between Greece and Italy). Given the significant consequences of the EEZ/continental shelf delimitation and the political instability occurring

[233] *Supra* note 39, pp. 299-300
[234] Gavouneli, Maria. *Functional Jurisdiction in the Law of the Sea*. Vol. 62. Publications on Ocean Development. Leiden: Martinus Nijhoff Publishers, 2007, p.87
[235] T. Scovazzi, Note on the establishment of Marine Protected Areas beyond national jurisdiction or in areas where the limits of national sovereignty or jurisdiction have not yet been defined in the Mediterranean Sea (2011), United Nations Environment Programme Mediterranean Action Plan Regional Activity Centre for Specially Protected Areas (RAC/SPA), p.8 (available at: http://www.rac-spa.org/publications)
[236] *Supra* note 51, p.22
[237] T. Scovazzi, *Maritime Delimitations in the Mediterranean Sea*. In: *Cursos Euromediterraneos Bancaja de Derecho Internacional*, 2004-2005, p. 349.

especially in the Eastern Mediterranean basin[238] it is clear that the vagueness and uncertainty of the legal status of vast Mediterranean marine areas is not going to be settled soon.

Particularly relevant for the establishment of MPAs in the high seas is the 1995 Protocol Concerning Specially Protected Areas and Biological Biodiversity in the Mediterranean (SPA/BD Protocol). Whereas the scope of application of the related 1982 Protocol (SPA Protocol) did not extend to the high seas, the 1995 Protocol applies to all maritime areas of the Mediterranean, irrespective of their legal status, to the seabed and its subsoil and to the terrestrial coastal areas designated by each of the Contracting Parties. This extension could be explained by the realization of the need to protect highly migratory marine species, such as marine mammals, which cannot be limited by the artificial jurisdictional boundaries. Also, it is important to highlight the introduction of disclaimer provisions[239], in order the intergovernmental cooperation in the field of ecological balance of Mediterranean not to be jeopardized by the jurisdictional uncertainty of the region[240].

The 1995 Protocol provides for two types of MPAs in the Mediterranean Sea. The Specially Protected Areas (SPAs) were introduced by the relevant 1982 Protocol and are reaffirmed by its current version. Neither Protocol defines SPAs, but instead both describe the objectives to be achieved by their establishment, *inter alia* to safeguard representative types of coastal and marine ecosystems or sites of particular importance because of their scientific, aesthetic, cultural or educational interest (Art.4). Whereas SPAs were limited to the territorial sea of the Contracting Parties, they are expanded by the SPA/BD Protocol to all marine or coastal areas under their national sovereignty or jurisdiction, thus also covering EEZ. Both Protocols obliges Parties to cooperate in transboundary management for the establishment of SPAs in the frontier area either between them or with neighbouring third States (Art.5). Furthermore, the Protocols stipulate in detail the protection and planning, management and supervision measures to be taken for the conservation of SPAs.[241]

Along with the SPAs, the SPA/BD Protocol develops the innovative concept of Specially Protected Areas of Mediterranean Interest (SPAMIs) which are of importance for conserving the components of biological diversity in the Mediterranean, contain ecosystems specific to this region or the habitats of endangered species and are of special interest at the scientific, aesthetic, cultural or educational levels. These sites are to be included in the "SPAMI List"[242] drawn by the Parties

[238] The Israeli-Palestinian conflict, the Aegean Sea dispute between Greece and Turkey and the division of Cyprus are some of the intertemporal issues of the region. *Supra* note 83, pp.196-200
[239] Art.2(2)(3) of the SPA/BD Protocol
[240]Scovazzi, Tullio. "Marine Protected Areas on the High Seas: Some Legal and Policy Considerations." *The International Journal of Marine and Coastal Law* 19, no. 1 (2004), p.11
[241] Art.6 and 7 of the SPA/BD Protocol
[242] Art.8 of the SPA/BD Protocol

after a proposal for inclusion indicating the relevant protection and management measures and the means for their implementation. However, the existence of the List does not exclude the right of the Parties to establish MPAs under their national legislation which are not intended to be listed as SPAMIs[243]. The special element of the Protocol is the capability to establish SPAMIs also in areas partly or wholly located on the high seas. In this case, the proposal for inclusion in the List may be submitted by two or more neighbouring countries concerned. The same applies also to sites located in areas where the limits of national sovereignty or jurisdiction are not yet defined.[244] Hence, due to the unsettled status of several marine areas in the region, it is important to be identified which Party is "neighbouring". In the case where the site is located partly or wholly on the high seas, the notion of neighborhood should be understood in the sense of vicinity and not necessarily of continuity based on its inherent element of ambiguity. A Party proximate to the SPAMI site can be considered as neighbouring, even where there are high seas areas between the high seas SPAMI and its territorial sea. On the other hand, on areas not yet defined, all Parties with overlapping claims should form the joint proposal for inclusion in the SPAMI List taking into account[245] the different scope of the existing zones (e.g. the overlap between Spanish fishing zone and French ecological zone) or any treaty delimitating the continental shelf beneath the marine area concerned. If the SPA or SPAMI is located in marine areas under Party's sovereignty or (delimitated) jurisdiction, the proposal should be submitted by this Party alone.

The Mediterranean importance of the site must be justified based on the common criteria for the choice of protected marine and coastal areas provided in Annex I of the Protocol. The decision for the inclusion in the SPAMI List is taken by the Meeting of the Parties to the SPA/BD Protocol, if the site is located in a delimited zone, and by the Contracting Parties to the Barcelona Convention, if it is located in an undelimited area or on the high seas.[246] Once included, the Parties agree to recognize the particular importance of these areas for the Mediterranean and to comply with the measures and objectives applicable to the SPAMI site.[247] Therefore, the site and the measures applicable are given an *erga omnes partes* effect with respect to the Protocol Parties. Regarding the non-Parties, the Protocol encourages Parties to invite third States and international organizations to cooperate in the implementation of the Protocol and to adopt consistent with international law measures, in order to ensure that no one engages in activities contrary to the principles and purposes of the Protocol.[248] Currently, there 35 sites included in the SPAMI List,

[243] *Supra* note 235, p.31
[244] Art.9(2) of the SPA/BD Protocol
[245] *Supra* note 235, pp.38-39
[246] *Supra* note 84, p.210
[247] Art.8(3) of the SPA/BD Protocol
[248] Art.28 of the SPA/BD Protocol

almost all of them located in areas under the national jurisdiction of 10 Parties.[249] The Pelagos Sanctuary for the Conservation of Marine Mammals is the only exception in the List partly covering ABNJ.

(b) The Pelagos Sanctuary

The Pelagos Sanctuary[250] was established in 1999 under a tripartite Agreement as a joint management area between France, Italy and Monaco for the protection of eight cetacean species regularly found in the Mediterranean[251] and was included in the List in 2002. It extends over 96.000 square kilometres covering the internal waters and territorial sea of the contracting States, as well as portions of adjacent high seas, i.e. the area between Corsica, Liguria and Provence. The Agreement is considered a major achievement, as is the first international agreement with the specific objective to establish a sanctuary for marine mammals.[252] According to Art.4 of the Agreement, the Signatories undertake to adopt measures in order to ensure a favourable state of conservation for every species of marine mammals and to protect their habitat from direct or indirect negative impacts. Any deliberate taking (hunting, catching, killing or harassing, as well as the attempt of such actions) is prohibited. Non-lethal catches may be authorized in urgent situations or for *in-situ* scientific research, whereas the Parties can regulate whale watching activities for tourism purposes.

Of particular importance is Art.14(2) of the Pelagos Agreement which refers to the enforcement of the coastal States on the high seas. According to this provision, beyond the limits of the territorial sea, "each of the State Parties is responsible for the application of the provisions of the present Agreement with respect to ships flying its flag as well as, within the limits provided for by the rules of international law, with respect to ships flying the flag of third States".[253] Given the region's transitory legal status, the consistent with international law enforcement on high seas with

[249] http://www.rac-spa.org/spami

[250] Agreement on the Creation of a Mediterranean Sanctuary for Marine Mammals, 25 November 1999 (available at: http://www.tethys.org/sanctuary.htm)

[251] Notarbartolo-Di-Sciara, Giuseppe, Tundi Agardy, David Hyrenbach, Tullio Scovazzi, and Patrick Van Klaveren. "The Pelagos Sanctuary for Mediterranean Marine Mammals." *Aquatic Conservation: Marine and Freshwater Ecosystems* 18, no. 4 (2008), pp. 367-391.

[252] The designation of sanctuaries is also provided by the 1946 International Convention for the Regulation of Whaling [Art.V(1)(c)], however the measures applied therein are limited to the prohibition of commercial whaling. Scovazzi, Tullio. " New international instruments for marine protected areas in the Mediterranean Sea." In *Unresolved Issues and New Challenges to the Law of the Sea: Time before and Time after*, edited by Anastasia Strati, Maria Gavouneli, and Nikos Skourtos. Vol. 54. Publications on Ocean Development. Leiden: Martinus Nijhoff Publishers, 2006, pp.115-116

[253] *"Dans les autres parties du sanctuaire, chacun des Etats Parties est competent pour assurer l'application des dispositions du présent accord à l'égard des navires battant son pavillon, ainsi que, dans les limites prévues par les règles de droit international, à l'égard des navires battant le pavillon d'Etats tiers"*. The English translation is provided in: Grbec, Mitja. *Extension of Coastal State Jurisdiction in Enclosed or Semi-enclosed Seas: A Mediterranean and Adriatic Perspective*. London: Routledge, 2014, p.85

respect to the latter is open to interpretation. On one hand, the enforcement on the high seas is not possible, as it would entail an encroachment upon the freedoms of the high seas.[254] On the other hand, though, the high seas area of the Sanctuary, i.e. marine areas beyond the territorial seas of the Signatories, would fall within the EEZ of one of them, if they decided to establish such zones.[255] This interpretation is based on the *lato sensu* high seas of the Mediterranean and the concept of *in maiore stat minus*, discussed above. Given the inclusion of the conservation of marine biodiversity in the scope of EEZ pursuant to the cumulative effect of Art.56(1) and the general obligations of Part XII of UNCLOS, it could be argued that on the potential EEZ the coastal States can exercise jurisdiction over the conservation of marine biodiversity by establishing MPAs and taking conservation measures consistently with international law, although to a lesser degree than in a fully proclaimed EEZ. Examples of limited EEZs are the existing fisheries and ecological protection zones, where coastal Mediterranean States exercise jurisdiction over one of the fields provided by UNCLOS (Art.56(1)(a) or (1)(b)(iii), respectively).[256] By establishing an MPA like the Sanctuary in the potential EEZ high seas area the coastal States declare to exercise limited jurisdiction regarding the conservation of marine biodiversity and their related conservation measures therein can be opposable to third States.

(c) Cooperation with the fisheries sector

Along with the Barcelona Convention and its SPA/BD Protocol, as well as the Sanctuary Agreement, the conservation of the Mediterranean marine biodiversity is complemented by the General Fisheries Commission for Mediterranean (GFCM).[257] Its main objective is to ensure the conservation and sustainable use of living resources at the biological, social, economic and environmental level, as well as the sustainable development of aquaculture in all the marine waters of the Mediterranean and Black Sea.[258] In 2012 a Memorandum of Understanding was signed between GFCM and UNEP/MAP (Barcelona Convention) stemming from years of bilateral consultations on common areas of work and responding to the request of the Contracting Parties for enhanced coordination. It is the first Memorandum of Understanding that formalizes the cooperation between a UN Environmental Regional Sea Convention and FAO Regional Fisheries

[254] Such an interpretation seems to contradict the "object and purpose" of the Agreement
[255] If established, the enforcement jurisdiction of the three Signatories would be fully covered by Art.14(1) of the Agreement, which provides for such powers in areas within national jurisdiction. *Supra* note 240, p.15
[256] None of these zones, which have been already mentioned and exist particularly in the Mediterranean region, has been the subject of a delimitation treaty between neighbouring or opposite States, thus have been criticized as a "triumph of unilateralism". *Supra* note 51
[257] GFCM is established under Article XIV of the FAO Constitution. Initially started its activities in 1952 as a Council and became a Commission in 1997. It currently has 24 member States including EU, all Mediterranean coastal States, except Japan. (http://www.fao.org/gfcm/background/about/en/, accessed in October 2018)
[258] Art.2 and 3 of the Agreement for the Establishment of GFCM

Management Organization.[259] One of the basic areas of cooperation is *inter alia* the promotion of ecosystem-based approach for the conservation of marine ecosystems and the sustainable use of marine living resources. A more holistic approach towards the conservation of the Mediterranean marine biodiversity is further enhanced by the designation of ecosystem-based Fisheries Restricted Areas (FRAs) in parts of the high seas including areas totally or partially coincident with that of SPAMIs. Such FRAs totally or partially located within a SPAMI may only be designated if appropriate cooperation takes place between GCFM and UNEP/MAP, as well as with relevant regional regimes, such as the Agreement for the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the contiguous Atlantic area (ACCOBAMS).[260]

B. The Southern Ocean

Great progress has been made for the conservation of marine biodiversity in the region of Southern Ocean surrounding the Antarctic continent. Being among the most remote areas of the planet, the Southern Ocean represents 10 percent of the world's ocean and supports approximately 8200 species.[261] Although States started to claim regions of Antarctica since the cold war, instead of dividing up the continent they signed in 1959 the Antarctic Treaty,[262] setting aside the entire continent "in the name of international peace and science".[263] Hence, there is no State sovereignty proclaimed in the region, but rather many stakeholders presenting divergent interests over time. The Antarctic Treaty forms the basis of the Antarctic Treaty System (ATS) which is further complemented by subsequent agreements and conventions. The maritime area covered by ATS is generally considered to be ABNJ, while the Treaty's Consultative Meeting (ATCM) has the competence to adopt by unanimous consensus non-legally binding decisions and resolutions and legally binding measures, including on the preservation and conservation of living resources.[264]

---

[259] *Joint Regional Input of the General Fisheries Commission for the Mediterranean (GFCM) and UN Environment/MAP-Barcelona Convention Secretariats into the Concept Paper of the Secretary-General of the Conference for the Partnership Dialogues theme 2 and 4 building on their joint regional efforts to implement SDG14.* Available at: https://sustainabledevelopment.un.org (accessed October 2018)

[260] Resolution GFCM/37/2013/1 on area based management of fisheries, including through the establishment of Fisheries Restricted Areas (FRAs) in the GFCM convention area and coordination with the UNEP-MAP initiatives on the establishment of SPAMIs

[261] Griffiths, Huw J. "Antarctic Marine Biodiversity – What Do We Know About the Distribution of Life in the Southern Ocean?" *PLoS ONE* 5, no. 8 (2010)

[262] Antarctic Treaty (adopted 1 December 1959, entered into force 23 June 1961) 402 UNTS 71 (AT), Art. IV

[263] Brooks, Cassandra M. "Competing Values on the Antarctic High Seas: CCAMLR and the Challenge of Marine-protected Areas." *The Polar Journal* 3, no. 2 (2013), p.278

[264] Art. IX (1)(f) of the AT

Regarding the conservation of the marine biodiversity in the ATS context, the subsequent instruments of the 1991 Protocol on Environmental Protection (Madrid Protocol)[265] and the 1982 Convention on the Conservation of Antarctic Marine Living Resources (CAMLR Convention)[266] are of relevance. Initially introduced in 1964 as Agreed Measures for the Conservation of Antarctic Fauna and Flora[267] which specifically provided for the designation of "Specially Protected Areas" through prohibition on collecting native plants and the establishment of a permitting system, given their merits for scientific research rather than for conservation value per se,[268] the 1991 Protocol rationalized the establishment and management of protected areas. Annex V of the Protocol provides for two types of protected areas, i.e. Antarctic Specially Protected Areas (ASPAs)[269] and Antarctic Specially Managed Areas (ASMAs), within which human activity is either prohibited, restricted or managed in accordance with the management plans proposed by the Committee on Environmental Protection (CEP) to ATCM. The difference between these two types is the degree of protection granted; ASPAs are considered to provide the highest level of environmental protection in terms of biodiversity protection.[270]

ASPAs and ASMAs may contain a marine component or be entirely marine-located, in which case their designation should take place in collaboration with the Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR), established under the CAMLR Convention as its governing body. Therefore, while at first only small coastal zones were protected as part of a wider terrestrial protected area, the CCAMLR played a predominant role in the establishment of MPAs when in 2009 the CEP[271] agreed to work towards a representative and coherent spatial protection of marine biodiversity by establishing ASPAs and ASMAs wholly located in marine areas[272]. It should be highlighted that the relationship between CCAMLR and CEP stands out as a

[265] Protocol on Environmental Protection to the Antarctic Treaty (adopted 4 October 1991, entered into force 14 January 1998)
[266] Convention on the Conservation of Antarctic Marine Living Resources (adopted in 20 May 1980, entered into force 7 April 1982) 1329 UNTS 48
[267] Recommendation ATCM III-VIII, *Agreed Measures for the Conservation of Antarctic Fauna and Flora* (1964)
[268] With Recommendation VII-2, the Parties recommended that the Specially Protected Areas should include, *inter alia*, representative examples of major land and freshwater ecological systems and areas with unique complexes of species and which should be kept inviolate so that in future, they may be used for comparison with localities that have been disturbed by human activities. B.W.T. Coetzee *et al.*, Expanding the Protected Area Network in Antarctica is Urgent and Readily Achievable (2017), *Conservation Letters*, Wiley Periodicals Inc., p. 671
[269] ASPAs are defined in Art. 3 of Annex V as "any area, including any marine area, […] designated […] to protect outstanding environmental, scientific, historic, aesthetic or wilderness values, any combination of those values, or ongoing or planned scientific research"; or "representative examples of major terrestrial, including glacial and aquatic, ecosystems and marine ecosystems". ASMAs may include areas where activities pose risks of mutual interference or cumulative environmental impacts, or sites or monuments of recognized historic value.
[270] Hughes, K.a., L.r. Pertierra, and D.w.h. Walton. "Area Protection in Antarctica: How Can Conservation and Scientific Research Goals Be Managed Compatibly?" *Environmental Science & Policy* 31 (2013), pp.120-132.
[271] Final Report of the Thirty-Second Antarctic Treaty Consultative Meeting, Baltimore, United States, 119
[272] Wright, Glen, Julien Rochette, and Elisabeth Druel. "Marine Protected Areas in Areas beyond National Jurisdiction." In *Research Handbook on International Marine Environmental Law*, edited by Rosemary Rayfuse. Cheltenham, UK: Edward Elgar Publishing, 2017, pp. 279-280

model of collaboration and communication towards the establishment of a biogeographically representative system of MPAs. Even though both bodies have the mandate to take conservation measures for the protection of marine biodiversity, they have agreed that CCAMLR would take the lead in taking such measures.[273]

