

Marine Biodiversity Beyond National Jurisdiction

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Abstract

Areas beyond national jurisdiction (ABNJ), which include both the high seas and the seabed area beyond the external limit of the continental shelf, cover more than half of our planet's surface. They contain a wealth of living resources and play a crucial role in many earth processes, making their protection necessary for the current and future generations. However, the current regulatory framework has proven insufficient to address the many threats that endanger ABNJ. This chapter will present the current legal framework purporting to protect marine biodiversity in ABNJ and will assess its actual reach. It will then briefly discuss the current, ongoing negotiations at the United Nations, aimed at the adoption of a legally binding instrument to protect ABNJ, and will conclude with some thoughts on the role and limits of ABNJ protection through international law instruments.

Keywords

High seas · Area · Marine genetic resources · Areas beyond national jurisdiction

1 Introduction

Oceans, seas and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical to sustaining it.¹ In particular, the ocean and its ecosystems provide significant benefits to the global community, which include climate regulation, coastal protection, food, employment, recreation and cultural well-being (United Nations 2021, p. 5). Oceans and their biodiversity, however, are currently under severe threat. Climate change is affecting the oceans in different ways (Laffoley and Baxter 2016; Hobday and Matear 2020); depletion of marine living resources is ongoing;² pollution of the marine environment, including plastic pollution³ and noise pollution (McKenna and International Fund for Animal Welfare 2008), is increasing.

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¹ "The Future We Want" UNGA Res. 66/288 of 27 July 2012, para. 158.

 $^{^2}$ According to FAO (2020, p. 47), "the fraction of fish stocks that are within biologically sustainable levels decreased from 90 percent in 1974 to 65.8 percent in 2017 [...]. In contrast, the percentage of stocks fished at biologically unsustainable levels increased, especially in the late 1970s and 1980s, from 10 percent in 1974 to 34.2 percent in 2017."

³ Plastic pollution has been addressed in four United Nations Environment Assembly resolutions of 2014, 2016, 2017, and 2019, collected in UN Doc UNEP/ AHEG/2019/3/INF/2 of 25 October 2019. For background information see the report *Breaking the Plastic Wave*, available at breakingtheplasticwave_report.pdf (oneplanetnetwork.org).

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M. d. G. Garcia, A. Cortês (eds.), *Blue Planet Law*, Sustainable Development Goals Series, https://doi.org/10.1007/978-3-031-24888-7_9

Within oceans, marine biodiversity is impressive: the seas are home to up to 80 per cent of all life on planet earth. Yet, marine biodiversity is rapidly decreasing⁴ due to human activities, including fishing, aquaculture, shipping, sand and mineral extraction, oil and gas exploitation, the building of renewable energy infrastructures, coastal infrastructure development and pollution, including the release of greenhouse gases (United Nations 2021, p. 10).

The importance of the oceans make it essential to engage in strict normative action in light of the threats currently faced, with the aim of mitigating existing phenomena and addressing major threats and their harmful consequences. In order for such normative action to be successful, it must be undertaken at the international level. From a practical point of view, the ocean is unique and all seas and basins are interconnected, and hence fragmented action will not suffice to address which threats and dangers are often transboundary and sometimes global. From a normative point of view, the high seas and the seabed beyond national jurisdiction, together known as areas beyond national jurisdiction (ABNJ) form the largest part of marine waters. ABNJ do not fall within the jurisdiction of any single State; consequently, any measures need to be multilateral. For this reason, States have created a number of international bodies tasked with managing activities in ABNJ, including protection of the marine environment and preservation of marine living resources (Freestone 2014). Yet protection of marine biodiversity in ABNJ has long remained only loosely regulated.

