Identifying and Describing Ecologically or Biologically Significant Marine Areas (EBSAs): A Key Tool for the Protection of Ocean Biodiversity in Dispute

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Abstract
The distribution of legal authority to protect biodiversity in marine areas beyond national jurisdiction (ABNJ) between the Convention on Biological Diversity (CBD) and the UN Law of the Sea Convention (LOSC) has been a contentious issue. In practice, main responsibility has been allocated to LOSC, under which a new implementing agreement on conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (BBNJ) is currently being negotiated. CBD was allocated responsibility for providing scientific information and advice on marine biodiversity, which has resulted in the identification and description of 321 Ecologically or Biologically Significant Marine Areas (EBSAs) worldwide, within and beyond national jurisdiction. These could provide important scientific backing for a coming BBNJ instrument under LOSC, especially as regards the designation of marine protected areas and the conduct of environmental impact assessments in ABNJ. However, the process of modifying EBSAs and identifying new ones has recently been challenged by the CBD Conference of the Parties, harking back to previous disputes over the legal mandate and thereby threatening the entire mechanism that has been established. In the context of international environmental law and law of the sea, this article discusses the potential importance of EBSAs for the expected BBNJ instrument, using the Central Arctic Ocean EBSA as an example.

Keywords: Ecologically or Biologically Significant Marine Areas (EBSAs), Convention on Biological Diversity (CBD), Biodiversity Beyond National Jurisdiction (BBNJ), marine protected areas, Central Arctic Ocean

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1 Introduction

The legal framework on the protection of the marine environment and fragile ecosystems in areas beyond national jurisdiction (ABNJ) is widely viewed as inadequate for dealing with the environmental pressures of increased human activity, especially as regards pollution and over-exploitation of marine living resources. Increased awareness of the effects of global warming only reinforces this situation. While the CBD is widely considered to have a rather limited mandate in terms of ABNJ, the obligations of LOSC Part XII on the protection of the marine environment (covering areas within as well as beyond national jurisdiction) are of a general nature basically requiring states to perform due diligence.\(^1\)\(^2\) The Annex VII Arbitral Tribunal in its *Award on South China Sea* states that the “content of the general obligation in Article 192 is further detailed in the subsequent provisions of Part XII, including Article 194, as well as by reference to specific obligations set out in other international agreements, as envisaged in Article 237 of the Convention”.\(^3\) In many cases the structure of the provisions provides for – and depends upon – dynamic evolution of the rules, to achieve environmental objectives. However, this evolution has yet to take place – for example, in the form of legal instruments for ecosystem-based management, the designation of marine protected areas and minimum standards for Environmental Impact Assessments (EIAs).

Concerns about deficiencies in the legal and governance framework have come along with growing knowledge and awareness that the high seas and underlying deep ocean host far more marine life than previously realized. For example, underwater seamounts and hydrothermal vents have been found to be unique biodiversity-rich ecosystems in ABNJ, cradling some of the oldest organisms on the planet. With the growing awareness of biodiversity in ABNJ has also come awareness of the serious threats to biodiversity caused by recent decades’ increasing demands for exploration and exploitation of ABNJ hitherto largely beyond the reach of human activities.

The UN Convention on Biological Diversity (CBD) in 2008 decided to identify and describe “Ecologically or Biologically Significant Marine Areas” (EBSAs) based on a set of scientific criteria covering areas both within and beyond national jurisdiction.\(^4\) This happened after hard discussions on the delimitation of legal powers between the CBD and LOSC regarding the protection of biodiversity in marine areas beyond national jurisdiction (ABNJ). In 2017, the UN General Assembly (UNGA) mandated an Intergovernmental Conference (IGC) to elaborate the text of an international legally binding instrument under LOSC on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction with a view to developing the instrument as soon as possible.\(^5\) Area-based management tools, including marine protected areas and EIAs, are two of the four topics that the IGC is to address for inclusion in the instrument. Both the designation of protected areas and the conduct of EIA require scientific evidence, and for that EBSAs could be an essential instrument. Lately, however, the process of modifying
Existing and identifying new EBSAs has been challenged by disagreements under the CBD Conference of the Parties (COP), threatening the entire mechanism that has been established. These disagreements are reminiscent of the old discussion on CBD powers over ABNJ.

In the context of international environmental law and law of the sea, this article analyzes the actual and potential function as well as the legal status of EBSAs mainly in relation to a future implementing agreement under LOSC on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. This includes an account of the current dispute within the CBD on the future EBSA process and its possible consequences. To fully understand the emergence and development of the EBSA concept as well as the challenges now facing the concept, the article accounts for the history of dispute between LOSC and the CBD on the delimitation of mandates in relation to ABNJ which led to the concept. The article discusses a possible future protective regime for the Central Arctic Ocean as a case to which EBSAs can provide important scientific justification. In conclusion, it argues for the importance of the EBSA process under the CBD being brought back on track.