The CAMLR Convention was adopted as a response to the developing krill fishery during the 1960s and 1970s especially undertaken by the Soviet Union, which caused concern among the scientists of ATCM about the ecological impacts on mammal populations depending heavily on krill. The Convention applies to all marine organisms south of the Antarctic Polar Front, whereas it excludes from its scope the regulation over whales and seals which are managed under the International Whaling Convention[274] and the Convention for the Conservation of Antarctic Seals,[275] respectively (Art.VI). Along with CCAMLR, the Convention establishes its Scientific Committee (SC-CAMLR), whose recommendations and advice should be fully taken in account by the Commission when exercising its functions.[276]

Specifically, the Commission has been regarded a pioneer in high seas management for its principles and achievements in implementing precautionary and ecosystem approach[277], while its has been described as "a conservation organization with the attributes of a RFMO";[278] unlike RFMOs whose primary objective is the management of fisheries, the explicit objective of the Convention in Art.2 to be pursued by the Commission is the conservation of the Antarctic marine living resources.[279] To this end, the Commission is tasked with the formulation, adoption and revision of conservation measures, which *inter alia* include "the designation of the opening and closing of areas, regions or sub-regions for purposes of scientific study or conservation, including special areas for protection and scientific study".[280]

The inclusion of "rational use" in the Convention's objective of conservation has provoked divergence of views between fishing and non-fishing Contracting Parties when interpreting the term and is highly connected with the establishment of MPAs by the Commission as conservation measure. States in favor of MPAs support that the term encompasses the establishment of protected areas designated as either no-take zones entirely prohibiting fishing, or multiple-use MPAs allowing a certain level of fishing in parallel with closed areas/seasons and catch limits. On the

[273] *Supra* note 228.; Report of the joint SC-CAMLR-CEP workshop. Baltimore, USA; 3 and 4 April 2009.
[274] The 1946 International Convention for the Regulation of Whaling
[275] The 1972 Convention for the Conservation of Antarctic Seals
[276] Art. IX (4) of the CAMLR Convention
[277] *Supra* note 263, p.280
[278] K. Martin-Smith, A risk-management framework for avoiding significant adverse impacts of bottom fishing gear on Vulnerable Marine Ecosystems (2009), *CCAMLR Sci.16*, pp.177–193.
[279] *Supra* note 263
[280] Art. IX (1)(f) and (2)(g) of CAMLR Convention

other hand, States contesting MPAs have argued that the term allows the exploitation of marine resources.[281] Based on the primary and supplementary interpretation methods of VCLT (Art.31-32), the "rational use" should be examined under both the "ordinary meaning" and "in Convention's context in the light of its object and purpose" as well as under "the preparatory work and the circumstances of the Convention's conclusion". Therefore, pursuant to the first full draft prefiguring the Convention the relevant Working Group included the term, in the sense "that harvesting would not be prohibited, but the regime would exclude catch allocation and other economic regulation of harvesting".[282] Given that even States strongly supporting rigorous conservation standards due to their geographical proximity to peri-Antarctic islands and the continent referred to the rational use or utilization of the living resources,[283] it could be concluded that all negotiators of the CALMR Convention viewed the term as an unrestricted, but consistent with the broader goals of conservation articulated in the Convention, right to fish.[284] In this sense, it was further argued that the Convention was not directed to prohibit fisheries and associated activities as long as they are conducted consistently with the conservation principles, i.e. *inter alia* the ecosystem approach, indicating that MPAs are one of the management tools as laid out by the Convention.[285] In addition, the term does not seem to place any limitations on the Convention's clear power to regulate fishing in the region.[286] However, the debate on rational use became even clearer during the Commission's meetings, especially after the accession of more fishing States to the Convention. Bearing in mind that the fishing Parties currently outnumber the non-fishing by ratio 5:3,[287] the current position in the interpretation of "rational use" implies a shift in favor of fishing.

Despite the concerns of fishing States regarding restrictions on access to lucrative fishing areas, the need for Southern Ocean MPAs has long been agreed among the CAMLR Convention Parties. While discussions were already initiated since 1999, the Commission recognized the WSSD commitment to a network of MPAs by 2012 and established a separate agenda item for discussing management of protected areas.[288] To this end, several workshops were convened, in order to meet

[281] Smith, Danielle, and Julia Jabour. "MPAs in ABNJ: Lessons from Two High Seas Regimes." *ICES Journal of Marine Science* 75, no. 1 (2017), p.418
[282] ANT/IX/82 (Rev.1), Draft Report on the Working Group on Marine Living Resources, Ninth Consultative Meeting of Antarctic Treaty, 7 October 1977, https://www.ccamlr.org/en/system/files/ANT-IX-82%20Rev1.pdf (accessed October 2018)
[283] E.g. the statement of the Argentine delegation expressing Argentina's "[…] fundamental and profound interest in arriving at a really effective agreement on the rational utilization of the living resources of the sea […]"
[284] Jacquet, Jennifer, Eli Blood-Patterson, Cassandra Brooks, and David Ainley. "'Rational Use' in Antarctic Waters." Marine Policy 63 (2016), pp.31-32
[285] R. Hofman, The Intent of Article II of the CAMLR Convention. Discussion paper for Sessions Two and Three, CCAMLR Commission Circular 15/01, CCAMLR Secretariat, (2015)
[286] *Supra* note 284, p.33
[287] *Supra* note 263, p.295
[288] CCAMLR, XXI, para 4.20 (2002 annual meeting)

the target of broad-scale bioregionalization by developing advice on the designation of MPAs and identifying priority areas ("planning domains") to be reviewed as potential MPA sites based on scientific criteria. After being proposed by the UK, the Commission adopted in 2009 its first MPA on the continental shelf of the South Orkney Islands where fishing and the dumping or discharge of wastes by fishing vessels was prohibited[289] and which is regarded as the world's first high seas MPA.[290] To avoid the free-riders problems, the Secretariat was tasked with the role of informing non-Parties of the measure when their vessels or nationals were in the area.[291] Whereas the initial UK proposal described the site as a no-take zone and was met with little resistance from CCAMLR Members, the designated MPA leaves out the most biologically rich regions adjacent to the Islands and totally excludes the northern region due to possible future crab fishery.[292] Russia, Ukraine, China and Japan have been among the most opposing States to the establishment of the MPAs in the region questioning either the legal competence of the Commission or the availability of adequate scientific evidence for the adoption of such conservation measures.[293]

After the adoption of a legally binding framework for the establishment of CCAMLR MPAs,[294] a joint proposal was submitted in 2012 by the USA and New Zealand on a Ross Sea region MPA, which was later established despite the initial opposite views of Russia and China.[295] The Ross Sea region was deemed by scientists to be the only large intact marine ecosystem remaining on the planet and was identified as a key region for a representative network of Southern Ocean MPAs. The site is divided into zones with specific purposes, i.e. three general protection/no-take zones, a special research zone and a krill research zone.[296] However, the final area covered by the MPA was reduced by 40 percent in comparison to the area jointly proposed. Still, covering approximately 1.55 million km^2, the Ross Sea is regarded the world's largest high seas MPA. The Ross Sea region MPA cam finally into force on the 1st December 2017.

[289] CCAMLR, CM 91-03 (2009), Protection of the South Orkney Islands Southern Shelf, §1
[290] *Supra* note 281, p.418; *supra* note 263, p.282
[291] *Supra* note 272, p.281
[292] *Supra* note 263, p.282
[293] *Supra* note 281, p.419
[294] CCAMLR, CM 91-04 (2011), General Framework for the establishment of CCAMLR MPAs; It states that "*this Conservation Measure and any other CCAMLR Conservation Measures relevant to CCAMLR MPAs shall be adopted and implemented consistent with international law, including as reflected in the United Nations Convention on the Law of the Sea*", and "*CCAMLR MPAs shall be established on the basis of the best available scientific evidence, and shall contribute, taking full consideration of Article II of the CAMLR Convention where conservation includes rational use"*; Nilsson, Jessica A., Elizabeth A. Fulton, Marcus Haward, and Craig Johnson. "Consensus Management in Antarctica's High Seas – Past Success and Current Challenges." Marine Policy 73 (2016)., p.177
[295] CCAMLR, CM 91-05 (2016). The Non-Governmental Organization (NGO) Antarctic and Southern Ocean Coalition (ASOC) was highly active during the MPA campaigns in raising public awareness of conservation objectives.
[296] *Supra* note 263, pp.286-287

On the other hand, not all actions towards a coherent network of MPAs undertaken by the CCAMLR are either effective or innovative. For example, the East Antarctic Region is considered as a "data-poor" and "ecologically uncertain" region. Thus, it proved difficult to develop suitable methods for designing MPAs, while a precautionary-based approach guided the MPA establishment proposal of Australia, the EU and France. The proposing States developed spatial models based on biological, biogeographical, benthic, hydrographic and geophysical data and generated a system of seven MPAs that would capture key ecosystem processes and reference areas in order to measure the ecological impacts of climate change and fisheries across the region. However, the proposal excludes large areas and as a result, does not provide protection for important physical and biological processes.[297] Moreover, the EU proposal for a no-take MPA providing precautionary protection to newly exposed habitats after ice shelves collapse and ensuing new ecological colonization (Ice Shelves MPAs) was met with concerns due to lack of extensive data on areas yet to be studied and thus the proposal was transformed to a CCAMLR Special Area for Scientific Research[298] where harvesting could still take place. The transformation of the proposal combined with the fact that the SC-CCMALR still considered the initial proposal as of major scientific and conservation value reaffirms the influence of the fishing Contracting Parties on the decision-making process in the CCAMLR context.

C. The South Pacific Ocean

The South West Pacific Ocean is a region of significant biological and ecological diversity integral to the economy, diverse cultures and food security of Pacific Island Countries and Territories (PICTs). This region is distinguished as a community of Small Island Developing States (SIDS) united by the high seas enclaves and the surrounding ABNJ, and its environmental framework is recognized as among the most integrated efforts of regional cooperation.[299] Specifically, its regional biodiversity governance is characterized by collective membership and overarching mechanisms for political cooperation and integration empowering the collective diplomacy on a vast marine area characterized as the "world's largest ocean continent".

The framework for regional oceans governance has established coordination and collaboration mechanisms to be integrated between its various regional organizations through the unique

[297] SC-CAMLR, XXX, Annex 6, paras 3.14–3.19; CCAMLR, XXXI, para 7.63
[298] CCAMLR, XXXI, paras 7–86-7.88.
[299] R. Mahon *et al*., 'Transboundary Waters Assessment Programme (TWAP) Assessment of Governance Arrangements for the Ocean, Volume 2: Areas Beyond National Jurisdiction" (UNESCO-IOC Technical Series, Paris, 2015), pp. xi, 29–51.

overarching regional oceans policy, shared oceans governance objectives formed by the Pacific Island Forum (PIF), the Council of Regional Organizations of Pacific (CROP), as well as through MoUs between organizations and regular multi-agency consultative arrangements and joint work programmes.[300] The CROP was established in 1988 by PIF, in order to improve coordination between intergovernmental regional organizations, while its 2004 Charter provides a functional mechanism guiding the sharing of resources and expertise between its member agencies.[301] The regional organizations of the CROP with mandates including ocean issues are the PIF Secretariat which supports economic and political oversight of regional natural resource management, the Secretariat of the Pacific Regional Environment Programme (SPREP) for environment and conservation, the Forum Fisheries Agency (FFA) for advice on fisheries and the Secretariat of the Pacific Community and the University of South Pacific for scientific and technical advice.[302]

In the context of SPREP, various legally (non-) binding instruments are relevant to the region's ABNJ biodiversity conservation. Firstly, the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea or SPREP Convention) was among the first instruments adopted under the Regional Seas Programme of UNEP.[303] The Convention applies also to high seas enclaves, i.e. those high seas areas "which are enclosed from all sides by the 200 nautical mile zones" of the coastal States.[304] The Convention invites Contracting Parties to establish Specially Protected Areas, including MPAs in ABNJ, and to prohibit or regulate any human activity likely to have adverse effects on the species, ecosystems or biological processes of the region.[305] Despite this mandate, currently there is no MPA established on the high seas of the Convention Area probably due to the Convention's limited jurisdictional scope on the high seas enclaves.

In addition, further initiatives towards species-specific conservation encompass ABNJ. On the one hand, the Pacific Islands Regional Plan of Action for Sharks (RPOA Sharks)[306] in collaboration with FFA and the Secretariat of the Pacific Community (SPC) provides guidance

[300] Quirk, Genevieve C., and Harriet R. Harden-Davies. "Cooperation, Competence and Coherence: The Role of Regional Ocean Governance in the South West Pacific for the Conservation and Sustainable Use of Biodiversity beyond National Jurisdiction." *The International Journal of Marine and Coastal Law* 32, no. 4 (2017), p.682
[301] Charter of the Council of Regional Organizations of the Pacific (2004), § 1,3,6,8(c) [CROP Charter] (available at: https://gsd.spc.int/sopac/docs/RIF/CROP%20Charter_2004.pdf)
[302] *Ibid*
[303] Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea Convention) (Noumea, 24 November 1986, in force 22 August 1990). It currently has 12 Contracting Parties [https://www.sprep.org/convention-secretariat/noumea-convention (accessed October 2018)]
[304] Art.2(a)(ii) of the Noumea Convention
[305] Art.14 of the Noumea Convention
[306] Mary Lack and Frank Meere, "Pacific Islands Regional Plan of Action for Sharks: Guidance for Pacific Island Countries and Territories on the Conservation and Management of Sharks" (2009) [https://www.sprep.org/att/publication/000853_RPOA_Sharks.pdf (accessed October 2018)]

and alignment with the conservation and management measures adopted under the regional RFMO (Western Central Pacific Fisheries Commission/WCPFC)[307] for the establishment of shark sanctuaries both in the EEZs[308] and on the high seas. On the other hand, the Whales and Dolphins Action Plan 2013-2017 (CMS MoU) [309] aims to revive the SPREP proposal for a South Pacific Whale Sanctuary, submitted at the 2000 International Whale Commission, by identifying and protecting critical habitats and migratory pathways.

However, it is mainly thanks to the adoption of the conservation and management measures applicable to the high seas under the WCPFC framework that the Pacific States have achieved progress on the protection of ABNJ marine biodiversity.[310] *Inter alia*, the conservation and management measure (CMM) 2008-01[311] sets a high standard for the sustainable use of tuna and closes the high seas enclaves to fishing, driving fishing vessels into the regulated areas of the coastal States' EEZs. In support of the measure, the Parties to the Nauru Agreement (PNA)[312] and the PNA Palau Arrangement [313] set multilateral standards for access to fish and licensing conditions for exploitation in the EEZs of the coastal States.

[307] Convention on the Conservation and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) (Honolulu, 5 September 2000 in force 19 June 2004). Art.8 of the Convention contains a requirement for compatible measures between EEZs and the high seas.
[308] The EEZs of the Republic of the Marshall Islands, Palau, Guam, the Northern Mariana Islands, Federated States of Micronesia, Tokelau, French Polynesia and the Cook Islands are designated shark sanctuaries.
[309] "Whale and Dolphin Action Plan 2013–2017" in 3rd Meeting of the Signatories to the Memorandum of Understanding for the Conservation of Cetaceans and Their Habitats in the Pacific Islands Region, Noumea (New Caledonia, SPREP, 8 September 2012) Doc. CMS/ PIC/MoS3/Doc.4.1, 24 August 2012, Annex II.
[310] *Supra* note 192, p.4
[311] Conservation and Management Measure (CMM) 2008–01, 'Conservation and Management Measure for Bigeye and Yellowfin Tuna in the Western and Central Pacific Ocean' 5th session, WCPF Commission Meeting (Busan, WCPFC, 8–12 December 2008); now replaced by CMM 2016–01.
[312] Nauru Agreement Concerning Cooperation in the management of fisheries of common interes*t* (Nauru, 11 February 1982). PNA Members are: the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, Palau, Papua New Guinea, the Solomon Islands and Tuvalu
[313] Palau Arrangement for the management of the Western Pacific Fishery as amended management scheme (Purse Seine Fishing Vessel Day Scheme) (amended October 2016)

D. Regions where action has been taken regarding ABNJ

In addition to the regimes which include high seas areas in their geographical scope, there are also regional seas conventions under the UNEP framework, which, despite the lack of conventional coverage of ABNJ, their Member Parties and contracting Parties started to study on issues regarding the ABNJ biodiversity, as dictated by UN resolutions.[314] Such initiatives have been developed under three regional conventions covering different geographical areas. Thus, the 2012 7th CoP of the Nairobi Convention[315] urged Parties to describe EBSAs and establish MPAs within their EEZs and ABNJ. In response, Mauritius and Seychelles concluded a MoU on a joint management area of the Mascarene Plateau. The Western Indian Ocean was also selected as one of the pilot regions to test the application of an area-based planning methodology in ABNJ under the Global Environment Facility (GEF) Project implemented by FAO and UNEP.[316] Furthermore, the Parties agreed in 2015 to cooperate in improving the governance of ABNJ, building on existing regional institutions including the Nairobi Convention and developing area-based management tools such as marine spatial planning in the context of Africa Development Agenda.[317]

In African region, the 2014 11th CoP of the Abidjan Convention decided to establish a working group to study all aspects of the conservation and sustainable use of ABNJ marine biodiversity within the framework of the Convention.[318] Based on this decision, the Secretariat invited the Partnership for Regional Ocean Governance (PROG) to support the task of the working group by organizing a workshop which finalized the terms of reference and work programme of the group. The next meeting of the group is expected to move forward towards the implementation of the agreed action.[319]

Finally, the 2012 Meeting of Ministers of Foreign Affairs of Comisión Permanente del Pacifico Sur (CPPS) adopted the Galapagos Declaration, under which they committed to promote the coordinated action of Member States regarding their interests on living and non-living resources

[314] UNEP/EA.2/Res.10, Oceans and seas, 2nd session, Nairobi, 23-27 May 2016, §13 ("[The UN Environmental Assembly] Encourages the contracting parties to existing regional seas conventions to consider the possibility of increasing the regional coverage of those instruments in accordance with international law")

[315] UNEP/(DEPI)/EAF/CP.7/7, 7th CoP to the Amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean [Nairobi Convention], Maputo, Mozambique, 10-14 December 2012. The Convention was adopted on 31st March 2010, Nairobi, Kenya)

[316] "Project on Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the ABNJ" [http://www.fao.org/in-action/commonoceans/background/program-structure-goals/en/ (accessed November 2018)]

[317] Decision CP8/5, §113

[318] Decision CP 11.10 of the Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region [Abidjan Convention]

[319] Written submission by UNEP, Regional Seas Programmes and other UNEP Activities Relevant to Marine Biodiversity in Areas beyond National Jurisdiction, §21

in ABNJ. Along with Western Indian Ocean, the Southeast Pacific, covered by CPPS's scope, has been also selected as one of the pilot regions under the GEF Project, while there are also ongoing discussions on the establishment of a working group on ABNJ marine biodiversity under PROG.