This chapter will present the normative framework developed by States to protect biodiversity in ABNJ (Warner 2015; Nordquist et al. 2019; Nordquist and Long 2021). In doing so, it will first recall existing rules and principles addressing protection of the marine environment, primarily those included in the United Nations Convention on the Law of the Sea (UNCLOS). It will then highlight gaps in regulation which compromise the ability of the international community to effectively address threats to biodiversity in ABNJ. It will then turn to ongoing negotiations at the United Nations (UN) to develop a legally binding instrument to address biodiversity in ABNJ. Lastly, the chapter will present some critical remarks concerning ongoing developments and their potential to ensure effective protection.

2 The Law of the Sea and Protection of the Marine Environment

The international law of the sea contains numerous provisions concerning protection of the marine environment, including its biodiversity. Part XII of the UNCLOS, in particular, is dedicated to the protection and preservation of the marine environment and is complemented by numerous treaties adopted by States at the global and regional levels.⁵

Art. 192 UNCLOS sets the general principle, according to which "States have the obligation to protect and preserve the marine environment." As the International Tribunal for the Law of the Sea (ITLOS) has clarified, this duty both includes "the positive obligation to take active measures to protect and preserve the marine environment, and by logical implication, entails the negative obligation not to degrade the marine environment".⁶ The duty contained in Art. 192 UNCLOS is not merely a hortatory provision or a policy statement but is an actual legal duty.⁷ It concerns not only pollution of the marine environment, but

⁴ This is a reflection of the global decrease in biodiversity. It has been estimated that around 1 million species already face extinction and that "there will be a further acceleration in the global rate of species extinction, which is already at least tens to hundreds of times higher than it has averaged over the past 10 million years" (IPBES 2019, p. 12).

⁵ For a brief overview of the principal treaties concerning protection of the marine environment, see Boyle and Redgwell (2021), Chapter 7; for a comprehensive overview, see Harrison (2017).

⁶ The M/V 'Louisa' Case (Saint Vincent and the Grenadines v Kingdom of Spain) (Merits), Judgment of 28 May 2013, para. 76; see also The South China Sea Arbitration (The Republic of Philippines v. The People's Republic of China), Award of 12 July 2016, para. 941.
⁷ Ibid.

also other forms of degradation and, more generally, the need to protect and preserve the marine environment in all its aspects and components.⁸

Part XII of the UNCLOS is mostly concerned with combatting pollution of the marine environment. Section 5 of Part XII contains a list of activities causing pollution that, at the time the Convention was negotiated and adopted, were of concern to the international community. These include pollution from land-based sources,⁹ pollution from seabed activities subject to national jurisdiction,¹⁰ pollution from activities in the Area,¹¹ pollution by dumping,¹² pollution from vessels,¹³ and pollution from or through the atmosphere.¹⁴ Nonetheless, States also have the duty to address other sources of pollution which are not expressly mentioned in the UNCLOS, should they become aware of their existence. This is clear from the language of Article 194(3), which refers to "all sources of pollution of the marine environment" and uses the words "inter alia" to introduce an illustrative list with four items. The attention being paid to noise pollution (Dotinga Elferink and 2000;Gillespie 2007;Papanicolopulu 2011) and plastic pollution (Prata 2018; Schmalenbach and Pleiel 2019) in recent years, and the discussions that have developed, confirm this point.

Notwithstanding its focus on pollution, the UNCLOS also contains broader provisions. Art. 194(5) UNCLOS, in particular, requires States to adopt those measures that are "necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life". This provision is often identified as the legal basis for the adoption of measures to protect marine biodiversity, including through the establishment of Marine Protected Areas (MPAs).

- ¹² Art. 210 UNCLOS.
- ¹³ Art. 211 UNCLOS.
- ¹⁴ Art. 212 UNCLOS.

In protecting the marine environment and its biodiversity, States must take both individual and joint measures. Individual measures include the duty to prevent transboundary pollution of the marine environment¹⁵ and the duty not to transfer damage or hazards or transform one type of pollution into another.¹⁶ When unilateral action is not sufficient to address a certain source of pollution, or when joint action could optimise efforts and reduce costs, States may have an obligation to cooperate, as further detailed in Art. 197 UNCLOS. The duty to cooperate may take the form of a duty to notify all potentially affected States of the fact that "the marine environment is in imminent danger of being damaged or has been damaged by pollution",¹⁷ to adopt joint contingency plans,¹⁸ or to develop international rules and standards, as required by the provisions contained in Part XII, Section 5, of the UNCLOS.

Finally, in order to understand the scope and limits of the duties to protect the marine environment and prevent pollution, it is necessary to consider that these are "due diligence" duties. According to the ITLOS Seabed Disputes Chamber (SDC), a due diligence obligation 'is not an obligation to achieve, in each and every case, the result [envisaged by the norm]. Rather, it is an obligation to deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain this result'.¹⁹ As a consequence, States are required to take measures not only when pollution is due to their own activities, but also when pollution is due to the activities of other—often private—actors. The SDC has, in fact, noted that

⁸ Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom), Award of 18 March 2015, para. 320.

⁹ Art. 207 UNCLOS.

¹⁰ Art. 208 UNCLOS.

¹¹ Art. 209 UNCLOS.

¹⁵ Art. 194(2) UNCLOS.

¹⁶ Art. 195 UNCLOS.

¹⁷ Art. 198 UNCLOS.

¹⁸ Art. 199 UNCLOS.

¹⁹ Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, Advisory Opinion of 1 February 2011 (SDC Opinion), para 110. See also Request for an advisory opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion of 2 April 2015 (2015 Opinion) para 126–129. On due diligence obligations generally, see Ollino (2021). On due diligence in the law of the sea, see Konig (2018), Caracciolo (2018) and Papanicolopulu (2020).

due diligence obligations arise out of the necessity to control activities carried out by non-State actors,²⁰ and that they are distinct from 'direct' obligations of States.²¹

While due diligence obligations are flexible, international judges have identified a certain number of actions that are relevant in assessing compliance with a due diligence obligation: the adoption of laws and regulations;²² the taking of administrative measures;²³ the exercise of a 'certain level of vigilance in their enforcement and the exercise of administrative control';²⁴ the enactment of enforcement measures, including 'boarding, inspection, arrest and judicial proceedings';²⁵ the proper marking of vessels;²⁶ the creation of monitoring mechanisms;²⁷ the investigation of any alleged violation and the duty to inform the affected State of the results;²⁸ the provision of sanctions 'sufficient to deter violations and to deprive offenders of the benefits' accruing from their illegal activities.²⁹ From a substantial perspective, the SDC has stressed the link between due diligence obligations and the precautionary principle/ approach,³⁰ and also their connection with the duty to conduct an environmental impact assessment (EIA).³¹

In conclusion, the international legal framework provides for overarching principles that impose a duty on States to protect marine biological diversity, including that in ABNJ, to take all necessary measures according to their capabilities, and to cooperate when individual

²³ SDC Opinion, para 119; 2015 Opinion, para. 119.

- ²⁵ 2015 Opinion, paras. 104–105.
- ²⁶ 2015 Opinion, para. 137.

action cannot achieve the intended aim. However, this framework affords little mention to specific measures that States must adopt, or to mechanisms for ensuring cooperation between them.

3 Gaps in Regulation

All the rules illustrated above seek, directly or indirectly, to protect the marine environment, including marine biodiversity. However, as an analysis of them shows, these rules, with the possible exception of Art. 194(5) UNCLOS, do not specifically deal with protection of biological diversity, nor are they specifically applicable in ABNJ. This gap in regulation is only partially filled by other treaties. Two types of treaties are relevant: those that address biodiversity generally, on the one hand, and those that deal with specific marine regions, on the other.