E. The Sargasso Sea

In contrast to the above-mentioned regimes which have been developed or later been endorsed by UNEP, the regime covering the Sargasso Sea lies beyond the UNEP framework and contains an innovative approach to the ABNJ biodiversity conservation. The Sargasso Sea is an area of open ocean located within the North Atlantic Subtropical Gyre and surrounded on all sides by the clockwise flow of major ocean currents.[320] Its core area covers approximately two million^2 nm around the Bermuda Islands most of which is located beyond national jurisdiction of any State. The Sea is named after its floating golden *Sargassum* seaweed which provides shelter and nutrients for a variety of endemic and endangered species, while it is also a migration path for sharks and cetaceans and the only place in the world where (critically) endangered species like the American and European eel spawn. The ecological importance of the area is complemented by the presence of three groups of seamounts that are 70 to 90 million years old, i.e. the New England, the Corner Rise and Mid-Atlantic Ridge seamounts, and is affirmed by its inclusion as the only named ecosystem in the First World Ocean Assessment to merit a chapter of its own.[321]

Lacking any regional environmental agreement or RFMO, the Sargasso Sea is administered by the Sargasso Sea Commission which was appointed by the Government of Bermuda in 2014 pursuant to the Hamilton Declaration for the Conservation of the Sargasso Sea.[322] As a successor of the previous Sargasso Sea Alliance, the Commission aims to build a network of international partnerships for the recognition of the ecological importance of the Sargasso Sea and to work with existing organizations in accordance with UNCLOS in order to promote this experience as a model to achieve protective status in ABNJ elsewhere. Therefore, the Hamilton Declaration does not

[320] The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case (2011). Sargasso Sea Alliance, p.7

[321] D. Freestone and K. Gjerde, Lessons from the Sargasso Sea: Challenges to the conservation and sustainable use of marine biodiversity beyond national jurisdiction (2016), Sargasso Sea Commission, p.1

[322] http://www.sargassoseacommission.org/storage/Hamilton_Declaration_with_signatures_April_2018.pdf (accessed October 2018)]. The 2014 Hamilton Declaration is the first non-binding instrument to establish a framework for its signatory governments to work through existing international organizations and other partners in order to mitigate the adverse impacts of human activities in an ecosystem which primarily lies beyond national jurisdiction. The Hamilton Declaration was initially signed by the governments of the Azores, Bermuda, Monaco, UK and US, who were later joined by the British Virgin Islands, the Bahamas, Canada, the Cayman Islands, and most recently the Dominican Republic.

create any new regulatory or management authority for the region,[323] but instead the Commission addresses the most important threats to the Sargasso ecosystem by seeking protective measures through the relevant existing international or sectoral organizations. Thus, threats from shipping or vessel pollution are addressed through IMO, from fishing through the only two relevant fishing organizations, i.e. the International Commission for the Conservation of Atlantic Tuna (ICCAT)[324] regarding tuna and tuna-like species fishing and the North-west Atlantic Fisheries Organization (NAFO),[325] and from seabed activities through ISA. Furthermore, the UNEP regional seas Conventions relating to adjacent or similar ocean areas have been regarded as natural allies of the Commission.[326]

The Sargasso Sea is also one of the few regions where two important international environmental concepts coexist.[327] In 2012, the Corner Rise and New England seamount chains were approved and described as EBSAs by the CoP of CBD after Bermudian proposal.[328] Despite the legally non-binding character of such science-driven description and the jurisdictional limitations of CBD in ABNJ, the EBSA process may strengthen the scientific basis upon which protective measures may be adopted under other competent sectoral entities regarding the Sargasso Sea region. In addition, in 2016, NAFO conferred on the seamounts chains a higher level of protection from bottom fishing activities identifying them as VMEs and giving effect to the relevant UNGA Resolutions[329] and FAO Guidelines.[330]

The initiative undertaken in the Sargasso Sea has attracted widespread attention as it is the first attempting to use the range of existing sectoral structures for complementary protective measures

[323] Annex II of the Hamilton Declaration explicitly deprives the Commission from any management authority. However, it states that it *"*will (a) exercise a stewardship role for the Sargasso Sea and keep its health, productivity and resilience under continual review*"*.
[324] The International Convention for the Conservation of Atlantic Tunas was signed in Rio de Janeiro, Brazil, in 1966. It entered into force in 1969.
[325]The 1979 Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries (NAFO) applies to most fishery resources of the Northwest Atlantic except salmon, tunas/marlins, and sedentary species. NAFO covers a small area of the Sargasso Sea which overlaps with a section of Bermuda's EEZ.
[326] The 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention); The 1981 Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central Africa (Abidjan Convention); the OSPAR Convention, with which the Alliance had already signed a Collaboration Arrangement in 2011. The working arrangements of Sargasso Sea Commission is available at: http://www.sargassoseacommission.org/about-our-work (accessed November 2018)
[327] Diz, Daniela. "Current Legal Developments: The Sargasso Sea." *The International Journal of Marine and Coastal Law 31*, no. 2 (2016), pp.359-362
[328] CBD Decision XI/17, Marine and coastal biodiversity: ecologically or biologically significant marine areas, 11th Meeting of the CoP to the CBD, Hyderabad, India, 8-19 October 2012, § 3; CBD Decision XII/22, Marine and coastal biodiversity: ecologically or biologically significant marine areas (EBSAS), 12th Meeting of the CoP to the CBD, Pyeongchang, Republic of Korea, 6 - 17 October 2014, § 1.
[329] UNGA Resolution 61/105 (2006), § 84; UNGA Resolution 64/72 (2009), § 122(b).
[330] FAO, International Guidelines for the Management of Deep-sea Fisheries in the High Seas (2009)

to be adopted, such as MPAs, in an area mostly located in ABNJ.[331] Each sectoral regime has its own distinctive protection mechanisms and takes different factors into account. Also, under their framework different criteria and scientific data are adopted and assessed. Even though MPAs in ABNJ have been (successfully or not) established under the framework of other regimes, the Sargasso Sea project is a groundbreaking case of ABNJ biodiversity conservation, as no environmental regional seas convention or RFMO covers the region.[332] Hence, the Sargasso Sea project provides an interesting insight into the legal gaps existing in the current high seas governance system.

F. The regional approach in a nutshell

The development of regional initiatives for the protection of the marine environment is a cornerstone of international environmental policies. The notion of regionalism has been quite an important element in the context of UNCLOS and regional cooperation is contemplated *inter alia* with respect to the conservation of living marine resources, enclosed or/and semi-enclosed seas, and the protection and preservation of the marine environment. Regarding the latter, Art.197 endorses "the international practice of the two-track, global and regional/sub-regional approach", as well as marine regionalism.[333] The regional approach is further exemplified through regional seas conventions and arrangements, and RFMOs. Currently, the UNEP-coordinated Regional Seas Programme covers 18 regions with more than 146 States participating in 18 Regional Seas Conventions and Actions Plans.[334]

The most important argument for a regional approach towards the conservation of marine biodiversity in ABNJ, and thus the establishment of MPAs, is the elimination of unilateralism, while enabling States to agree on commitments for common action which is easier to be implemented than under a global framework. Instead, regional initiatives respond better to common interests in dealing with common problems raising from the special needs of seas with diverse oceanographical and ecological characteristics. Moreover, regional frameworks establish institutions that have more cohesion and can be more effective in meeting their conservation

[331] Freestone, David, and F. Bulger. "The Sargasso Sea Commission: An Innovative Approach to the Conservation of Areas beyond National Jurisdiction." *Ocean Yearbook Online* 30, no. 1 (2016), p. 85

[332] At present, there is no fisheries regulatory authority for non-tuna like species in the majority of the Sargasso Sea, while the closest regional seas programme, the one for the Wider Caribbean, does not extend as far north as Bermuda and excludes ABNJ.

[333] Jefferies, Cameron S. G., and John Norton Moore. *Marine Mammal Conservation and the Law of the Sea*. Oxford University Press, 2016, p.275

[334] Written submission by the United Nations Environment Programme (UNEP), Regional Seas Programmes and other UNEP Activities Relevant to Marine Biodiversity in Areas beyond National Jurisdiction, 26 August 2016

objectives. For example, the OSPAR Commission and CCAMLR have taken remarkable measures in ABNJ by establishing MPAs therein, while they could be regarded as pioneers in the implementation of the environmental provisions of UNCLOS both within and beyond national jurisdiction. The State practice under regional seas conventions, especially those pre-dating the entry into force of UNCLOS in 1994, is one of the main reasons why Part XII of UNCLOS has quickly come to be regarded as largely codifying customary international law.[335]

On the other hand, one of the fundamental arguments against the effectiveness of regional frameworks is the conflict with third parties, especially regarding conservations measures, such as MPAs, in ABNJ. Even though no definition of a region exists in UNCLOS, the term "regional" generally refers to a small number of States compared to the international community of States as a whole.[336] Given the exclusive flag State jurisdiction on high seas, no initiative in ABNJ taken by regional frameworks can be enforced against any other vessel than the vessels flying the flag of their Contracting Parties. This issue is similar to the *pacta tertiis* limitations in the UNFSA and RFMO context. However, none of the regional seas conventions encompassing high seas areas, i.e. the OSPAR Convention, the SPA/BD Protocol of the Barcelona Convention, the CAMLR Convention and the Noumea Convention, includes a provision similar to Art.21 and 22 of UNFSA[337], which can be deemed as an explicit exception to the exclusivity of flag State jurisdiction.[338] Such a provision or a mutual enforcement agreement would be an exception to Art.92 of UNCLOS only regarding the Contracting Parties in the regional seas convention, however it would be a significant legal step towards the more effective protection of the conservation measures, such as MPAs, in ABNJ, which could set an example for the reformation of the global ocean governance architecture.

[335] Boyle, Alan. "Globalism and Regionalism in the Protection of the Marine Environment." In *Protecting the Polar Marine Environment: Law and Policy for Pollution Prevention*, edited by Davor Vidas. Cambridge: Cambridge University Press, 2000, p.32

[336] According to Vidas, "the general use of the term 'region', including in the UNEP's Regional Seas Programme, suggests that the only limit to the term 'region' would be the entire 'ocean space' – 'regional' as being all that is not 'global". *Ibid*, p.43

[337] According to Art.21§1 of UNFSA, "In any high seas area covered by a subregional or regional fisheries management organization or arrangement, a State Party which is a member of such organization or a participant in such arrangement may, […], board and inspect, […], fishing vessels flying the flag of another State Party to this Agreement, whether or not such State Party is also a member of the organization or a participant in the arrangement, for the purpose of ensuring compliance with conservation and management measures[…].

[338] Palma-Robles, Mary Ann. "Fisheries Enforcement and the Concept of Compliance and Monitoring, Control and Surveillance." In *Routledge Handbook of Maritime Regulation and Enforcement*, edited by Robin Warner and Stuart Kaye. London and New York: Routledge Taylor & Francis Group, 2016, p.148

Part III: Moving Forward

A. Identifying the gaps

As indicated above, the current international legal framework for the conservation of marine biological diversity, and thus for the use of MPA tool, in ABNJ contains gaps, the most prominent of which is the lack of an overarching regulatory system that could provide *inter alia* for the establishment of MPAs. Therefore, regarding ABNJ, there is no coherently and comprehensively binding framework for the implementation of such important conservation tools.[339] Instead, the prevailing approach to the conservation and sustainable use at the international level is sectoral.

1) In global context

The leading and widely accepted legal instruments, i.e. UNCLOS and CBD, do not provide for such a system. On the one hand, UNCLOS establishes a broad framework for the regulation of oceans. However, it is not complete. As a product of its time, it was designed to deal with matters that the negotiating States were then aware of. Many issues related to the governance of the ABNJ marine environment, such as biological diversity of deep sea ecosystems or the concept of sustainable development, were developed after its adoption, challenging its suitability as a self-constrained regime for ABNJ.[340] Even though the use of MPAs in ABNJ is fully consistent with UNCLOS under the joint application of Art.194 and 197, the Convention does not specify any identification criteria and designation or management mechanisms[341], while the rules arising from the establishment of such areas can only be binding upon participating States and the vessels flying their flags pursuant to the traditional high seas freedoms and the predominant flag State jurisdiction.[342] Similarly, as in the UNFSA context, it has been (unrealistically) argued that this is not a *pacta tertiis* case, but rather the customary obligation to protect and preserve the marine environment binding upon all States (participating or third States) which entails a duty of non-

[339] Wright, G., J. Rochette, and T. Greiber. "Sustainable Development of the Oceans: Closing the Gaps in the International Legal Framework." In *Legal Aspects of Sustainable Development*, edited by Volker Mauerhofer. Cham: Springer, 2015, p.552

[340] Barnes, R. "The Proposed LOSC Implementation Agreement on Areas Beyond National Jurisdiction and Its Impact on International Fisheries Law." *The International Journal of Marine and Coastal Law* 31, no. 4 (2016), p.5

[341] Scovazzi, Tullio. "Negotiating Conservation And Sustainable Use Of Marine Biological Diversity In Areas Beyond National Jurisdiction: Prospects And Challenges." *The Italian Yearbook of International Law Online* 24, no. 1 (2015), p.68

[342]Tladi, Dire. "Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction: Towards an Implementing Agreement." In *Research Handbook on International Marine Environmental Law*, edited by Rosemary Rayfuse. Cheltenham, UK: Edward Elgar Publishing, 2017, pp. 279-280

interference with arrangements agreed by certain States on behalf of the international community as a whole.[343]

On the other hand, Art.5 of CBD limits the obligation to conserve and sustainably use the components of ABNJ marine biodiversity to a duty to cooperate directly or through competent international organizations, thus no direct obligation to take *in-situ* measures such as MPAs in ABNJ exists.[344] In addition, Art.22 seems to imply that UNCLOS would prevail over CBD on marine matters except for cases when the exercise of rights and obligations would cause serious damage or threat to marine biodiversity (e.g. fishing in the high seas).[345] As CBD follows the structure of jurisdictional zones introduced by UNCLOS, the Contracting Parties cannot ignore the rights and duties of States when navigating in EEZ or the high seas. Even though CBD is a convention "concluded in furtherance of the general principles set forth in UNCLOS" and thus, as *lex specialis,* Part XII of UNCLOS is without prejudice to the specific obligations assumed by States under CBD, [346] the object and purpose of UNCLOS can already be interpreted to include measures for the conservation of marine biodiversity.[347] As a result, the establishment of MPAs aiming to prevent serious damage to the biodiversity of ABNJ under CBD would be compatible with UNCLOS and consistent with Art.22 of CBD.[348] However, according to Art.311 of UNCLOS, such MPAs would not be opposable to non-CBD Contracting Parties of UNCLOS, whose interests this provision seeks to protect. Hence, its has been argued that any regulation of marine biodiversity primarily depends on the parties to UNCLOS and not on the parties to CBD.[349]

Due to the sectoral regulation of human activities for the conservation of ABNJ marine biodiversity at the global level, legal gaps can also be identified in relation to activities, such as

[343] In this sense, it has been suggested that MPAs may create an erga omnes effect similar to the objective regimes discussed by the Permanent Court of International Justice (PCIJ) in the Free Zones of Upper Savoy and the district of Gex 1932 case, or that may entitle the injured State to countermeasures against flag States whose vessels act within the area contrary to the agreed conservation measures based on the ILC Articles on State Responsibility. The latter raises questions regarding the definition of the injured State, though. Gavouneli, Maria. Functional Jurisdiction in the Law of the Sea. Vol. 62. Publications on Ocean Development. Leiden: Martinus Nijhoff Publishers, 2007, pp.81-82, 122

[344] Warner, Robin M. "Conserving Marine Biodiversity in Areas Beyond National Jurisdiction: Co-evolution and Interaction with the Law of the Sea." In *The Oxford Handbook of the Law of the Sea*, edited by Donald Rothwell, A. G. Oude Elferink, Karen N. Scott, and Tim Stephens. Oxford, United Kingdom: Oxford University Press, 2017, p.757

[345] According to Art.22(1), "the provisions of [CBD] shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity", while (2) states that "Contracting Parties shall implement [CBD] with respect to the marine environment consistently with the rights and obligations of States under the law of the sea". To that extend Art.22 of CBD reinforces the terms of Art.311(3) of UNCLOS.

[346] Art.237 of UNCLOS

[347] *Supra* note 44 and text

[348] Pinto, Daniela Diz Pereira. *Fisheries Management in Areas beyond National Jurisdiction the Impact of Ecosystem Based Law-making*. Vol. 13. Legal Aspects of Sustainable Development. Leiden: Martinus Nijhoff Publishers, 2013, p.179

[349] This could explain the reason why UNFSA was adopted as an Implementing Agreement to UNCLOS and not to CBD. *Supra* note 3, pp.750-751

shipping and deep seabed mining. IMO, as the focal point for technical expertise in international shipping, has developed various instruments for the mitigation of vessel pollution applicable to areas both within and beyond national jurisdiction, such as MARPOL and the Special Areas of its Annexes, the PSSAs Guidelines, the 1972 London Convention and Protocol[350] and the 2001 Anti-fouling Convention.[351] Despite its detailed framework, IMO lacks mechanisms to monitor and enforce compliance with its instruments. Still, compliance in ABNJ is largely depended upon flag States resulting to very little reporting of vessel pollution, while port States action in cases of high seas pollution incidents seems negligible in spite of them being vested with the exercise of extraterritorial jurisdiction for the protection of global commons.[352] Similarly, in the deep seabed mining context, ISA's deep seabed mining environmental protection framework lacks a collaborative mechanism for monitoring and enforcing compliance between exploration contractors and ISA's representatives.[353]

2) In regional context

At the regional level the lack of coordination and cooperation between global, regional and sectoral organizations regulating human activities in ABNJ is even clearer. RFMOs and Regional Seas Conventions are the regimes regionally responsible for the conservation of marine biodiversity in ABNJ pursuant to Art.117-118 and their Implementing UNFSA, and Art.197, respectively, implementing the duty to cooperate for the preservation of high seas marine living resources and the protection of marine environment.