The main global treaty is the Convention on Biological Diversity (CBD), adopted in 1992.³² The CBD provides a comprehensive framework for protecting biological diversity and sets out key principles for State action in this regard. It comprises procedural rules aimed at minimising adverse impacts on biological diversity, including impact assessment,³³ and rules on access to genetic resources, including the fair and equitable sharing of benefits deriving from these.³⁴ Furthermore, States parties to the CBD have developed scientific guidance to identify Ecologically or Biologically Significant Marine Areas (EBSAs), many of which include portions of ABNJ.³⁵ Unfortunately, however, the CBD is of little use in protecting marine biodiversity in ABNJ, since

²⁰ SDC Opinion, para 112.

²¹ SDC Opinion, para 121. See also 2015 Opinion, para 128; *South China Sea* (n 6), para 944.

²² SDC Opinion, para 119.

²⁴ SDC Opinion, para 115.

²⁷ 2015 Opinion, para. 138.

²⁸ 2015 Opinion, para 139.

²⁹ 2015 Opinion, para. 138.

³⁰ SDC Opinion, para 131.

³¹ SDC Opinion, paras 145 and 150. See also *South China Sea* (n 6), para 988.

³² The CBD is complemented by two protocols, the Cartagena Protocol on Biosafety, adopted in 2000, and the Nagoya Protocol on Access and Benefit-sharing, adopted in 2010.

³³ Art. 14 CBD.

³⁴ Art. 15 CBD.

³⁵ CBD Decision IX/20 "Marine and coastal biodiversity", UN doc UNEP/CBD/COP/DEC/IX/20, Annex 1 "Scientific criteria for identifying ecologically or biologically significant marine areas in need of protection in openocean waters and deep-sea habitats".

it expressly provides that it applies "[i]n the case of components of biological diversity, in areas within the limits of its national jurisdiction" only,³⁶ and EBSAs themselves are not backed by legal measures for their protection.

Some regional treaties adopted to protect specific sea basins have gone beyond the UNCLOS and the CBD and have incorporated rules expressly aimed at the protection of marine biodiversity, also in ABNJ. For example, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) contains the obligation to "take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected".³⁷ Parties to the OSPAR Convention have furthermore adopted rules to create marine protected areas (MPAs) in ABNJ.³⁸ Similarly, the 1995 Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA Protocol) contains the obligation for States parties to "protect, preserve and manage in a sustainable and environmentally sound way areas of particular natural or cultural values" and "threatened or endangered species of flora and fauna",³⁹ and provides for the creation of Specially Protected Areas of Mediterranean Importance (SPAMIs) also on the high seas.⁴⁰

Measures adopted by way of regional treaties, however noteworthy, do not suffice to guarantee the effective protection of biological diversity in ABNJ. In fact, regional treaties do not cover the entire extension of the world's oceans, and vast expanses of marine waters fall outside these

³⁶ Art. 4(a) CBD.

treaties. Furthermore, these treaties are generally ratified only by the coastal States of that specific region; for all other States, they are *res inter alios acta* and do not set out legally binding obligations.⁴¹ As a consequence, States that are not parties to a regional treaty are not bound by protection measures adopted by the parties.

The lack of rules dedicated to the protection and preservation of marine biological diversity is further exacerbated by the general legal framework that applies to ABNJ. According to the law of the sea rules, ABNJ include the water column beyond national jurisdiction, which falls under the regime of the high seas,⁴² and the seabed and subsoil beyond the external limit of the continental shelf, which constitutes the international seabed area ("Area").⁴³

The basic principle that still applies on the high seas is the freedom of the high seas,⁴⁴ conceptualised by Hugo Grotius at the beginning of the seventeenth century (Grotius 1609). Freedom of the high seas is accompanied by, and indeed premised upon, the principle that grants the flag State of a vessel exclusive jurisdiction over that vessel.⁴⁵ As a consequence, it is only the flag State that can adopt measures with respect to activities undertaken by its vessels which may negatively impact biodiversity in ABNJ. However, the lack of uniform international standards, combined with the phenomenon of flags of convenience (Llácer 2003), make regulation by the flag State entirely insufficient to address threats to biodiversity.

A different legal regime was introduced by the UNCLOS concerning the Area. According to Art. 136, the Area and its resources are the common heritage of mankind, subject to the specific legal regime contained in Part XI of the UNCLOS. In

⁴³ Art. 1(1)(1) UNCLOS.

³⁷ Art. 2(1)(a) OSPAR Convention.

³⁸ OSPAR's Regulatory Regime for establishing Marine Protected Areas (MPAs) in Areas Beyond National Jurisdiction (ABNJ) of the OSPAR Maritime Area, OSPAR doc. OSPAR 09/22/1-E, Annex 6.

³⁹ Art. 3(1) SPA Protocol.

⁴⁰ Art. 9(1) SPA Protocol.

⁴¹ In accordance with the well-known principle codified in Art. 34 Vienna Convention on the Law of Treaties.

⁴² Art. 86 UNCLOS.

⁴⁴ Art. 87 UNCLOS.

⁴⁵ Art. 92(1) UNCLOS. While the latter principle has some limitations, these do not directly relate to the right to take measures to protect and preserve marine biodiversity in ABNJ.

particular, no State may exercise sovereign rights over the Area and its resources,⁴⁶ while all activities must be carried out for the benefit of mankind as a whole and must result in the equitable sharing of financial and other economic benefits derived from them.⁴⁷ However, the strict definition of "resources", which includes only mineral resources,⁴⁸ renders the common heritage of mankind regime inapplicable to marine biological diversity in the Area.

Both the high seas regime and that of the Area are therefore unsatisfactory with respect to biodiversity in ABNJ. The insufficiency of the current regime has become apparent in recent decades in relation to two issues in particular: access to marine genetic resources and the establishment of marine protected areas (MPAs) in ABNJ.

The protection of rare or fragile marine ecosystems, which are often hosts to significant biodiversity, had already been promoted by Art. 194(5) UNCLOS, although it contained no express mention of the establishment of MPAs. The need to create MPAs was, however, openly acknowledged in Agenda 21, which identified priority areas for protection,⁴⁹ and is included in regional treaties, including the OSPAR Convention and SPA Protocol mentioned above. Today, the creation of MPAs is considered a priority and Sustainable Development Goal (SDG) 14, target 14.5, requires States to protect ten percent of marine waters by means of MPAs by 2020.

While the need to establish MPAs, also in ABNJ, has become increasingly clear, the legal complexities of such a process have not diminished. The fact that no State exercises exclusive jurisdiction on the high seas implies that no State can unilaterally adopt and implement measures to create an MPA that would have a binding effect on all other States. In particular, no State may exclude or limit the transit and activities of vessels flying foreign flags on the high seas, nor may it regulate other activities that might have an impact upon biodiversity. It is thus necessary to rely on international cooperation in order to create MPAs on the high seas.

Currently, some international organisations have a mandate to establish protected areas on the high seas. These MPAs, however, are subject to important limitations, due either to the membership of the organisation or to the limits to the organisation's mandate (Freestone 2018). For example, the MPAs that can be created under the OSPAR and SPA Protocol, mentioned above, are actually only applicable, as a matter of law, to the parties to those agreements. The International Maritime Organization (IMO) can adopt Particularly Sensitive Sea Areas (PSSAs),⁵⁰ which, due to the global membership of the IMO, apply to virtually all States. However, PSSAs address only pollution from vessels, because of limits to the IMO's mandate. Since the high seas are open for the use of all States, it is clear that only a global agreement could provide a stable legal basis for the creation of MPAs in ABNJ. This gap in legal regulation has brought to the fore the need to develop new legal instruments and rules to regulate how MPAs, applicable to all States, could be created on the high seas.