Regarding regional fisheries, many RFMOs conventions concluded prior to UNFSA do not include modern environmental protection principles or guidelines such as the precautionary approach and ecosystem-based management, thus their States Members are not obliged to consider them when adopting and implementing conservation measures, or to identify VMEs. Even when the precautionary and ecosystem-based approach exist, many RFMOs allow for States to opt out or object to the implementation of agreed conservation and management measures taking advantage of scientific uncertainty. Moreover, there has been very little collaboration and consultation between the existing RFMOs, as no overarching mechanism exists in order to monitor their activities in ABNJ, assess their performance based on best practice standards and enhance the cross-sectoral exchange of information making it even harder to effectively deal with the

[350] The 1972 Convention on the Protection of Marine Pollution by Dumping of Wastes and Other Matter; the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.
[351] The 2001 International Convention on the Control of Harmful Anti-fouling System on Ships
[352] Kopela, Sophia. "Port-State Jurisdiction, Extraterritoriality, and the Protection of Global Commons." *Ocean Development & International Law* 47, no. 2 (2016), pp. 89-130
[353] *Supra* note 3, pp.763-764

conservation of highly migratory marine species or the illegal, unregulated and unreported (IUU) fishing, the latter stemming in part from often poor domestic registration processes. Also, as few RFMOs include all the participants in a regional fishery among their members, it is highly possible that non-parties or "free riders" to undermine the effectiveness of the restrictive conservation measures adopted by the RFMO members based on the *pacta tertiis* rule. The mixed RFMO performance in implementing ecosystem-based management to sustain habitat, species and ecological integrity, as well as the gaps in spatial coverage[354] and target species[355] have resulted in uneven governance of high seas fisheries.[356]

As far as the regional seas arrangements are concerned, there is a clear gap in the spatial and geographical distribution of regional seas conventions applied to ocean regions. Despite the variety of such conventions in force either under the auspices of UNEP or outside UNEP's framework and the participation of the vast majority of States,[357] there are ocean regions not covered by a legally binding regional convention such as the East and South Asian Seas or North-West and North-East Pacific. Furthermore, there are just few regional seas conventions having the mandate to address environmental issues in high seas enclaves or high seas areas adjacent to areas within national jurisdiction.[358] Indeed, the areas of responsibility of most of the existing regional conventions are limited to areas within national jurisdiction, as these conventions are primarily groupings of neighbouring coastal States whose jurisdiction is generally restricted to their coastal zones or out to 200nm.[359] Even though the 2008-2012 UNEP Regional Seas Strategic Direction recognized the need for regional seas conventions and actions plans to focus on "addressing the protection of marine biodiversity beyond areas within national jurisdiction and deep-sea biodiversity",[360] the majority of regional seas programmes focuses on coastal areas only. This is mainly because of the conclusion of such environmental arrangements is primarily based on

[354] Currently the Arctic and the bottom fisheries of Central and South-West Atlantic are not covered by an RFMO, whereas the convention establishing RFMO in North Pacific Ocean entered into force quite recently (2015). [http://www.fao.org/fishery/topic/166304/en (accessed November 2018)]

[355] Although tuna and tuna-like fisheries are regulated by RFMOs covering almost all ABNJ, there are significant gaps in the regulation of non-tuna species fisheries, even though highly migratory species and straddling fish stocks, as well as discrete high seas fish stocks are significant components of marine biodiversity. Warner, Robin. "Conservation and Sustainable Use of High-seas Biodiversity: Steps towards Global Agreement." *Australian Journal of Maritime & Ocean Affairs* 7, no. 3 (2015)., p.219

[356] K. Gjerde., B. Boteler, *et al.* 'Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction: Options for Underpinning a Strong Global BBNJ Agreement through Regional and Sectoral Governance', STRONG High Seas Project, 2018, p.8

[357] Vallega, Adalberto. "The Regional Seas in the 21st Century: An Overview." *Ocean & Coastal Management* 45, no. 11-12 (2002), p.926

[358] Freestone, David. "Fisheries Commissions and Organizations." In *The Max Planck Encyclopedia of Public International Law (2008)*, edited by R. Wolfrum. 2008, pp.196-197

[359] *Supra* note 345

[360] UNEP, Regional Seas Strategic Directions 2008–2012, 14th Global Meeting of the Regional Seas Conventions and Action Plans, Nairobi, Kenya, 1st–3rd October 2012

political opportunity rather than on scientific evidence for marine biodiversity conservation purposes.[361] Furthermore, the collaboration between the decision-making bodies established under the regional seas conventions and RFMOS is lax. Most of the conventions exclude from their mandates the regulation of fisheries, in order to avoid the adoption of overlapping or substantially conflicting fisheries conservation measures. But, also, they do not provide for collaboration or cooperation mechanisms with RFMOs. In most regional seas conventions covering ABNJ, subsequent MoUs have been adopted between their decision-making bodies and the respective RFMOs (or other international organizations sectorally responsible, such as IMO or ISA) so as a more comprehensive and holistic approach towards the conservation of marine biodiversity to be regionally achieved. However, there is still progress to be made towards the target of collaborative action as implied by the UNEP 2017-2020 Regional Seas Strategic Directions, which provides for four key thematic strategies aiming to enhance "the work in collaboration with international and regional organizations, including Multilateral Environmental Agreements (MEAs), RFMOs and other relevant stakeholders".[362]

B. Towards an overarching regime (?)

In seeking an overarching framework which could comprehensively and holistically regulate the conservation of marine biological diversity in ABNJ by providing *inter alia* a globally accepted process for the establishment of MPAs, it is widely recognized that UNCLOS should be the legal framework under which high seas MPAs should be established with the appropriate scientific and technical support of CBD. Specifically, the CBD Contracting Parties have constantly affirmed the role of UNCLOS as the suitable framework for the establishment of MPAs in ABNJ and recognized UNGA as the appropriate forum to address such issues,[363] while UNGA has endorsed the role of CBD on the identification of threatened marine areas and adoption of EBSA criteria.[364] Despite this mutual expression of "respect" towards each other, though, UNCLOS and CBD remain under the present structure two distinct international fora, which even though consistent,

[361] Sand, Peter H. "Transnational Environmental Law: Lessons in Global Change." *Max Planck Yearbook of United Nations Law Online* 5, no. 1 (2001), p.183

[362] UNEP, Regional Seas Strategic Directions (2017-2020), 17th Global Meeting of the Regional Seas Conventions and Action Plans, Istanbul, Turkey, October 2015

[363]The Conference of the Parties *"*recognizes that the Convention on Biological Diversity has a key role in supporting the work of the General Assembly with regard to marine protected areas beyond national jurisdiction, by focusing on provision of scientific and, as appropriate, technical information and advice relating to marine biological diversity, the application of the ecosystem approach and the precautionary approach*."* CBD, COP 8, Decision VIII/24, §42

[364] UN General Assembly Resolution A/RES/63/111, Oceans and the law of the sea, 63rd session, (12 February 2009), § 135.

no mechanism for their common action towards the conservation of marine biodiversity and the establishment of MPAs in ABNJ is yet in place.

1) The procedure towards a new regime

(a) Would an UNCLOS amendment be possible?

Pursuant to the identified gaps of UNCLOS on the conservation of ABNJ marine biodiversity and the establishment of MPAs in ABNJ, questions are raised regarding the procedure to be followed, in order UNCLOS to meet the new challenges and prove its dynamic nature. The Convention includes a cumbersome and complex amendment mechanism as provided for in Art. 312-316 which allows Parties to propose specific amendments other than those relating to activities in the Area and request the convening of a conference to consider such proposals by consensus, given that at least half of the Parties reply favorably within a period of twelve months from the circulation of such communication. Alternatively, a Party may propose an amendment to be adopted by the simplified procedure without convening a conference, but the amendment will only be adopted, only if no Party objects to the proposal.[365] For an amendment to enter into force, the ratification or accession of 60 Parties (or two-thirds of Parties, whichever is greater) is required. Given the negotiations of the Convention as a "package deal", a strong influence against any amendments can be exerted,[366] and thus, it would be highly unlikely Part XII of UNCLOS to be thus amended. Indeed, the amendment mechanism of UNCLOS (and of subsequent UNFSA) is so cumbersome that "no serious thought has been given to using them".[367]

The same obstacles occur also to the alternative of expanding ISA's mandate, in order to cover the water column above seabed and establish MPAs therein. ISA is the only international body established under UNCLOS and its mandate is restricted to the protection of marine environment against mining activities conducted in the Area.[368] Therefore, any such expansion would require the amendment of Part XI of UNCLOS.[369] Moreover, this would probably result in ISA's interference to RFMOs geographical scope and mandate. Apart from the amendment obstacles,

[365] It should be noted that the amendment mechanism of UNCLOS is available to Parties since 2004, when the 10-year period from the date of entry into force of the Convention expired (Art.312(1)

[366] Freestone, David, and A. G. Oude Elferink. "Flexibility and Innovation in the Law of the Sea – Will the LOS Convention Amendment Procedures Ever Be Used." In *Stability and Change in the Law of the Sea: The Role of the LOS Convention*, edited by A. G. Oude Elferink. Netherlands: Brill, 2005, pp.169-221

[367] Treves, T. "Principles and Objectives of the Legal Regime Governing Areas beyond National Jurisdiction." In *The International Legal Regime of Areas beyond National Jurisdiction: Current and Future Developments*, edited by Oude Elferink Alex G. and Erik Jaap. Molenaar. Leiden: Martinus Nijhoff Publishers, 2010, p.15

[368] Art.145 of UNCLOS

[369] According to Art.316(5), any amendment relating exclusively to activities in the Area […] shall enter into force for all States Parties one year following the deposit of instruments of ratification or accession by three fourths of the States Parties.

the expansion of ISA' mandate to the high seas water column seems also unrealistic for two reason. First, as implied by the Convention's negotiations, the proposal of Maltese Ambassador Arvid Pardo to consider all natural resources (including the living resources) of ABNJ as "common heritage of mankind" managed by the "International Ocean Space Institution" was not finally accepted.[370] Second, as already mentioned, there are high seas areas, such as of the Mediterranean sea, where due to their geophysical features there is no seabed area legally defined as Area. Thus, such areas are excluded from ISA's mandate and would remain unregulated, if the expansion of its mandate was chosen as the suitable procedure. However, Part XI has been already implicitly amended by the 1994 Agreement, which even though adopted as a legally binding Implementing Agreement, and thus not under the strict conditions of the amendment procedure, there is no doubt that it implements and interprets Part XI in a new way, resulting to its modification.[371]

(b) A new Implementing Agreement under UNCLOS

In 2004, UNGA established 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 (the BBNJ Working Group).[372] For nearly a decade,[373] the Group was tasked with the survey of past and present activities of UN and other international organizations and the examination of their scientific, technical, legal and socioeconomic aspects. Its work aimed to facilitate government studies and generate recommendations on the improvement of international cooperation and coordination. Since the beginning of its work, there was a general consensus on the importance of the issues forming the remit of the Group and the implementation of existing legal commitments. In this regard it was accepted that UNCLOS is the framework for ocean activities, but also other instruments are relevant.[374] However, States were divided on the precise way forward, even though it was generally accepted that the status quo was not an option.[375]

By 2011, a powerful alliance had emerged, as G77 and China agreed to support the call for an implementing agreement., along with the EU and other States, such as Australia, Mexico and New

[370] The notion of common heritage of mankind was finally restricted to the Area (Art.136 of UNCLOS). Scovazzi, Tullio. "Mining, Protection of the Environment, Scientific Research and Bioprospecting: Some Considerations on the Role of the International Sea-Bed Authority." *The International Journal of Marine and Coastal Law* 19, no. 4 (2004), 383–409.
[371] *Supra* note 348, p.182
[372] UN General Assembly Resolution A/RES/59/24, Oceans and the law of the sea, 59th session (5 February 2005)
[373] The BBNJ Working Group first convened in 2006 and concluded it work in 2015.
[374] UN General Assembly A/61/65, Report 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 Annex I, 61st session (20 March 2006) §3
[375] *Supra* note 339, pp.6-7

Zealand.[376] Even though the alliance could be regarded as tenuous, as "it was built not on substance but on progress", however, it was strong enough to isolate the United States, Iceland, Russia, Norway, Canada and Japan as the only six States which opposed to the necessity of a new legally binding instrument.[377] While the 2012 Rio+20 Summit was an opportunity for the G77 and China and the EU to pursue the adoption of an implementing agreement, Venezuela blocked the position of G77 due to its opposition to UNCLOS. In response, South Africa organized a group of like-minded countries which called for an implementing agreement, supported by the EU[378]. No decision on an implementing agreement was taken at the Summit, although States made a strong commitment at ministerial level to address this issue as a matter of urgency and to reach a decision by the end of UNGA's 69th session in 2015.[379]

Progress was made since 2013, when the Co-Chairs of the Group invited States to submit their views on the scope, parameters and feasibility of an implementing agreement under UNCLOS.[380] The discussions took place under three meetings of the Group and covered issues, such as the (non-) binding form of an instrument and its substantial and procedural aspects, as well as whether such an instrument should fall under UNCLOS. Finally, in 2015, during the third and final meeting of the Group, States reached a compromise following intensive discussions and took the historic step to recommend by consensus to UNGA that it opens negotiations for a legally binding instrument.[381] According to the Recommendations, the process included a two-step approach; a Preparatory Committee would be established and make recommendations to UNGA on the elements of a draft text by the end of 2017, and by the end of its 72nd session, UNGA would decide the convening and starting date of an Intergovernmental Conference under the auspices of UN. Furthermore, the negotiations would address the topics identified by the Group in 2011 as a package in the sense that no topic could be separated from the other,[382] namely "marine genetic resources, including questions on the sharing of benefits, measures such as area-based management tools, including marine protected areas, environmental impact assessments and capacity building and the transfer of marine technology".[383]

---

[376] UN General Assembly A/69/780, Co-Chairs Summary of Discussions, Annex II, 69th session (13 February 2015), §.12
[377] *Supra* note 331, p.269; *ibid*, §.13-14
[378] *Ibid*, p.270
[379] Report of the United Nations Conference on Sustainable Development (Rio de Janeiro, Brazil 20–22 June 2012) Un Doc. A/CONF.216/16, §162.
[380] UNGA Res. 68/70, §201
[381] UN General Assembly A/69/780, 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 sixty-ninth session of the General Assembly, Annex I, 69th session (13 February 2015), §1(e)
[382] *Ibid* §1(f)
[383] UN General Assembly A/66/119, 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

By the historic resolution 69/292,[384] UNGA approved the Recommendations of the BBNJ Working Group and thus, established a Preparatory Committee (PrepCom) "to make substantive recommendations to the General Assembly on the elements of a draft text of an international legally binding instrument", taking into consideration the reports of the Group. The PrepCom convened four times in 2016 and 2017. In the final session, States adopted a Report including non-exclusive elements that generated convergence among most delegations and issues on which there is divergence of views,[385] following the streamlined Chair's non-paper on elements of a draft text, which provides ideas and proposals reflecting the variety of options developed during the previous sessions.[386] It was stressed that the issues of convergence and divergence do not reflect consensus and the positions of States expressed during PrepCom are without prejudice to their position during future negotiations. Finally, UNGA adopted the resolution 72/249[387] convening an Intergovernmental Conference under the auspices of the UN "to consider the recommendations of the Preparatory Committee on the elements and to elaborate the text of an international legally binding instrument under the United Nations Convention on the Law of the Sea […] with the view to developing the instrument as soon as possible". The resolution was co-sponsored by 141 States and adopted by consensus.

2) MPAs under a new international legally binding instrument

Attention was given to MPAs as part of the so-called "2011 package deal", and more specifically, as one of the most valuable area-based management tools (ABMTs).[388] Since PrepCom sessions, States seemed to agree on the guiding principles, i.e. the precautionary approach, the ecosystem approach, the science-based approach and transparency. The Report does

Jurisdiction, Annex I, 66th session (30 June 2011) §1(b); UN General Assembly Resolution A/RES/66/231, 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, Annex, 66th session (5 April 2012)

[384] UN General Assembly Resolution A/RES/69/292, Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 69th session (6 July 2015) §1(a)

[385] A/AC.287/2017/PC.4/2 Report of the Preparatory Committee established by General Assembly resolution 69/292: Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 4th session, 10-21 July 2017

[386] Chair's streamlined non-paper on elements of a draft text of an international legally-binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

[387] UN General Assembly Resolution A/RES/72/249, International legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 72nd session (19 January 2018) §1

[388] Apart from MPAs, the term "area-based management tools" also encompasses the development of cross-sectoral measures, such as marine spatial planning (MSP), and the use of sectoral measures, such as spatial and temporal fisheries closures (refugia) and VMEs closures, the IMO PSSAs and the designation of ISA's Areas of Particular Environmental Interest (APEIs).

not distinguish between MPAs and other ABTMs, thus much of the discussions focused on MPAs.[389] According to, *inter alia*, the Report of PrepCom and President's aid to discussion, key elements of MPAs negotiations include the criteria used to identify potential areas of protection, the proposal and adoption of MPAs, the implementation of management measures and the enforcement, as well as procedural aspects on the process for coordination and consultation on proposals and mechanisms for their scientific assessment. These issues generated convergence of views among most delegations.

More specifically, and as indicated by the 1st session of the Intergovernmental Conference, there was convergence among States regarding the objectives to be achieved by the ABMTs, including MPAs, under the new international legally binding instrument, i.e. the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction, as well as overarching principles of the instrument to be fully applicable to the full range of ABTMs, such as the promotion of cooperation and coherence in the use of MPAs by regional and sectoral bodies and the implementation of existing obligations. Also, it was recognized that the new instrument should foster greater cooperation between regional and sectoral bodies and that respect should be given to the rights and jurisdiction of coastal States over the area within their national jurisdiction, including within their EEZ and extended continental shelf beyond 200 nm. Further principles were agreed regarding the process in relation to the establishment of ABMTs, including MPAs, such as transparency, inclusiveness and consistency with the Charter of United Nations and UNCLOS. Moreover, it was recognized that standards and criteria should be developed on the basis of the best available scientific knowledge for the identification of possible areas, and that the relevant proposals could be submitted by States parties to the instrument, either individually or collectively, including through competent organizations. Finally, there was convergence of views on the responsibility of States parties to implement the relevant measures by regulating activities and processes under their jurisdiction or control, including their flagged vessels, and on the need for monitoring and compliance mechanism, as well as regular review functions to be allocated to a subsidiary body under the instrument.

On the other hand, the fundamental issue of institutional decision-making set up including the issue of not undermining existing legal instruments, frameworks and mandates of regional or sectoral bodies required further discussions, hence enlisted as one of the divergent issues of the PrepCom Report.[390] Still, by the end of the 1st session of the Intergovernmental Conference, this

[389] G. Wright, J. Rochette, K. Gjerde, I. Seeger, The Long and Winding Road: Negotiating a Treaty for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction (2018). IDDRI, Paris, France, p.57

[390] *Supra* note 376, Section B

issue remained divergent. In addition, mixed views were expressed regarding the role of the adjacent coastal States in the newly established mechanism and the need for consultations and compatibility with their national measures. In this context it was questioned whether the consent of adjacent coastal States would be required. Therefore, these two issues require further analysis.