Another issue that has polarised the attention of States concerns access to and exploitation of marine genetic resources in ABNJ (Leary 2007; Kirchner-Freis and Kirchner 2014; Mossop 2015). Bioprospecting activities carried out by private actors in ABNJ and the subsequent patenting of genetic material recovered from ABNJ ignited a debate within the international community concerning the legal regime that regulates access to and exploitation of marine genetic resources in ABNJ.⁵¹ Genetic material from ABNJ may have a high commercial value and at the same time is often difficult to access.

⁴⁶ Art. 137(1) UNCLOS.

⁴⁷ Art. 140 UNCLOS.

⁴⁸ Art. 133 UNCLOS.

⁴⁹ Agenda 21 - Global Programme of Action on Sustainable Development, UN doc. A.CONF/151/26, para. 17.85.

⁵⁰ IMO Res. A.927(22) Annex 2.

⁵¹ CBD SBCTTA, 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, UN doc. UNEP/CBD/SBSTTA/8/ INF/3/Rev.1.

This has meant, in practice, that only few companies from very few States have the technical capacity to access and use this material. Economic and other benefits deriving from it, therefore, are unequally distributed at the global level.

This picture is due, to a significant extent, to the gaps that exist in the current legal framework (Scovazzi 2010). While some interpret freedom of the high seas as freedom to access and exploit marine genetic resources located in the water column beyond national jurisdiction, others contest this understanding. As to resources on or under the seabed beyond national jurisdiction, two theories have been advanced. According to the first, mostly supported by developing States, these resources fall within the regime of the Area, regulated in Part XI of the UNCLOS, which states that the resources of the Area are the common heritage of mankind and establishes a complex legal and institutional framework regulating access to and exploitation of these resources. According to the second theory, the letter of Art. 133(a) UNCLOS excludes living resources from the regime of the Area; consequently, these fall under the freedom regime applicable on the high seas. Disagreement between the two groups of States formed the basis for the developments that currently characterise action by the international community.

recommended to the UNGA that a process be initiated to ensure the conservation and sustainable use of marine biodiversity in ABNJ "by identifying gaps and ways forward, including through the implementation of existing instruments and the possible development of a multilateral agreement" under the UNCLOS.⁵³ In 2015, the UNGA convened a Preparatory Committee (PrepCom) with the aim of developing recommendations regarding a draft text for a legally binding instrument on biological diversity in ABNJ.⁵⁴ The PrepCom submitted its recommendations to the UNGA in September 2017, on the basis of which the UNGA decided to convene an Intergovernmental Conference (IGC).⁵⁵

The IGC is tasked with developing an international legally binding instrument under the UNCLOS on the conservation and sustainable use of marine biological diversity of ABNJ.⁵⁶ The IGC's mandate includes the following four issues: "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".⁵⁷ The IGC has so far held three sessions. The fourth session, which was to be the final session, was originally sched-

4 Towards a New Treaty on Marine Biodiversity in ABNJ

The important economic and political issues raised by exploitation of marine genetic resources in ABNJ prompted the UN to take action and address the gaps in the current rules governing marine biodiversity in ABNJ. In 2004, the United Nations General Assembly (UNGA) created 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 (BBNJ Working Group).⁵² In 2011, the BBNJ Working Group

⁵² 'Oceans and the Law of the Sea', UNGA Res 59/24 (17 November 2004) UN doc. A/RES/59/24, para 73.

⁵³ 'Oceans and the Law of the Sea', UNGA Res 66/231 (24 December 2011) UN doc. A/RES/66/231, Annex – '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'.

⁵⁴ 'Development of an international legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction', UNGA Res 69/292 (6 July 2015) UN doc. A/RES/69/292.

⁵⁵ "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", UNGA Res 72/249 (24 December 2017) UN doc. UN A/RES/ 72/ 249.

⁵⁶ Ibid, para 1.

⁵⁷ Ibid, para 2.

uled for 2020, but was postponed due to the Covid-19 crisis.⁵⁸

From a formal point of view, the decision to aim for a legally binding instrument, i.e. a treaty, is noteworthy. At a time when much of international law, including law of the sea, is developed through the use (and abuse) of soft law instruments (Klein 2022), the option to have a hard law instrument to address protection of marine biological diversity in areas beyond national jurisdiction is a clear sign of the international community's determination to address the topic.

At the same time, the fact that the new instrument will be a binding treaty under international law presents some challenges, which are likely to affect both the negotiating process and the effectiveness of the treaty itself, once it is adopted. While the latter point will be developed in the next section, it is worth mentioning here that the new treaty will need to be coordinated not only with the UNCLOS and the CBD, but also with all other global and regional treaties and international bodies that have a bearing on biodiversity protection or activities that may impact biodiversity. Furthermore, the effects of the new treaty on non-parties should be considered (Ma and Zhou 2021). A treaty only becomes binding once it enters into force,⁵⁹ and for this to happen it must be accepted by a certain number of States. A successful conclusion of the IGC negotiations should produce a treaty which is not only good in itself, but one which is also acceptable to the States who will be called to ratify it. Given its global scope, the new treaty should be ratified by the vast majority of States, if not all, in order to be effective.

From a substantial point of view, the IGC's mandate includes not only the above-mentioned issues of marine genetic resources and MPAs, but also EIAs and capacity building and technology

transfer. The inclusion of EIAs derives from the fact that regulation of marine genetic resources and MPAs, alone, is not sufficient to ensure protection of biological diversity in ABNJ. Access to and exploitation of genetic resources is only one of many activities that may have an impact on marine species in ABNJ. Moreover, even if a significant number of MPAs, including MPA networks, were to be established, these would certainly not cover the entire space included in ABNJ and would leave significant areas without protection. It is therefore necessary to consider all human activities carried out anywhere within ABNJ, in order to evaluate whether they might produce adverse effects upon biodiversity. Hence the need to provide for mandatory EIAs in cases where human activities might significantly compromise the integrity of marine ecosystems.

The last element of the package relates to capacity building and technology transfer. This topic, of particular concern to developing States, was previously discussed in the UNCLOS negotiations, resulting in Part XIV of the UNCLOS on "Development and Transfer of Marine Technology". However, this part has often been regarded as one of the parts receiving least attention. Hence the new call from developing States, during the preparation for the IGC, to include the topic within the IGC mandate. Furthermore, since access to and use of marine genetic resources is largely dependent on available technology, developing the capacities of all States and providing them with the technologies required to undertake bioprospecting and exploit genetic material would level the playing field and would allow all States to reap the benefits of marine genetic resources.

The four issues to be addressed by the IGC are considered a package, since the UNGA has tasked the Conference with addressing them "together and as a whole".⁶⁰ This means that, in order for the negotiation to be successful, all four issues must be addressed to the satisfaction of the participating States. The basis for this decision is

⁵⁸ The fourth session is now scheduled for March 2022; there are doubts, however, as to whether it will be the final one; see 25(218) *Earth Negotiations Bulletin* (2 September 2019) at <<u>https://enb.iisd.org/download/pdf/enb25218e.</u> pdf>.

⁵⁹ Art. 24 VCLT.

⁶⁰ This was the procedure adopted already in the Third United Nations Conference on the Law of the Sea, which produced the UNCLOS.

that the importance of each topic differs for the various States involved. For example, while developed States, driven by civil society organisations, place more emphasis on the need for a network of MPAs, developing States consider that it is crucial to have a legal regime on marine genetic resources that will allow them to access these resources and reap the benefits deriving from them. The package deal option would therefore give each group of States some bargaining power, with a view to reaching a compromise that could be transferred into the new treaty.

5 The Beginning of a Process

The international community appears to have understood the significance of marine biological diversity in ABNJ and the multiple threats that endanger it. The decision of the UNGA to adopt a treaty that will fill gaps in the law of the sea, as well as the ongoing negotiations within the IGC, testify to the willingness of States to address these issues, and to do so using binding legal instruments. At the same time, there are still a number of factors which might delay and potentially jeopardise current efforts. Some factors are internal to the negotiation, while others are external (Papastavridis 2020).