(a) The problem of "not undermining" clause

The requirement of "not undermining" the existing regional and sectoral structure is included in all documents of the process since the fundamental UNGA Resolution 69/292 and throughout the works of the PrepCom and the current (and future) sessions of the Intergovernmental Conference. However, the use of the term seems ambiguous. The UNGA Resolution and the PrepCom Report apply this requirement regarding "relevant legal instruments", "relevant legal frameworks" or "relevant global, regional and sectoral bodies". Its broad application complicates its meaning, which is of great significance, in order to determine the relationship between the future instrument and the existing regional mechanisms. The term could be dually interpreted depending on the object not to be undermined. Therefore, regarding existing bodies, the term narrowly requires the future instrument to not undermine their authority or mandate, as well as the measures taken under their legal frameworks, leaving their mandates intact. As a result, the existing bodies will continue to operate under their respective frameworks and mandates, whereas their regional function will be enhanced. On the other hand, when the term refers to the existing legal frameworks and instruments, it broadly requires the future instrument to not undermine their effectiveness and objectives. This results to a new global system with the mandate to effectively and complementarily implement existing legal instruments on the basis of their objectives, however it will implicitly disempower the mandate of existing regional bodies and their authority to take conservation measures.[391]

It has been argued that UNFSA should be decisive in interpreting the term.[392] The Agreement seems to support a broad interpretation, i.e. that "not undermine" refers to the effectiveness and objectives of existing legal frameworks, instruments and bodies. Therefore, a new instrument should not undermine, but rather complement the effective implementation of UNFSA and RFMOs objectives in ABNJ. However, the term is included in numerous provisions of the Agreement regarding the effectiveness of conservation and management measures taken by

[391] Scanlon, Zoe. "The Art of "not Undermining": Possibilities within Existing Architecture to Improve Environmental Protections in Areas beyond National Jurisdiction." *ICES Journal of Marine Science* 75, no. 1 (2017), pp.406-407

[392] Wright, Glen, Jeff Ardron, Kristina Gjerde, Duncan Currie, and Julien Rochette. "Advancing Marine Biodiversity Protection through Regional Fisheries Management: A Review of Bottom Fisheries Closures in Areas beyond National Jurisdiction." *Marine Policy* 61 (2015), pp. 134–148.

RFMOs.[393] Its application in this context refers to any vessel act inconsistent with a legal measure, thus supporting a narrower interpretation of the term, so as "not to undermine" the mandate and authority of RFMOs to take such measures. Pursuant to this interpretation of UNFSA, any (future) instrument providing for an overlapping mandate to take measures imposed on RFMOs Member States would be inconsistent with the requirement not to undermine included in UNGA Resolution 69/292. The example of UNFSA is even more doubtful because of environmental treaties, like UNFSA itself, providing for the creation of subsequent bodies, like RFMOs, with their own objectives, mandates and constitutional instruments.[394]

Furthermore, even though UNGA Resolution 69/292 is not a treaty, the customary interpretation rules of VCLT could be regarded a useful tool towards that end. However, the interpretation rules of VCLT do not appear instructive for the meaning of the term. The primary object of the Resolution is the decision on the development of an international legally binding instrument, which is too broad to clarify the relationship of the future instrument with existing mechanisms. The PrepCom Report could be considered as subsequent practice between the parties in the application of the Resolution. Among the divergent issues regarding ABMTs, it explicitly refers to the mandates of existing bodies as object whose undermining should be avoided by a future instrument. Although consensus was not achieved, this reference prioritizes the first interpretation of the "not to undermine" requirement. However, the use of "avoiding undermining" does not reflect a significant commitment to "not undermine". It implies that when deciding on the appropriate decision-making and institutional set up States should take the existing structure into account, while they are not deterred from considering the establishment of a global body with decision-making powers.[395]

Throughout the negotiations, various decision-making approaches were expressed, which are broadly clustered as global, regional and hybrid approach.[396] The global approach emphasizes the need to establish a global body and a coherent process for the establishment, implementation and enforcement of ABMTs, including MPAs, while it envisages the participation of the existing regional or sectoral bodies in the overall process.[397] On the other hand, the regional approach views the future instrument as a mechanism to strengthen existing regional bodies empowered to

[393] E.g. Art.7,17,18,20,23 of UNFSA
[394] *Supra* note 391, p. 407
[395] *Ibid*, p.409
[396] Earth Negotiations Bulletin, Summary of the Third Session of the Preparatory Committee on Marine Biodiversity Beyond Areas of National Jurisdiction: 27 March–7 April 2017, Vol.25, No.129, International Institute for Sustainable Development
[397] The global approach was supported *inter alia* by the African Group, the EU, Mexico, El Salvador, Iran, Costa Rica and Peru.

establish ABTMs, while promoting cooperation and coordination between those and relevant bodies. Therefore, the instrument would provide general principles and approaches regarding ABMTs, including MPAs, while the full authority in decision-making, monitoring and review would be still exercised by the regional bodies.[398] Somewhere in the middle stands the hybrid approach, which suggests a compromise between global and regional approaches and enhances coordination and cooperation while avoiding overlapping mandates. According to this approach, the decision-making process would more extensively rely on the existing regional and sectoral bodies, while some decision-making responsibilities would be fulfilled at the global level. Thus, a CoP under the instrument would consider MPAs proposals from a holistic point of view, and after identifying specific measures in consultation with relevant bodies, would refer guidance to existing regional bodies for their final decision.[399]

(b) The role of adjacent coastal States under the new instrument

Another aspect of the decision-making, and of the whole MPAs establishment and management process in general, is the involvement of coastal States adjacent to ABNJ in the process and the consideration on their rights in the areas within national jurisdiction. Due to the transboundary effects of human activities in the marine environment and the fact that threatened areas in need of protection may cover areas both within and beyond national jurisdiction, this controversial issue was obviously addressed throughout negotiations. The Chair's streamlined non-paper enlists among the general principles and approaches to be included in the future instrument items referring explicitly to the rights and duties of coastal and other States regarding the establishment of MPAs in ABNJ[400], while the PrepCom Report states that the future instrument would address the relationship between its measures and those established by adjacent coastal States, as well as their involvement in the process of consultation and assessment of proposals and decision-making.[401]

Although PrepCom prioritizes the coastal State position, there are no precise details on its content and implications.[402] Regarding the terminology included, the PSIDS proposed the

[398] The regional approach was primarily supported by States initially opposed to the negotiations towards a new international legally binding instrument, such as Iceland and the Russian Federation.
[399] The hybrid approach was favored by Norway, Japan, New Zealand, Australia and the group of Pacific Small Island Developing States (PSIDS).
[400] I.e. due regard for the rights of others; respect for the rights of coastal States over all areas under their national jurisdiction, including their continental shelves beyond 200nm where applicable; respect for the sovereignty and territorial integrity of coastal States; compatibility; adjacency and requirement to consult adjacent States; and recognition of the role of adjacent coastal States as well as other States. Specifically, in the ABMTs and MPAs, the paper includes the requirement of agreement of adjacent States and the consideration on the measures already taken in area within national jurisdiction (e.g. MPAs in EEZ) and not undermining their sustainable development or their actions and interests. *Supra* note 328, § 24, 107, 115,116, 131
[401] *Supra* note 381, § 4.2 and 4.3.2(ii)(iii)
[402] Oude Elferink, Alex G. "Coastal States and MPAs in ABNJ: Ensuring Consistency with the LOSC." *The International Journal of Marine and Coastal Law* 33, no. 3 (2018), p.442

"adjacency principle" to address the interests of adjacent coastal States, whereas the Cook Islands commented that activities in ABNJ should not impact activities within national jurisdiction. Those States supported also the concept of "compatibility" pursuant to Art.7 of UNFSA.[403] On the other hand, the concept of "due regard" has been juxtaposed to that of "adjacency" based on the fact that the latter is not included in UNCLOS as addressing the relationship between coastal States and States carrying out activities in ABNJ.[404] No further light is shed regarding the concepts of "respect for the rights of coastal States over all areas under their national jurisdiction, including their continental shelves beyond 200nm where applicable" and "respect for the sovereignty and territorial integrity of coastal States". The latter concepts are not featured in UNCLOS as an obligation of States to respect the rights of the coastal State when carrying out activities in ABNJ.

The relationship between coastal States and the establishment of MPAs in ABNJ could be identified by recourse to the legal basis of MPAs in ABNJ, i.e. Part XII of UNCLOS and CBD. As already illustrated above, on the one hand, the provisions of Part XII of UNCLOS apply to all States either flag, port or coastal. Part XII puts emphasis on the need for global or regional cooperation by taking into account the characteristic regional features. Also, pursuant to the traditional flag State jurisdiction, it indicates that the States involved in ABNJ activities have the primary responsibility to take measures for the prevention, reduction and control of pollution in relation to MPAs in ABNJ, thus such obligations are imposed on the States under whose jurisdiction or control the activities in ABNJ take place. On the other hand, the Contracting Parties of CBD can establish MPAs in ABNJ as an *in-situ* measure in the case of processes and activities, regardless of where their effects occur, carried out under their jurisdiction or control (Art.4), whereas they are under a duty to cooperate for the conservation and sustainable use of biodiversity components in ABNJ (Art.5). Taken together, the legal bases do not suggest that adjacent coastal States have a specific competence regarding MPAs in ABNJ, as in dealing with such MPAs the primary responsibility rests on the States whose activities may adversely affect biodiversity in ABNJ.[405]

However, regarding the rights of coastal States in ABNJ, it has been argued that a due regard requirement also applies in this case.[406] Although the high seas freedoms are not qualified by a

[403] Earth Negotiations Bulletin, Summary of the Fourth Session of the Preparatory Committee on Marine Biodiversity Beyond Areas of National Jurisdiction: 10 July–21 July 2017, Vol.25, No.141, International Institute for Sustainable Development

[404] The concept of "adjacency" could only be based on Art.63§2, which refers to the cooperation between coastal States and States fishing on the high seas regarding measures necessary for the conservation of straddling fish stocks "in the adjacent area". Among States opposed to the concept of adjacency are China, the USA, Singapore, the Republic of Korea and Switzerland, as well as the EU and its Member States.

[405] *Supra* note 402, p.446

[406] *Ibid.*

due regard requirement to the coastal States interests, the opposite could be argued primarily based on the EEZ provisions of UNCLOS.[407] According to Art.56§2, when exercising their EEZ rights and duties, coastal States shall have due regard to the rights and duties of other States. This implies that the due regard obligation of the coastal States is not limited to the EEZ, but it is also relevant to the exercise of high seas freedoms by other States in ABNJ. In other words, the coastal State shall have due regard not to affect the activities of other States in ABNJ, when it exercises its jurisdiction regarding the protection and preservation of the marine environment by establishing MPAs in its EEZ. Also, according to Art.58§3, when exercising the high seas freedoms in a coastal State's EEZ, other States have a due regard obligation to coastal State's EEZ rights and duties, as well. This due regard obligation of other States should not be interpreted as ceasing just after their vessels pass the external EEZ boundary of the coastal State, but as also covering their activities in ABNJ that may affect the rights and duties of the coastal State in its EEZ.[408] This interpretation is compatible with the conjunctive reading of Art.194(4)(5), according to which, States establishing an MPA should have due regard to all other States, including the coastal ones.

The primacy of due regard principle is affirmed also in UNCLOS Parts regarding continental shelf (Part VI) and the Area (Part XI). Art.78§2 places on the coastal State the obligation not to unjustifiably interfere with the rights and freedoms of other States exercised in its EEZ or high seas (if no EEZ is proclaimed) when exercising its continental shelf rights and duties,[409] while Art. 79§5 employs the concept of due regard, which is applicable to both coastal and other States when laying submarine cables or pipelines. Furthermore, Art.142 states that activities in the Area shall be conducted with due regard to the rights and legitimate interests of any coastal States across whose jurisdiction resource deposits lie. However, Art. 7 of UNFSA, elaborating Art.63§2 and 64 of UNCLOS, employs the concept of compatibility[410] requiring the coastal and States fishing on the high seas to agree on compatible measures for areas both within and beyond national jurisdiction, in order not to undermine the effectiveness of the measures taken by the coastal State in accordance with Art.61 of UNCLOS. This concept requires an increased level of coordination

[407] Art.87§2 of UNCLOS places the due regard requirement for the interests of other States *in their exercises of the freedom of the high seas* (emphasis added).

[408] *Dispute concerning delimitation of the maritime boundary between Bangladesh and Myanmar in the Bay of Bengal* (Bangladesh/Myanmar), ITLOS Judgment of 14 March 2012, § 475. In this case, ITLOS considered a case of vertically concurrent jurisdiction (i.e. overlap of the high seas with the continental shelf or EEZ water column with the continental shelf), but its finding is applicable to horizontally concurrent jurisdiction (i.e. the EEZ and an adjacent area of high seas), as well.

[409] *Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom)*, Award of 18 March 2015 [PCA], §540. According to the Award, the "unjustifiable interference" included in Art.194§4 of UNCLOS is functionally equivocal to the obligation of due regard.

[410] *Supra* note 400 and text

in comparison with "due regard"; a State should not only consult with other States, but they should also agree on measures properly regulating an activity.[411]

In the context of regional seas conventions whose mandate covers also ABNJ, most of the States involved are considered coastal States, even though not all of them are adjacent to the ABNJ area proposed for MPA establishment. More specifically, the relevant practice in regional level indicates that the regional frameworks are not intended to modify the existing jurisdictional balance of rights and obligations between coastal States and States carrying out activities in ABNJ as contained in UNCLOS and customary international law. Furthermore, their approach to the establishment of MPAs in ABNJ implies that the coastal States adjacent to the site proposed will be part of the designation process, but without having a role distinct from the role of other participating States, e.g. that the establishment of MPAs in ABNJ would be subject to the consent of the adjacent coastal State.[412] Only the SPA/BD Protocol under the Barcelona Convention and its SPAMI List procedure accords a special role to the coastal State adjacent to an area proposed for inclusion. However, this could be arguably justified as an exception to the degree of coastal State involvement based on the special circumstances of the region, i.e. the semi-closed nature of the Mediterranean basin and the transitional characteristics of its ABNJ.[413] It has been also argued that the practice of OSPAR Convention implies a special position for coastal States whose ECS overlaps with high seas, such as Portugal and Iceland, thus "it is difficult to conceive of the designation of high seas MPAs without their consent".[414] However, in the OSPAR practice, the due regard concept and the balance of rights and obligations of the coastal State and of other States who carry out activities in ABNJ is affirmed, as well. Therefore, no special position is accorded to the adjacent coastal State. Indeed, the OSPAR decisions on the establishment of MPAs on high seas waters superjacent to the ECS submissions of Portugal and Iceland provide that they do not in any way prejudice the sovereign rights and obligations of the coastal State over its continental shelf and its relationship with other States carrying out activities on the high seas, as included in UNCLOS and customary international law.

[411] Oude Elferink, Alex G. "The Determination of Compatible Conservation and Management Measures for Straddling and Highly Migratory Fish Stocks." *Max Planck Yearbook of United Nations Law Online* 5, no. 1 (2001), pp.551–607.
[412] *Supra* note 402, p.461
[413] *Supra* note 235 and text. In this context, the arguments on which States could be considered "neighbouring", in order to propose the inclusion in the SPAMI List, are relevant.
[414] Ribeiro, Marta Chantal. "South Atlantic Perspectives on the Future International Legally Binding Instrument under the LOSC on Conservation and Sustainable Use of BBNJ." *The International Journal of Marine and Coastal Law* 32, no. 4 (2017)., p.757

C. The dilemma between global and regional approach

In searching the approach which will fill the existing gaps and deficiencies of the global and regional regime, the question raised is the one on which the most suitable kind of cooperation in consistency with UNCLOS is. Art.197 of UNCLOS is broad enough to permit a wide range of different mechanism designs, making the designation of a new system more flexible. The available options vary from a mechanism like a global political movement which has been at the centre of discussion among the academia[415] to a mechanism which would merely strengthen the information sharing between regional and sectoral bodies.[416] In between there are countless other possible structures comprising regional, sectoral and global management elements.

As already discussed, the central point of divergence among States regarding the "ABMTs, including MPAs" part of the package deal was the institutional approach to be followed by the new legally binding instrument. The dilemma between giving primary authority over designating ABMTs to regional or sectoral bodies and entrust this authority to a new or existing global body (organization, CoP or ad hoc arrangement for collaboration) is obvious. By the end of the 1st session of the Intergovernmental Conference in September 2018, it was stated that "there seemed to be a growing convergence on the need for a global decision-making body; a mechanism to provide scientific advice […]; and a secretariat to discharge administrative functions […]".[417] This point of divergence was summarized by recourse to a triple-approach distinction, i.e. global, regional and hybrid, or to reference to "heavy" and "light" regimes.[418]

Among the new global body's substantive responsibilities would be the deployment of area-based management tools, *inter alia* the designation of MPAs in ABNJ. Such a body, though, would require significant resources, which explains the opposing views of States and their desire of empowering an existing institution, such as a CoP, or focusing on ad hoc coordination within existing frameworks. Developing countries have been calling for an increasingly ambitious and articulated international architecture, with multiple funds and overview and support mechanisms. Several developed countries, however, were worried about the costs involved, advocating for a light institutional structure.[419] Both "heavy" and "light" regimes can be identified in the existing

[415] *Supra* note 200, p.163
[416] *Supra* note 340, p.615
[417] UNGA A/CONF.232/2018/7, Statement by the President of the conference at the closing of the first session, Intergovernmental conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, First session, New York, 4–17 September 2018
[418] Earth Negotiations Bulletin, Summary of the Fourth Session of the Preparatory Committee on Marine Biodiversity Beyond Areas of National Jurisdiction: 10 July–21 July 2017, Vol.25, No.141, International Institute for Sustainable Development
[419] *Ibid*.

structure. For example, the World Trade Organization (WTO) serves as an example of a comprehensive and "heavy" framework, as it oversees a set of international covered trade agreements that rest upon international standards from other regimes (such as food safety). Its committees exercise oversight over exogenous standards by engaging in ongoing scrutiny of the standard-setting process, while its panels and Appellate Body authoritatively interpret them even without them being supported by all Member States of the Organization. The WTO example is relevant in this context, especially if the compliance provisions of the future instrument are linked to the UNCLOS Part XV on compulsory dispute settlement.[420] In contrast, "lighter" regimes such as CoPs or ad hoc arrangements for coordination appear as weaker mechanisms to address the existing issues, if adopted by the future instrument. For example, the incentive of Contracting Parties to the CoP of the United Nations Framework Convention on Climate Change (UNFCCC) to provide information on their compliance with the CoP decisions comes from their desire for climate finance, which is far from what is envisaged currently for the conservation and sustainable use of marine biodiversity in ABNJ.[421] Furthermore, UNFSA do not engage in binding norm development, but instead it merely encourages States to apply its guiding principles and approaches within different RFMOs, as ad hoc arrangements, leading to the present fragmented marine biodiversity and fisheries management.[422]

On the other hand, given the progress already made by regional and sectoral bodies on the establishment of MPAs in ABNJ, there is already in place an important environmental "toolbox", including infrastructure, management measures, identification criteria and data, which should not be ignored. The pioneering efforts of regional seas conventions on the adoption, establishment and management of MPAs which can be legally opposed to their Member States in ABNJ set a precedence for the decision on the institutional set up provided in the future instrument. In the RFMOs context, there are management measures, scientific data and monitoring and compliance mechanisms that could be expanded and used as models for other measures under the new overarching regime. The MoUs signed between RFMOs, the governing bodies of the regional seas conventions and sectoral international organizations as collaboration agreements for the conservation and sustainable use of marine biodiversity in their respective regions reveal strong political commitment to a more holistic conservation approach, which is envisaged by the future instrument, while the sets of scientific criteria adopted under their auspices are referred as possible

[420] Young, Margaret A., and Andrew Friedman. "Biodiversity Beyond National Jurisdiction: Regimes and Their Interaction." *AJIL Unbound* 112 (2018), pp.127-128
[421] *Ibid;* United Nations Framework Convention on Climate Change (adopted on 9th May 1992, entered into force on 21st March 1994)
[422] *Ibid*

criteria for the identification of areas in need under the new instrument, as well.[423] Irrespective of the contribution of the regional and sectoral bodies to the conservation and sustainability of marine biodiversity, though, the reality remains that achieving consensus among States at the global level in order to take conservation measures will be even more challenging than at the regional, since this seems to be a difficult task even within bodies with limited membership. For example, CCAMLR has been criticized for its consensus-based management, as the adoption of a conservation measure requires the agreement of every single Member, while when disagreeing no particular reason has to be forwarded.[424] Given that its membership is not limited to fishing States, but it also includes States with no fishing interests in the region, the adoption procedure is proved even more cumbersome.

It is apparent that an entirely global or regional approach in the institutional and decision-making set up under the future instrument will hardly meet the target of a new comprehensive legally binding instrument on the conservation of ABNJ, as envisaged by the UNGA Resolution 69/292 and the majority of States during the negotiations of the 1st session of the Intergovernmental Conference; a global approach may be long-term proved ineffective due to the interest of States Parties on the establishment of MPAs in ABNJ depending on the particular region to be protected each time, while a clearly regional approach, despite its progress already, would be still in need of global and sectoral coordination and cooperation at the global level. Even the Sargasso Sea Commission under the non-binding Hamilton Declaration, which has been regarded as "a new paradigm for high seas conservation" based on the current system of ocean governance, has found it difficult to work within this uncoordinated system.[425] Therefore, the global and regional approach should be complemented.

The international legally binding instrument under negotiation should contain flexible and regionally-tailored provisions, in order to enhance the performance of the existing regional framework in the establishment of MPAs in ABNJ. It could also provide an important focal point for global, regional and sectoral organizations to coordinate and cooperate, when the designation of MPAs in ABNJ demands their holistic contribution. This could take the form of a CoP which establishes regular cooperation mechanisms between sectoral organizations, i.e. RFMOs, IMO, ISA, and regional seas organizations, and provides a forum and potential financial support for such

[423] Most of the existing scientific criteria for the identification of areas of interest were adopted in the context of sectoral or regional frameworks. These are the VMEs criteria under FAO and RFMOs, the PSSAs criteria under IMO, the SPAMIs criteria under SPA/BD Protocol of the Barcelona Convention and the ASPAs/ASMAs criteria under CCAMLR. Supra note 386, §99

[424] *Supra* note 294, pp.175-176

[425] Freestone, David. "The Limits of Sectoral and Regional Efforts to Designate High Seas Marine Protected Areas." *AJIL Unbound*, vol. 112, 2018, p.133

organizations to coordinate their competences towards the conservation and sustainable use of marine biodiversity in ABNJ. This could be particularly important given the gathering of global scientific, monitoring and assessment information to a single forum, which could further measure the cumulative effects of human activities in ABNJ by providing environmental baselines for different regions. In this context, the science-driven EBSAs identification process and the regional and sectoral criteria are already in place to provide guidance. Therefore, any proposal for the designation of an MPA in ABNJ by States Parties, sectoral organizations or even NGOs would be considered from a holistic point of view. If the proposal is approved by the CoP after scientific consideration, it can identify complementary conservation measures to be adopted and implemented by the existing regional seas conventions and their governing bodies. The final decision would be entrusted to the existing regional organizations, which, after consultation with coastal States adjacent to the ABNJ area and other stakeholders and evaluation of the region's peculiarities, would establish the proposed MPA adapted to the region's geomorphological and ecological features.

A future MPA would be under the auspices of a global body, i.e. the future instrument's CoP. Its full effectiveness is dependent on the guiding principles and approaches provided by the instrument. As shown by the Chair's streamlined paper, the general principles and approaches both for the conservation and sustainable use of marine biodiversity in ABNJ and for ABMTs[426] reflect in general the 10 Principles for high seas governance recommended by IUCN.[427] More specifically, the principle of "consistency with UNCLOS, UNFSA and other relevant treaties" implies that the MPAs in ABNJ established under the new framework should not impede the exercise of high seas freedoms by all States. However, such exercise is qualified by, *inter alia*, an obligation not to abusively use the rights conferred by Art.87 of UNCLOS.[428] Given that the MPAs in ABNJ would be established under the auspices of a global forum, and not merely after a regional sea convention's initiative, any State whose vessels act contrary to the objectives of the ABNJ MPAs under the future instrument would be in breach of its Art.300 of UNCLOS obligation, i.e. abusively using its high seas freedoms. Similarly, under the regional seas conventions perspective, the obligation of Art.300 of UNCLOS could imply that any proposal or decision on the

[426] *Supra* note 386, §24 and 93

[427] I.e. conditional freedom of activity on the high seas, protection and preservation of the marine environment, international cooperation, science-based approach to management, public availability of information, transparent and open decision-making processes, precautionary approach, ecosystem approach, sustainable and equitable use, responsibility of States as stewards of the global marine environment [Available at: https://cmsdata.iucn.org/downloads/10_principles_for_high_seas_governance___final.pdf (accessed November 2018)]

[428] Art.300 of UNCLOS; Oude Elferink, Alex G. "Governance Principles for Areas beyond National Jurisdiction." *The International Journal of Marine and Coastal Law* 27, no. 2 (2012), pp. 211-215

establishment of MPAs in ABNJ should be based exclusively on environmental purposes and not on political grounds. The arguments of Mauritius[429] against the MPA established by UK in the Chagos Archipelagos shed some light on the substantive content of the obligation and reaffirmed the assumption that in order an MPA to be as widely as possible respected, this tool should not be explicitly or even implicitly used for political purposes, therefore it should be used only when there is an actual environmental threat. Even though the Tribunal did not examine the "abuse of right" argument of Mauritius in substance (as it had already found that UK had beached other UNCLOS provisions)[430], it seems that there will be opportunities to do so in the future.

[429] "First, the right must not be exercised for a purpose that is entirely different from the purpose for whish the right was created- especially if this comes at the expense of the rights or legally-protected interests of others, of other States, or indeed, of other uses of the oceans. Second, where a State takes measures in the exercise of a jurisdictional right, those measures must at least be capable of fulfilling the purpose for which the right is was exercised. If they are not, the manner in which the right is being exercised is objectionable, even if that is capable of repair. If it's not repaired, then there is a breach of Article 300." *Supra* note 409, §492

[430] Kiriakopoulos, George. *The Abuse of Right in Public International Law [=Κατάχρηση δικαιώματος στο δημόσιο διεθνές δίκαιο]*. Nomiki Vivliothiki, 2018, pp.134-137

Concluding Remarks

MPAs has been widely considered cautious and scientifically rigorous mechanisms protecting not only what is important today, but also what is valuable for the next generations, by providing resilience to marine ecosystems and safeguarding feeding grounds, migratory routes, harvest areas etc. from the adverse effects of expanding human activity. This thesis has sought to present the use of MPA as an ABMT in one of the areas most exposed to environmental degradation, i.e. ABNJ. In order to do so, it was important to illustrate the legal bases regarding the conservation and sustainable use of marine biodiversity in ABNJ under the existing international legal framework at global and regional level. As UNCLOS and CBD are the relevant conventions with close-to-universal participation, they provide the starting point of such an analysis and the foundation upon which any regional initiative should be built. It was shown that, instead of a comprehensive global legal instrument providing for common principles, objectives, obligations and institutional procedures for protecting areas and species in ABNJ, the existing structure contains a patchwork of global, regional and sectoral conventions and bodies governing specific aspects of biodiversity in ABNJ as autonomous regimes. This results to contradictory mandate overlaps or even jurisdictional, institutional and geographical gaps in the present form of ocean governance, where the prominence of flag State jurisdiction still remains.

The convening of the UN Intergovernmental Conference for negotiations on a new legally binding instrument on the conservation and sustainable use of marine biodiversity in ABNJ under UNCLOS has been welcomed by international community as a historic chance to address present environmental issues of great importance by testing the ability of the Convention to adapt to modern problems, such as marine plastic pollution and ocean acidification. Even though, by the time of writing, only the first session (out of the four planned until the first half of 2020) took place, it became apparent that the role of ABMTs, including MPAs, will likely be "front and centre in the minds of a number of delegates" during the next sessions.[431] This thesis attempted an overview of the MPA issues of divergence under negotiation, and more specifically, the global, hybrid and regional approach to the institutional set up of the future instrument, as well as the role of the adjacent coastal States in the MPA procedure. However, it has to be admitted that there is a long road to go yet. Marine issues have always been at the centre of States attention and their negotiation at the global level is not an easy task. This can easily be implied by the 10-year negotiations of UNCLOS itself, as well as by the fact that over the 30-year "lifespan" of the Convention, the instrument under negotiation will be, if adopted, just the third Implementing

[431] Tiller, Rachel, Elizabeth De Santo, Elizabeth Mendenhall, and Elizabeth Nyman. "The Once and Future Treaty: Towards a New Regime for Biodiversity in Areas beyond National Jurisdiction." *Marine Policy* 99 (2018), p.241

Agreement under UNCLOS. For the Intergovernmental Conference to achieve its goals and meet the expectations, trust is necessary; trust both among States and in the process itself, i.e. that is transparent and gives all States the same opportunities to express their views and concerns. At the end of the day, this is a historic opportunity that "biodiversity" rather than "beyond national jurisdiction" determines what States are willing to do. This is the case, as the environmental problems our planet is facing demand, quoting the phrase of the South African delegation, "a treaty with teeth that bites when necessary…a real tiger".

Bibliography

(in alphabetical order)

Books

- Agardy, Tundi. *Marine Protected Areas and Ocean Conservation*. San Diego: Academic Press, 1997
- Beyerlin, Ulrich, and Thilo Marauhn. *International Environmental Law*. 1st ed. London: Hart/Beck, 2011
- Birnie, Patricia W., Alan E. Boyle, and Catherine Redgwell. *International Law & the Environment*. 3rd ed. Oxford: Oxford University Press, 2009
- Boyle, Alan. "Globalism and Regionalism in the Protection of the Marine Environment." In *Protecting the Polar Marine Environment: Law and Policy for Pollution Prevention*, edited by Davor Vidas. Cambridge: Cambridge University Press, 2000, pp.19-33
- Boyle, Alan. "The Rio Convention on Biological Diversity." In *International Law and the Conservation of Biological Diversity*, edited by Michael Bowman and Catherine Redgwell. London: Kluwer Law International, 1996, pp.33-50
- Dang, Vu Hai. *Marine Protected Areas Network in the South China Sea: Charting a Course for Future Cooperation*. Edited by David Freestone. Vol. 18. Legal Aspects of Sustainable Development. Leiden: Martinus Nijhoff Publishers, 2014
- Fitzmaurice, Malgosia A., David M. Ong, and Panos Merkouris. *Research Handbook on International Environmental Law*. Edward Elgar, 2014
- Frank, Veronica. *The European Community and Marine Environmental Protection in the International Law of the Sea: Implementing Global Obligations at the Regional Level*. Boston: Martinus Nijhoff Publishers, 2008
- Freestone, David, and A. G. Oude Elferink. "Flexibility and Innovation in the Law of the Sea – Will the LOS Convention Amendment Procedures Ever Be Used." In *Stability and Change in the Law of the Sea: The Role of the LOS Convention*, edited by A. G. Oude Elferink. Netherlands: Brill, 2005, pp.163-216
- Gavouneli, Maria. "State Jurisdiction in Relation to the Protection and Preservation of the Marine Environment." In *The IMLI Manual on International Maritime Law*, edited by David Joseph Attard, Malgosia Fitzmaurice, Martínez Gutiérrez Norman A., and Riyaz Hamza. Vol. 3. Oxford University Press, 2016, pp.5-29
- Gavouneli, Maria. *Functional Jurisdiction in the Law of the Sea*. Vol. 62. Publications on Ocean Development. Leiden: Martinus Nijhoff Publishers, 2007
- Gillespie, Alexander. *Protected Areas and International Environmental Law*. Leiden: Nijhoff, 2007
- Grbec, Mitja. *Extension of Coastal State Jurisdiction in Enclosed or Semi-enclosed Seas: A Mediterranean and Adriatic Perspective*. London: Routledge, 2014
- Jakobsen, Ingvild Ulrikke. *Marine Protected Areas in International Law: An Arctic Perspective*. Edited by Malgosia Fitzmaurice, Phoebe Okowa, and Sarah Singer. Vol. 25. Queen Mary Studies in International Law. Leiden: Brill Nijhoff Publishers, 2016
- Jefferies, Cameron S. G., and John Norton Moore. *Marine Mammal Conservation and the Law of the Sea*. Oxford University Press, 2016
- Kiriakopoulos, George. *The Abuse of Right in Public International Law [=Κατάχρηση δικαιώματος στο δημόσιο διεθνές δίκαιο]*. Nomiki Vivliothiki, 2018

- Lalonde, Suzanne. "Marine Protected Areas in the Arctic." In *The Law of the Sea and the Polar Regions Interactions between Global and Regional Regimes*, edited by Erik J. Molenaar, Ag. G. Oude Elferink, and Donald R. Rothwell, Vol. 76. Publications on Ocean Development. Martinus Nijhoff Publishers, 2013, pp.85-111
- Oguamanam, Chidi. "Biological Diversity." In *Routledge Handbook of International Environmental Law*, edited by Shawkat Alam, Jahid Hossain Bhuiyan, Tareq M.R Chowdhury, and Erika J. Techera. London and New York: Routledge Taylor & Francis Group, 2013.
- Palma-Robles, Mary Anna. "Fisheries Enforcement and the Concept of Compliance and Monitoring, Control and Surveillance." In *Routledge Handbook of Maritime Regulation and Enforcement*, edited by Robin Warner and Stuart Kaye. London and New York: Routledge Taylor & Francis Group, 2016, pp.139-160
- Pinto, Daniela Diz Pereira. *Fisheries Management in Areas beyond National Jurisdiction the Impact of Ecosystem Based Law-making*. Vol. 13. Legal Aspects of Sustainable Development. Leiden: Martinus Nijhoff Publishers, 2013
- Roberts, Callum. *The Unnatural History of the Sea: The past and Future of Humanity and Fishing*. London: Gaia, 2007
- Sands, Philippe, Jacqueline Peel, Adriana Fabra Aguilar, and Ruth Mackenzie. *Principles of International Environmental Law*. 3rd ed. Cambridge, United Kingdom: Cambridge University Press, 2018
- Scovazzi, Tullio. " New international instruments for marine protected areas in the Mediterranean Sea." In *Unresolved Issues and New Challenges to the Law of the Sea: Time before and Time after*, edited by Anastasia Strati, Maria Gavouneli, and Nikos Skourtos. Vol. 54. Publications on Ocean Development. Leiden: Martinus Nijhoff Publishers, 2006, pp.109-120
- Stolton, Sue, and Nigel Dudley. *Arguments for Protected Areas: Multiple Benefits for Conservation and Use*. London: Earthscan, 2010
- Tanaka, Yoshifumi. *The International Law of the Sea*. 2nd ed. Cambridge: Cambridge University Press, 2015
- Tladi, Dire. "Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction: Towards an Implementing Agreement." In *Research Handbook on International Marine Environmental Law*, edited by Rosemary Rayfuse. Cheltenham, UK: Edward Elgar Publishing, 2017, pp.259-271
- Treves, T. "Principles and Objectives of the Legal Regime Governing Areas beyond National Jurisdiction." In *The International Legal Regime of Areas beyond National Jurisdiction: Current and Future Developments*, edited by Oude Elferink Alex G. and Erik Jaap. Molenaar. Leiden: Martinus Nijhoff Publishers, 2010, pp.7-27
- Verschuuren, Jonathan, and Timon Oudenaarden. "The Role of Ideals in Legal Development: Sustainable Development and the Conservation of Biological Diversity as Cases in Point." In T*he Importance of Ideals. Debating Their Relevance in Law, Morality, and Politics*, edited by Wibren Van Der Burg and Sanne Taekema. Bruxelles: P.I.E.-Peter Lang, 2004, pp.231-263
- Warner, Robin M. "Conserving Marine Biodiversity in Areas Beyond National Jurisdiction: Co-evolution and Interaction with the Law of the Sea." In *The Oxford Handbook of the Law of the Sea*, edited by Donald Rothwell, A. G. Oude Elferink, Karen N. Scott, and Tim Stephens. Oxford, United Kingdom: Oxford University Press, 2017, pp.752-776

- Wright, G., J. Rochette, and T. Greiber. "Sustainable Development of the Oceans: Closing the Gaps in the International Legal Framework." In *Legal Aspects of Sustainable Development*, edited by Volker Mauerhofer. Cham: Springer, 2015, pp.549-564
- Wright, Glen, Julien Rochette, and Elisabeth Druel. "Marine Protected Areas in Areas beyond National Jurisdiction." In *Research Handbook on International Marine Environmental Law*, edited by Rosemary Rayfuse. Cheltenham, UK: Edward Elgar Publishing, 2017, pp.272-290