Within the IGC process, it is worth highlighting that, after over fifteen years of preparatory work and three years of formal negotiations, the positions of some States are still far apart. Developed States continue to push hard for the establishment of a system of MPAs on the high seas, yet do not seem particularly willing to make concessions on marine genetic resources and technology transfer. The numerous alternatives still present in the draft negotiating text also bear witness to this distance between States.⁶¹ If no compromise is found concerning marine genetic resources, the negotiation as a whole is unlikely to reach a successful conclusion.

In addition, the IGC's mandate, while consistent, may not prove sufficient to truly guarantee the protection and preservation of marine biological diversity in ABNJ. Although the four elements of the package do, in fact, cover some key aspects of biodiversity protection, they do not exhaust the topic, since there are further issues of concern. It will suffice to mention 2020) climate change, including warming of the oceans and ocean acidification,⁶² both of which have detrimental effects on marine species. While MPAs may contribute to dealing with climate change (Smith 2020), they are by no means the solution to the problem. Comprehensive protection of biodiversity, including in ABNJ, cannot leave climate change out of the picture, even if the origins of this phenomenon are mostly to be found on land.

Turning to external factors, these relate not only to contingent problems, above all the Covid-19 crisis, which has delayed negotiations, but also to limitations of international law as a legal system, and to deeper issues, concerning in particular the method adopted to address issues pertaining to ABNJ.

The decision to seek to adopt a treaty, rather than a soft law instrument, is certainly evidence of serious intent and actually the only option available, in the absence of rules of customary international law. However treaties, which are one of the main sources of international law, raise some issues when called on to address global and pressing challenges. A treaty is only binding once it has entered into force and only on those States that have accepted it. There is likely to be a certain time lag between adoption of the new treaty and its entry into force, and even when it does come into force, it will not be immediately binding on all States. Private actors might exploit this fact and opt for the nationality of non-parties,

⁶¹ Draft text of an agreement 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 doc A/CONF.232/2019/6.

⁶² SDG 14 Target 14.3 requires States to "minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels".

so as to bypass legal obligations concerning protection of biodiversity in ABNJ.

More broadly, the current paradigm, which is still premised on the principle of freedom of the high seas and exclusive flag state jurisdiction, has proven unsatisfactory in successfully addressing the many challenges posed by human activities on the high seas. Even if the new treaty were to be adopted, enter into force, and be ratified by a sufficient number of States to ensure its generalised application, it would still be difficult to effectively monitor the high seas and enforce the treaty's provisions. Exclusive flag state jurisdiction, combined with the widespread use of flags of convenience and the ease with which a vessel can be reflagged, even when it is navigating the high seas, facilitate the avoidance of rules and the persistence of deplorable, albeit not entirely unlawful, conduct.63

This phenomenon is well-known in other fields, in particular efforts to address Illegal, Unreported and Unregulated (IUU) fishing on the high seas (Palma et al. 2010; Rosello 2021). It is only through the combined action of law-making, law enforcement and economic and political sanctions that States have achieved a certain level of success in curbing IUU fishing. Lessons might be learnt from that field, but always keeping in mind the peculiarities of biodiversity protection.

In conclusion, it is still too early to advance any meaningful considerations on the capacity of the ongoing IGC and the future treaty to effectively address biodiversity protection in ABNJ. Two facts do, however, seem clear. First, regardless of the outcome of the IGC, existing rules, instruments and bodies will still have a role to play in ensuring protection of marine biodiversity in ABNJ (Ardron et al. 2014). Second, successful conclusion of the IGC would be a major milestone, but it would by no means be the end of the process, which would need to continue in order to ensure that marine biological diversity in ABNJ is effectively protected.

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⁶³ Reform has already been suggested by scholars, e.g. Geiss and Tams (2015).

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