Journals

- Barnes, R. "The Proposed LOSC Implementation Agreement on Areas Beyond National Jurisdiction and Its Impact on International Fisheries Law." *The International Journal of Marine and Coastal Law* 31, no. 4 (2016), pp.583-619
- Brooks, Cassandra M. "Competing Values on the Antarctic High Seas: CCAMLR and the Challenge of Marine-protected Areas." *The Polar Journal* 3, no. 2 (2013), pp.277-300
- Burhenne-Guilmin, Françoise, and Susan Casey-Lefkowitz. "The Convention on Biological Diversity: A Hard Won Global Achievement." *Yearbook of International Environmental Law*, vol. 3, no. 1, 1992, pp.43-59
- Diz, Daniela. "Current Legal Developments: The Sargasso Sea." *The International Journal of Marine and Coastal Law* 31, no. 2 (2016), pp.345-362
- Diz, Daniela. "Unravelling the Intricacies of Marine Biodiversity Conservation and Its Sustainable Use: An Overview of Global Frameworks and Applicable Concepts." *SSRN Electronic Journal*, 2016, pp.1-25
- Dunn, Daniel C., Jeff Ardron, Nicholas Bax, Patricio Bernal, Jesse Cleary, Ian Cresswell, Ben Donnelly, Piers Dunstan, Kristina Gjerde, David Johnson, Kristin Kaschner, Ben Lascelles, Jake Rice, Henning Von Nordheim, Louisa Wood, and Patrick N. Halpin. "The Convention on Biological Diversity's Ecologically or Biologically Significant Areas: Origins, Development, and Current Status." *Marine Policy* 49 (2014), pp.137-145
- Fayette, Louise De La. "The Marine Environment Protection Committee: The Conjunction of the Law of the Sea and International Environmental Law." *The International Journal of Marine and Coastal Law* 16, no. 2 (2001), pp.155-238
- Freestone, David, and F. Bulger. "The Sargasso Sea Commission: An Innovative Approach to the Conservation of Areas beyond National Jurisdiction." *Ocean Yearbook Online* 30, no. 1 (2016)
- Freestone, David. "Fisheries Commissions and Organizations." In *The Max Planck Encyclopedia of Public International Law (2008)*, edited by R. Wolfrum. 2008
- Freestone, David. "The Limits of Sectoral and Regional Efforts to Designate High Seas Marine Protected Areas." *AJIL Unbound*, vol. 112 (2018), pp. 129–133.
- Gjerde, Kristina M., and Anna Rulska-Domino. "Marine Protected Areas beyond National Jurisdiction: Some Practical Perspectives for Moving Ahead." *The International Journal of Marine and Coastal Law* 27, no. 2 (2012), pp. 351-373
- Griffiths, Huw J. "Antarctic Marine Biodiversity – What Do We Know About the Distribution of Life in the Southern Ocean?" *PLoS ONE* 5, no. 8 (2010)
- Grove, Richard H. "Origins of Western Environmentalism." *Scientific American* 267, no. 1 (1992), pp.42-47

- Hey, Ellen. "Multi-Dimensional Public Governance Arrangements for the Protection of Transboundary Aquatic Environment in the European Union - The Changing Interplay between European and Public International Law." *SSRN Electronic Journal*, 2009
- Hughes, K.a., L.r. Pertierra, and D.w.h. Walton. "Area Protection in Antarctica: How can conservation and scientific research goals be managed compatibly?" *Environmental Science & Policy* 31 (2013), pp.120-132
- Jacquet, Jennifer, Eli Blood-Patterson, Cassandra Brooks, and David Ainley. "'Rational Use' in Antarctic Waters." *Marine Policy* 63 (2016), pp.28-34
- Kim, Jung-Eun. "The Incongruity between the Ecosystem Approach to High Seas Marine Protected Areas and the Existing High Seas Conservation Regime." *Aegean Review of the Law of the Sea and Maritime Law* 2, no. 1-2 (2012), pp.1-36
- Kimball, Lee A. "The Biodiversity Convention: How to Make It Work." *Vanderbilt Journal of Transnational Law* 28, no. 765 (1995), pp.763-775
- Kopela, Sophia. "Port-State Jurisdiction, Extraterritoriality, and the Protection of Global Commons." *Ocean Development & International Law* 47, no. 2 (2016), pp.89-130
- Kvalvik, Ingrid. "Managing Institutional Overlap in the Protection of Marine Ecosystems on the High Seas. The Case of the North East Atlantic." *Ocean & Coastal Management* 56 (2012), pp.35-43
- Long, Ronán. "Legal Aspects of Ecosystem-Based Marine Management in Europe." *Ocean Yearbook Online* 26, no. 1 (2012), pp.417-484
- Markus, Till, Nina Maier, and Sabine Schlacke. "Legal Implementation of Integrated Ocean Policies: The EU's Marine Strategy Framework Directive." *The International Journal of Marine and Coastal Law* 26, no. 1 (2011), pp.59-90
- Matz-Lück, Nele, and Johannes Fuchs. "The Impact of OSPAR on Protected Area Management beyond National Jurisdiction: Effective Regional Cooperation or a Network of Paper Parks?" *Marine Policy* 49 (2014), pp.1-12
- Molenaar, Erik J., and Alex G. Oude Elferink. "Marine Protected Areas in Areas beyond National Jurisdiction The Pioneering Efforts under the OSPAR Convention." *Utrecht Law Review* 5, no. 1 (2009), pp.5-20
- Nilsson, Jessica A., Elizabeth A. Fulton, Marcus Haward, and Craig Johnson. "Consensus Management in Antarctica's High Seas – Past Success and Current Challenges." Marine Policy 73 (2016), pp.172-180
- Nollkaemper, André. "The Distinction Between Non-Legal and Legal Norms in International Affairs: An Analysis with Reference to International Policy for the Protection of the North Sea from Hazardous Substances." *The International Journal of Marine and Coastal Law* 13, no. 3 (1998), pp.355-371
- Nordtvedt Reeve, Lora, Anna Rulska-Domino, and Kristina M. Gjerde. "The Future of High Seas Marine Protected Areas." *Ocean Yearbook Online* 26, no. 1 (2012), pp.265-289
- Notarbartolo-Di-Sciara, Giuseppe, Tundi Agardy, David Hyrenbach, Tullio Scovazzi, and Patrick Van Klaveren. "The Pelagos Sanctuary for Mediterranean Marine Mammals." *Aquatic Conservation: Marine and Freshwater Ecosystems* 18, no. 4 (2008), pp.367-391
- Oleary, B.c., R.l. Brown, D.e. Johnson, H. Von Nordheim, J. Ardron, T. Packeiser, and C.m. Roberts. "The First Network of Marine Protected Areas (MPAs) in the High Seas: The Process, the Challenges and Where next." *Marine Policy* 36, no. 3 (2012), pp.598-605
- Oude Elferink, Alex G. "Coastal States and MPAs in ABNJ: Ensuring Consistency with the LOSC." *The International Journal of Marine and Coastal Law* 33, no. 3 (2018), pp.437-466

- Oude Elferink, Alex G. "Governance Principles for Areas beyond National Jurisdiction." *The International Journal of Marine and Coastal Law* 27, no. 2 (2012), pp.205-259
- Oude Elferink, Alex G. "The Determination of Compatible Conservation and Management Measures for Straddling and Highly Migratory Fish Stocks." *Max Planck Yearbook of United Nations Law Online* 5, no. 1 (2001)
- Owen, D. "The Application of the Wild Birds Directive beyond the Territorial Sea." *Journal of Environmental Law* 13, no. 1 (2001), pp.39-78
- Quirk, Genevieve C., and Harriet R. Harden-Davies. "Cooperation, Competence and Coherence: The Role of Regional Ocean Governance in the South West Pacific for the Conservation and Sustainable Use of Biodiversity beyond National Jurisdiction." *The International Journal of Marine and Coastal Law* 32, no. 4 (2017), pp.672-708
- Ribeiro, Marta Chantal, Marine Protected Areas: The Case of the Extended Continental Shelf, In: *International Conference on the 30 years after the signature of the United Nations Convention on the Law of the Sea: the protection of the environment and the future of the Law of the Sea', At Faculty of Law, University of Porto, Portugal, 16 November 2012, Volume: '30 years after the signature of the United Nations Convention on the Law of the Sea: the protection of the environment and the future of the Law of the Sea', Coimbra Editora,* 2014, pp.197-201
- Ribeiro, Marta Chantal. "South Atlantic Perspectives on the Future International Legally Binding Instrument under the LOSC on Conservation and Sustainable Use of BBNJ." *The International Journal of Marine and Coastal Law* 32, no. 4 (2017), pp.733-764
- Rochette, Julien, Sebastian Unger, Dorothée Herr, David Johnson, Takehiro Nakamura, Tim Packeiser, Alexander Proelss, Martin Visbeck, Andrew Wright, and Daniel Cebrian. "The Regional Approach to the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction." *Marine Policy* 49 (2014), pp.109-117
- Sand, Peter H. "Transnational Environmental Law: Lessons in Global Change." *Max Planck Yearbook of United Nations Law Online* 5, no. 1 (2001)
- Scanlon, Zoe. "The Art of "not Undermining": Possibilities within Existing Architecture to Improve Environmental Protections in Areas beyond National Jurisdiction." *ICES Journal of Marine Science* 75, no. 1 (2017), pp.405-416
- Scovazzi, Tullio *The Regional Dimension of Environmental Governance: The Case of the Mediterranean Sea*, Varstvo Narave, Supl.1 (2011)
- Scovazzi, Tullio. "Marine Protected Areas on the High Seas: Some Legal and Policy Considerations." *The International Journal of Marine and Coastal Law* 19, no. 1 (2004), pp.1-17
- Scovazzi, Tullio. "Mining, Protection of the Environment, Scientific Research and Bioprospecting: Some Considerations on the Role of the International Sea-Bed Authority." *The International Journal of Marine and Coastal Law* 19, no. 4 (2004), pp.383-410
- Scovazzi, Tullio. "Negotiating Conservation And Sustainable Use Of Marine Biological Diversity In Areas Beyond National Jurisdiction: Prospects And Challenges." *The Italian Yearbook of International Law Online* 24, no. 1 (2015), pp.61-93
- Smith, Danielle, and Julia Jabour. "MPAs in ABNJ: Lessons from Two High Seas Regimes." *ICES Journal of Marine Science* 75, no. 1 (2017), pp.417-425

- Spalding, Mark D., Amy Milam, Imèn Meliane, Claire Fitzgerald, and Lynne Z. Hale. "Protecting Marine Spaces: Global Targets and Changing Approaches." *Ocean Yearbook Online* 27, no. 1 (2013), pp.213-248
- Tanaka, Yoshifumi. "Zonal and Integrated Management Approaches to Ocean Governance: Reflections on a Dual Approach in International Law of the Sea." *The International Journal of Marine and Coastal Law* 19, no. 4 (2004), pp.483-514
- Tiller, Rachel, Elizabeth De Santo, Elizabeth Mendenhall, and Elizabeth Nyman. "The Once and Future Treaty: Towards a New Regime for Biodiversity in Areas beyond National Jurisdiction." *Marine Policy* 99 (2019), pp.239-242
- Trouwborst, Arie, and Harm M. Dotinga. "Comparing European Instruments for Marine Nature Conservation: The OSPAR Convention, the Bern Convention, the Birds and Habitats Directives, and the Added Value of the Marine Strategy Framework Directive." *European Energy and Environmental Law Review 20*, no. 11 (2011), pp.129-149.
- Vallega, Adalberto. "The Regional Seas in the 21st Century: An Overview." *Ocean & Coastal Management* 45, no. 11-12 (2002), pp.925-934
- Warner, Robin. "Conservation and Sustainable Use of High-seas Biodiversity: Steps towards Global Agreement." *Australian Journal of Maritime & Ocean Affairs* 7, no. 3 (2015), pp.217-222
- Warner, Robin. "Marine Protected Areas Beyond National Jurisdiction – Existing Legal Principles and Future Legal Frameworks", In Thiel, Hjalmar, and J. A. Koslow, eds. *Managing Risks to Biodiversity and the Environment on the High Sea, including Tools Such as Marine Protected Areas: Scientific Requirements and Legal Aspects; Proceedings of the Expert Workshop Held at the International Academy for Nature Conservation Isle of Vilm, Germany, 27 February - 4 March 2001*. Bonn: BfN, 2001.*)*
- Wright, Glen, Jeff Ardron, Kristina Gjerde, Duncan Currie, and Julien Rochette. "Advancing Marine Biodiversity Protection through Regional Fisheries Management: A Review of Bottom Fisheries Closures in Areas beyond National Jurisdiction." *Marine Policy* 61 (2015), pp.134-148
- Young, Margaret A., and Andrew Friedman. "Biodiversity Beyond National Jurisdiction: Regimes and Their Interaction." *AJIL Unbound* 112 (2018), pp.123-128

Table of cases

(in chronological order)

Arbitral Awards

- *Trail Smelter arbitration* (United States v. Canada) 16 April 1938 and 11 March 1941, III RIAA 1905

International Court of Justice (available at: https://www.icj-cij.org/)

- *Corfu Channel* case (United Kingdom v. Albania), ICJ Reports 1949
- *Case concerning the Barcelona Traction, Light and Power Company Limited* (Belgium v. Spain), Second Phase, ICJ Reports 1970
- *Legality of the threat or use of nuclear weapons*, Advisory Opinion, ICJ Reports 1996
- *Gabčikovo-Nagymaros* (Hungary/Slovakia) ICJ Reports 1997

- *Oil Platforms* (Islamic Republic of Iran v. United States of America), Judgment, ICJ Reports 2003
- *Pulp Mills on the River Uruguay* (Argentina v. Uruguay) (Judgment) General List No. 135, 20 April 2010

International Tribunal for the Law of the Sea (available at: https://www.itlos.org/)

- *Southern Bluefin Tuna* cases (New Zealand v. Japan, Australia v. Japan), ITLOS Provisional Measures, Order of 27th August 1999
- *MOX Plant* case (Ireland v. United Kingdom), ITLOS Provisional Measures, Order of 3rd December 2001
- *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 of ITLOS), Case No. 17, Advisory Opinion of Feb. 1, 2011
- *Dispute concerning delimitation of the maritime boundary between Bangladesh and Myanmar in the Bay of Bengal* (Bangladesh/Myanmar), ITLOS Judgment of 14 March 2012
- *Request for an Advisory Opinion Submitted by the Sub- Regional Fisheries Commission (SRFC),* Case No. 21, Advisory Opinion of Apr. 2, 2015

Permanent Court of Arbitration

- *Arbitration regarding the Iron Rhine ('IJzeren Rijn') railway,* (Belgium v. The Netherlands), Award of 24 May 2005
- *Chagos Marine Protected Area Arbitration* (Mauritius v. United Kingdom), Award of 18 March 2015

World Trade Organization (Appellate Body)

- Shrimp/Turtle: United States – Import Prohibition of Certain Shrimp and Shrimp Products (Report of the Appellate Body) WTO (12 October 1998) Doc. WT/DS58

European Court of Justice (available at: https://eur-lex.europa.eu/homepage.html)

- Case 61-77 R, Commission of the European Communities v Ireland, Order of the Court of 22 May 1977
- Case C-286/90, Reference for a preliminary ruling from Kriminal- og Skifteretten i Hjørring – Denmark, Anklagemyndigheden v Peter Michael Poulsen and Diva Navigation Corp [*Poulsen* case] (1992)
- Case C-405/92, Reference for a preliminary ruling from Tribunal de commerce de La Roche-sur-Yon – France, Etablissements Armand Mondiet SA v Armement Islais SARL [*Driftnets* case] (1993)
- Case C-188/91, Reference for a preliminary ruling from Finanzgericht Hamburg - Germany, Deutsche Shell AG v Hauptzollamt Hamburg-Harburg [*Shell* case] (1993)
- Case C-239/03, Commission of the European Communities v. the French Republic (Étang de Berre), judgment of 7 October 2004
- Case C-6/04, Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, Judgment of the Court (Second Chamber) of 20 October 2005

- Case C-308/06, Reference for preliminary ruling from the High Court of Justice (England and Wales), Queen's Bench Division (Administrative Court) – The Queen on the application of The International Association of Independent Tanker Owners (Intertanko), The International Association of Dry Cargo Shipowners (Intercargo), The Greek Shipping Cooperation Committee, Lloyd's Register, The International Salvage Union v. The Secretary of State for Transport (2006)

Table of treaties & EU legislation

(in chronological order)

International Treaties

- International Convention for the Regulation of Whaling, done on 2 December 1946 and entered into force on 10 November 1948, 161 UNTS 72, also available at www.iwcoffice.org
- Antarctic Treaty (adopted 1 December 1959, entered into force 23 June 1961) 402 UNTS 71 and its Protocol on Environmental Protection (adopted 4 October 1991, entered into force 14 January 1998)
- International Convention for the Conservation of Atlantic Tunas (adopted in Rio de Janeiro, Brazil in 1966, entered into force in 1969)
- Vienna Convention on the Law of Treaties, concluded in Vienna on 23 May 1969 and entered into force on 27 January 1980, 1155 UNTS 18232, 8 ILM 1969, pp. 679-735; also available at <www.un.org>.
- Ramsar Convention on wetlands of international importance, especially as waterfowl habitat, done on 2 February 1971 and entered into force on 21 December 1975, 996 UNTS 245
- Convention Concerning the Protection of the World Cultural and Natural Heritage 1972, 1037 UNTS 151
- Convention on the International Regulations for Preventing Collisions at Sea (COLREG), adopted on 20 October 1972, available at www.imo.org
- Convention for the Conservation of Antarctic Seals (concluded on 1st June 1972, entered into force on 11th March 1978) 11 ILM 251
- International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter [London Dumping Convention] (adopted in 1972, entered into force in 1975) and its Protocol [London Protocol] (adopted in 1996, entered into force in 2006)
- Convention on International Trade in Endangered Species of Wild Fauna & Flora (CITES), concluded on 3 March 1973 and entered into force on 1 July 1975, 993 UNTS 243
- International Convention on the Safety of Life at Sea (SOLAS), adopted on 7 November 1974 and entered into force on 25 May 1980, 1184 UNTS 2, available at www.imo.org
- International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978 relating thereto; it entered into force on 2 October 1983 (MARPOL 73/78), available at www.imo.org; Annex I, Prevention of pollution by oil; Annex II, Noxious liquid substances; Annex V, Garbage; Annex VI, Prevention of air pollution by ships (SOx Emission Control Areas)
- Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries [NAFO] (adopted on 24th October 1978, entered into force on 1st January 1979)

- Convention on the Conservation of Migratory Species of Wild Animals adopted on 23 June 1979 and entered into force 1 November 1983, 19 ILM 15 (1980) (CMS) (available at https://www.cms.int/en/convention-text)
- Convention on the Conservation of European Wildlife and Natural Habitats [Bern Convention] (opened for signature in 19th September 1979, entered into force on 1st June 1982)
- Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), adopted on 20 May 1980 and entered into force on 7 April 1982, (available at www.ccamlr.org)
- Convention on the Conservation of Antarctic Marine Living Resources (adopted in 20 May 1980, entered into force 7 April 1982) 1329 UNTS 48
- Convention on the Conservation of Antarctic Marine Living Resources (adopted in 20 May 1980, entered into force 7 April 1982) 1329 UNTS 48 [CAMLR Convention]
- Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (adopted in 1981, entered into force in 1984)
- UN Convention on the Law of the Sea, concluded on 10 December 1982 and entered into force on 16 November 1994, 1833 UNTS 396; 21 ILM 1982, pp. 1261-1354 (also available at www.un.org)
- Nauru Agreement Concerning Cooperation in the management of fisheries of common interest (Nauru, 11 February 1982)
- Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region [Cartagena Convention] (adopted in 1983, entered into force 1986) and its Protocol on Specially Protected Areas and Wildlife (adopted in 1990, entered into force in 2000)
- Convention for the Protection of the Natural Resources and Environment of the South Pacific Region [Noumea Convention] (Noumea, 24 November 1986, in force 22 August 1990)
- Convention on Biological Diversity, 31 ILM 1992, pp. 818-848
- OSPAR Convention for the protection of the marine environment of the North-East Atlantic, done in Paris on 22 September 1992 and entered into force on 25 March 1998, 21 ILM 1993, pp. 1069-1100; available at www.ospar.org
- United Nations Framework Convention on Climate Change (adopted on 9th May 1992, entered into force on 21st March 1994)
- Agreement for Implementation of the provisions of the provisions of the UN Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of straddling fish stocks and highly migratory fish stocks, Opened for signature in New York on 4 December 1995, it entered into force on 11 December 2001; 34 ILM 1995
- Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (adopted in 1995, entry into force in 2004) and its Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (adopted in 1995, replacing the related protocol of 1982) and Annexes (adopted in 1996, amended in 2009, 2012 and 2013)
- Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, 24 Nov. 1996, 2183 U.N.T.S. 30 ["ACCOBAMS"].
- Agreement on the Creation of a Mediterranean Sanctuary for Marine Mammals, 25 November 1999

- Convention on the Conservation and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean [WCPF Convention] (Honolulu, 5 September 2000 in force 19 June 2004)
- International Convention on the Control of Harmful Anti-fouling Systems on Ships (adopted in, entered into force on 5th October 2001, entered into force on 17th September 2008)
- Charter of the Council of Regional Organizations of the Pacific (2004)
- Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization of 29th October 2010 (not in force)
- Amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean

EU Legislation

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [The Habitats Directive]
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy
- Consolidated version of the Treaty on the Functioning of the European Union, 13 December 2007, 2008/C 115/01
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds [The Birds Directive]

Table of documents

(in chronological order)

United Nations

- Stockholm Declaration on the Human Environment, 11 *ILM* 1972, pp. 1416-1420
- UN General Assembly, *World Charter for Nature.*, 28 October 1982, A/RES/37/7
- Agenda 21: Programme of Action for Sustainable Development, 14 June 1992, UN Doc. A/Conf.151/26.
- UN General Assembly Resolution A/RES/55/162 *Follow-up to the Outcome of the Millennium Summit*, Agenda item 182 (December 18, 2000)
- UN General Assembly Resolution A/RES/55/162 *United Nations Millennium Declaration*, Agenda Item 60(b), UN (2000)
- Plan of Implementation of the World Summit on Sustainable Development" in Report of the World Summit on Sustainable Development, Johannesburg, South Africa, August 26-September 4, 2002, A/CONF.199/20 (New York: United Nations, 2002).
- United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS) A/AC.259/7 Marine environment, marine resources and sustainable use: implementing the ecosystem approach (Submitted by the delegation of Norway)
- UN General Assembly Resolution A/RES/59/24, Oceans and the law of the sea, 59th session (5 February 2005)

- UN General Assembly A/61/65, Report 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 Annex I, 61st session (20 March 2006)
- UN General Assembly Resolution A/RES/61/105 *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments,* adopted on 8 December 2006 (2007)
- UN General Assembly Resolution A/RES/63/111, Oceans and the law of the sea, 63rd session (12 February 2009)
- UN General Assembly Resolution A/RES/64/72, adopted on 4 December 2009 (2010)
- UN General Assembly A/66/119 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, Annex I, 66th session (30 June 2011)
- UN General Assembly, Report of the Secretary-General, Oceans and the Law of the Sea, A/66/70 (2011)
- UN General Assembly Resolution A/RES/66/231, 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, Annex, 66th session (5 April 2012)
- UN General Assembly Resolution A/RES/66/288, "The Future We Want," (27 July 2012)
- UN General Assembly Resolution A/RES/67/78 *Ocean and the Law of the Sea,* Agenda item 75 (a), (2012)
- UN General Assembly Resolution A/RES/67/79 *Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instrument* (2012)
- UN General Assembly A/69/780, 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 sixty-ninth session of the General Assembly, Annex I, 69th session (13 February 2015)
- UN General Assembly Resolution A/RES/69/292, Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 69th session (6 July 2015)
- A/AC.287/2017/PC.4/2 Report of the Preparatory Committee established by General Assembly resolution 69/292: Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 4th session, 10-21 July 2017
- Chair's streamlined non-paper on elements of a draft text of an international legally-binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction

- UN General Assembly A/CONF.232/2018/7, Statement by the President of the conference at the closing of the first session, Intergovernmental conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 1st session, New York, 4–17 September 2018
- UN General Assembly Resolution A/RES/72/249, International legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 72nd session (19 January 2018)

International Law Commission

- Articles on State Responsibility, UN Doc A/56/10 (2001), as approved by General Assembly resolution 56/83 of 12 December 2001
- Report of the Study Group on Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, UNGA, 58th session, UN Doc A/CN.4/L.682 (18 July 2006)

Convention on Biological Diversity

- Decision II/10 *Conservation and Sustainable Use of Marine and Coastal Biological Diversity*, 2nd Meeting of the CoP to the CBD, Jakarta, Indonesia, November 6–17, 1995
- Decision II/8, *Preliminary consideration of components of biological diversity particularly under threat and action which could be taken under the Convention*, 2nd Meeting of the CoP to the CBD, Jakarta, Indonesia, 6 - 17 November 1995
- Decision V/6, *Ecosystem approach*, 5th Meeting of the CoP to the CBD, Nairobi, Kenya, 15–26 May 2000.
- Report of Ad hoc Technical Expert Group on Marine and Coastal Protected Areas, 8th Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, Montreal, Canada, March 10–14, 2003
- Decision VII/5, *Marine and Coastal Biological Diversity*, 7th Meeting of the CoP to the CBD, Kuala Lumpur, Malaysia, February 9–20, 2004, Annex
- Decision VIII/24, *Protected Areas*, 8th Meeting of the CoP to the CBD, Curitiba, Brazil, 20 - 31 March 2006
- 2008 Decision IX/20, *Marine and coastal biodiversity*, 9th Meeting of the CoP to the CBD, Bonn, Germany, 19 - 30 May 2008
- Secretariat of the CBD, *Protected Areas in Today's World: Their Value and Benefits for the Welfare of the Planet*, Technical Series No. 36 (Montreal: Secretariat of the Convention on Biological Diversity, 2008)
- Decision X/2, *Strategic Plan for Biodiversity 2011–2020*, 10th Meeting of the CoP to the CBD, Nagoya, Japan, October 18–29, 2010
- Decision XI/17, *Marine and coastal biodiversity: ecologically or biologically significant marine areas*, 11th Meeting of the CoP to the CBD, Hyderabad, India, 8-19 October 2012
- Decision XII/22, *Marine and coastal biodiversity: ecologically or biologically significant marine areas (EBSAS)*, 12th Meeting of the CoP to the CBD, Pyeongchang, Republic of Korea, 6 - 17 October 2014

International Maritime Organization

- IMO Assembly Res. A.927(22), *Guidelines for the Designation of Special Areas under MARPOL 73/78 and Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas*, adopted on 15 January 2002, Annex 1
- IMO Assembly Res. A.982(24) *Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas*, 24th Session (2005)

International Seabed Authority

- International Seabed Authority, Assembly, *Decision of the Assembly relating to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area*, 6th session, Doc. ISBA/6/A/18 (2000)
- International Seabed Authority, *Non-living Resources of the Continental Shelf Beyond 200 Nautical Miles: Speculations on the Implementation of Article 82 of the United Nations Convention on the Law of the Sea*, Technical Study No. 5 (2010)
- International Seabed Authority, Council, *Decision of the Council relating to an environmental management plan for the Clarion-Clipperton Zone*, 18th session, Doc. ISBA/18/C/22 (2012)

United Nations Environmental Programme

- Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II), adopted at the Conference of Plenipotentiaries on the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, Barcelona, June 9–10, 1995, Doc. UNEP(OCA)/MED IG.6/8 (1995), Appendix I
- The Jakarta Ministerial Statement on the implementation of the Convention on Biological Diversity" in UNEP, *Report on the 2nd Meeting of the Conference of the Parties of the Convention on Biological Diversity*, UN Doc.UNEP/CBD/COP/2/19, November 30, 1995, Appendix
- 'Marine and Coastal Biodiversity: Review, Further Elaboration and Refinement of the Programme of Work—Study of the Relationship between the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea with regard to the Conservation and Sustainable Use of Genetic Resources on the Deep Seabed (Decision II/10 of the Conference of the Parties to the Convention on Biological Diversity)' (2003) UNEP/CBD/SBSTTA/8/INF/3/Rev.1
- Report of the 16th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols, Marrakesh, Morocco, November 3–5, 2009, Doc. UNEP(DEC)/MED IG. 19/8 (2009), Annex II
- T. Scovazzi, Note on the establishment of Marine Protected Areas beyond national jurisdiction or in areas where the limits of national sovereignty or jurisdiction have not yet been defined in the Mediterranean Sea (2011), United Nations Environment Programme

Mediterranean Action Plan Regional Activity Centre for Specially Protected Areas (RAC/SPA)
- UNEP, *Regional Seas Strategic Directions (2008–2012),* 14th Global Meeting of the Regional Seas Conventions and Action Plans, Nairobi, Kenya, 1st–3rd October 2012
- UNEP, *Regional Seas Strategic Directions (2017-2020),* 17th Global Meeting of the Regional Seas Conventions and Action Plans, Istanbul, Turkey, October 2015
- UNEP/EA.2/Res.10, Oceans and seas, 2nd session, Nairobi, 23-27 May 2016
- Written submission by UNEP, Regional Seas Programmes and other UNEP Activities Relevant to Marine Biodiversity in Areas beyond National Jurisdiction, 26th August 2016
- UNEP/(DEPI)/EAF/CP.7/7, 7th CoP to the Amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean [Nairobi Convention]

OSPAR

- Ministerial Meeting of the OSPAR Commission, "The Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area," Ministerial Meeting of the OSPAR Commission, 20–24 July 1998, Summary Record OSPAR 98/14/1-E, Annex 31.
- OSPAR Commission, "OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area," (1998)
- OSPAR Commission, "The Sintra Statement", (1998)
- Agreement of cooperation between IMO and OSPAR, 1999, OSPAR agreement 1999-15, Doc Nr. 99/8/2
- Declaration of the First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions, 25–26 June 2003, Record of the Meeting, Annex 8.
- OSPAR Commission, "Guidelines for the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area," (2003)
- OSPAR Commission, "Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area," (2003)
- OSPAR Commission, "OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas," (2003)
- OSPAR Commission, "OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area," (2003)
- Memorandum of understanding between the OSPAR Commission and NEAFC, extraordinary meeting, OSPAR agreement 2008-04 of 5th September 2008
- OSPAR Commission, "OSPAR's Regulatory Regime for establishing Marine Protected Areas (MPAs) in Areas Beyond National Jurisdiction (ABNJ) of the OSPAR Maritime Area," Meeting of the OSPAR Commission 22–26 June 2009; Summary Record OSPAR 09/22/1-E, Annex 6
- Memorandum of understanding between the OSPAR Commission and the International Seabed Authority
- OSPAR Commission "The North-East Atlantic Environment Strategy: Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020" (2010), PART II Biological Diversity and Ecosystems
- OSPAR Commission, "OSPAR Recommendation 2010/2 on amending Recommendation 2002/3 on a Network of Marine Protected Areas", 20–24 September 2010, OSPAR 10/23/1-E, Annex 7

- OSPAR Commission, "2016 Status Report on the OSPAR Network of Marine Protected Areas"

Food and Agriculture Organization

- Committee on Fisheries COFI/2007/8 Implementing the Ecosystem Approach to fisheries, including deep-sea fisheries, biodiversity conservation, marine debris and lost and abandoned gear
- FAO *"International Guidelines for the Management of Deep-sea Fisheries in the High Seas"* (2009)
- *Fisheries Management. 4. Marine Protected Areas and Fisheries*, FAO Technical Guidelines for Responsible Fisheries No. 4, Suppl. 4 (Rome: FAO, 2011) 9 [Fisheries Management. 4. Marine Protected Areas and Fisheries].
- Resolution GFCM/37/2013/1 on area based management of fisheries, including through the establishment of Fisheries Restricted Areas (FRAs) in the GFCM convention area and coordination with the UNEP-MAP initiatives on the establishment of SPAMIs
- FAO-UNEP "*Project on Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the ABNJ*"
- Joint Regional Input of the General Fisheries Commission for the Mediterranean (GFCM) and UN Environment/MAP-Barcelona Convention Secretariats into the Concept Paper of the Secretary-General of the Conference for the Partnership Dialogues theme 2 and 4 building on their joint regional efforts to implement SDG14

International Union on the Conservation of Nature

- IUCN General Assembly Recommendation 17.38, *Protection of the coastal and marine environment* (1988)
- The IUCN Environmental Law Center, *The convention on biological diversity—an explanatory guide*, draft text (1993)
- IUCN General Assembly Recommendation 19.46 *Marine and Coastal Area Conservation* (1994)
- Kelleher, G. (1999). *Guidelines for Marine Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK
- Day J., Dudley N., Hockings M., Holmes G., Laffoley D., Stolton S. & S. Wells, 2012. *Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas*. Gland, Switzerland: IUCN.

Antarctic Treaty System

- ANT/IX/82 (Rev.1), Draft Report on the Working Group on Marine Living Resources, Ninth Consultative Meeting of Antarctic Treaty, 7 October 1977
- CCAMLR, CM 91-03 (2009), Protection of the South Orkney Islands Southern Shelf
- Recommendation ATCM III-VIII, Agreed Measures for the Conservation of Antarctic Fauna and Flora (1964)
- CCAMLR, CM 91-04 (2011), General Framework for the establishment of CCAMLR MPAs
- CCAMLR, CM 91-05 (2016), Ross Sea region marine protected area

- SC-CAMLR, XXX, Annex 6
- CCAMLR-XXXI, Report of the Thirty-first Meeting of the Commission. Thirty-first Meeting of the Commission, Hobart, Tasmania, 23 October – 1 November 2012
- R. Hofman, The Intent of Article II of the CAMLR Convention. Discussion paper for Sessions Two and Three, CCAMLR Commission Circular 15/01, CCAMLR Secretariat, (2015)

Other Documents

- European Commission, *Guidelines for the Establishment of the Natura 2000 Network in the Marine Environment: Application of the Habitats and Birds Directive* (2007)
- CMM 2008–01, 'Conservation and Management Measure for Bigeye and 2008 Yellowfin Tuna in the Western and Central Pacific Ocean' 5th session, WCPF Commission Meeting (Busan, WCPFC, 8–12 December 2008); now replaced by CMM 2016–01
- Mary Lack and Frank Meere, *Pacific Islands Regional Plan of Action for Sharks: Guidance for Pacific Island Countries and Territories on the Conservation and Management of Sharks*
- The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case (2011). Sargasso Sea Alliance
- "Whale and Dolphin Action Plan 2013–2017" in 3rd Meeting of the Signatories to the Memorandum of Understanding for the Conservation of Cetaceans and Their Habitats in the Pacific Islands Region, Noumea (New Caledonia, SPREP, 8 September 2012) Doc. CMS/ PIC/MoS3/Doc.4.1, 24 August 2012, Annex II.
- Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea, Hamilton, Bermuda, 11th March 2014
- European Environmental Agency Report, *Marine Protected Areas in Europe's seas: An overview and perspectives for the future* (2015)
- R. Mahon et al., '*Transboundary Waters Assessment Programme (TWAP) Assessment of Governance Arrangements for the Ocean, Volume 2: Areas Beyond National Jurisdiction*" (UNESCO-IOC Technical Series, Paris, 2015)
- Palau Arrangement for the management of the Western Pacific Fishery as amended management scheme (Purse Seine Fishing Vessel Day Scheme)
- Earth Negotiations Bulletin, Summary of the Fourth Session of the Preparatory Committee on Marine Biodiversity Beyond Areas of National Jurisdiction: 10 July–21 July 2017, Vol.25, No.141, International Institute for Sustainable Development
- Earth Negotiations Bulletin, Summary of the Third Session of the Preparatory Committee on Marine Biodiversity Beyond Areas of National Jurisdiction: 27 March–7 April 2017, Vol.25, No.129, International Institute for Sustainable Development
- K. Gjerde., B. Boteler, et al. *'Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction: Options for Underpinning a Strong Global BBNJ Agreement through Regional and Sectoral Governance'*, STRONG High Seas Project (2018)

Websites

- https://www.iucn.org/theme/protected-areas/about/protected-area-categories
- http://www.un-documents.net/unchedec.htm
- http://www.un.org/documents/ga/res/37/a37r007.htm
- https://www.cbd.int/doc/publications/cbd-ts-36-en.pdf
- http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm
- http://www.fao.org/tempref/docrep/fao/meeting/011/j8993e.pdf
- http://www.un.org/Depts/los/consultative_process/consultative_process.htm
- https://www.cbd.int/decision/cop/?id=7148
- http://wedocs.unep.org/handle/20.500.11822/19097
- https://www.ospar.org/about/international-cooperation
- https://undocs.org/A/RES/61/105
- https://www.cbd.int/doc/meetings/cop/cop-02/official/cop-02-19-en.pdf
- https://www.cbd.int/sp/targets/default.shtml
- https://www.cbd.int/marine/doc/azores-brochure-en.pdf
- http://web.unep.org/unepmap/
- http://www.rac-spa.org/spami
- http://www.fao.org/gfcm/background/about/en/
- https://sustainabledevelopment.un.org
- https://www.ats.aq
- https://www.ccamlr.org/en/organisation/home-page
- http://www.tethys.org/sanctuary.htm
- https://www.forumsec.org/council-of-regional-organisations-of-the-pacific/
- https://gsd.spc.int/sopac/docs/RIF/CROP%20Charter_2004.pdf
- https://www.sprep.org/convention-secretariat/noumea-convention
- https://www.sprep.org/att/publication/000853_RPOA_Sharks.pdf
- https://www.pnatuna.com/sites/default/files/PS_VDS%20Txt_Amended_Oct2016_0.pdf
- https://www.unenvironment.org/nairobiconvention/who-we-are
- http://www.fao.org/in-action/commonoceans/background/program-structure-goals/en/
- https://abidjanconvention.org/
- http://www.sargassoseacommission.org/storage/Hamilton_Declaration_with_signatures_April_2018.pdf
- http://www.fao.org/in-action/globefish/publications/details-publication/en/c/346096/
- http://www.un.org/Depts/los/biodiversityworkinggroup/biodiversityworkinggroup.htm
- https://cmsdata.iucn.org/downloads/10_principles_for_high_seas_governance___final.pdf
- https://www.isa.org.jm/sites/default/files/documents/EN/Regs/MOU-OSPAR.pdf
- https://sustainabledevelopment.un.org/content/documents/13776gfcmunenvironment.pdf
- https://edisciplinas.usp.br/pluginfile.php/520713/mod_resource/content/1/Cap.3_International%20Environmental%20Law%20%281%29.pdf
- http://www.sargassoseacommission.org/about-our-work