2 The EBSA concept

EBSAs are marine areas that are ecologically or biologically significant by providing, for example, important habitats, food sources and breeding grounds, including both water column and seabed areas. The EBSA concept was formally adopted in 2008 by the 9th Meeting of the Conference of Parties (COP 9). As discussed below, the concept is highly relevant to the CBD objectives of conservation of biodiversity and the sustainable use of its components as well as of several CBD provisions. The COP decision includes the following seven scientific criteria for identifying EBSAs:

1. uniqueness or rarity
2. special importance for life-history stages of species
3. importance for threatened, endangered or declining species and/or habitats
4. vulnerability, fragility, sensitivity, or slow recovery
5. biological productivity
6. biological diversity
7. naturalness.

2.1 The development of the concept in the CBD

CBD COP 10 in 2010 adopted a structured process for identifying and describing EBSAs. A core element here was the convening of regional workshops around the globe to consider scientific data on the marine areas of the given region as a basis for proposals of EBSAs, for endorsement by the CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and the COP.
The COP 10 decision also called for capacity building to support the application of the EBSAs and for the establishment of a repository “for scientific and technical information and experience related to the application of the scientific criteria on the identification of EBSAs, as well as other relevant compatible and complementary nationally and inter-governmentally agreed scientific criteria that shares information and harmonizes with similar initiatives ...”10 Like other CBD proceedings on EBSAs, the decision stresses that the application of the EBSA criteria is a purely scientific and technical exercise that as such does not imply designation and imposition of any legal requirements for management of the area. That is a matter solely for States and competent international organizations, including LOSC.

Between 2011 and 2019, the CBD Secretariat convened 15 regional workshops in collaboration with governments and international organizations, with significant input from scientific experts around the world. These workshops have facilitated the description of 321 areas that meet the EBSA criteria – areas within and beyond national jurisdiction. In several cases, EBSAs have already informed States in designating marine protected areas in areas within their national jurisdiction.11

The outputs of regional EBSA workshops are submitted for consideration by SBSTTA and the COP, after which they are included in the EBSA repository12 and transmitted to the United Nations General Assembly (UNGA) and its relevant processes.

At CBD COP 12 in 2014, it was decided to start a process to further enhance scientific methodologies and approaches on the description of areas meeting the EBSA criteria.13 This still ongoing process is discussed below.

2.2 Attention to EBSAs by other processes
EBSA descriptions have been the subject of attention in other processes than the CBD. Several UNGA Resolutions on Oceans and the Law of the Sea refer to the role of the CBD in providing scientific and technical information on areas in need of protection, including the adoption of the EBSA criteria.14 Regional fisheries management organizations (RFMOs), the Convention on Migratory Species (CMS) and the International Maritime Organization (IMO) are other international bodies that have included EBSA descriptions in their work15 (the latter for considering potential Particularly Sensitive Sea Areas, as discussed below).

2.3 Other instruments identifying marine areas of particular biodiversity interest
The EBSA instrument is not the only instrument for identifying marine areas in ABNJ of particular biodiversity interest. Here are some examples:

Prompted by concerns about the destruction of deep-sea cold-water corals and other seabed resources by bottom trawling, the concept of Vulnerable Marine Ecosystems (VMEs) was set out by the UN General Assembly in 2006.16 VMEs are related to the vulnerability of populations, communities, or habitats to deep-sea
Identifying and Describing Ecologically or Biologically Significant fishing in areas beyond national jurisdiction. Specific criteria for VMEs are included in a set of FAO deep-sea fisheries guidelines, to assist States and regional fisheries management organizations and arrangements (RFMO/As) in defining VMEs and how to identify them. The EBSA and VME criteria have many similarities, but the EBSA process is global, whereas the identification of VMEs is conducted by the respective RFMO/As. Moreover, the identification of VMEs requires a direct management response in accordance with UNGA resolutions on sustainable fisheries.

The International Maritime Organization (IMO) has enacted procedures for identifying and enhancing protection for areas designated as Particularly Sensitive Sea Areas (PSSAs) at risk from shipping activities. The PSSA criteria recognize sites of ecological and biological significance, but also include criteria relating to an area’s socio-economic, historic, scientific and educational significance. Unlike the EBSA, but like the VME procedure, a PSSA proposal must be accompanied by a specific protective measure. Even though PSSAs are eligible for designation, none have so far been designated in ABNJ.

The International Seabed Authority (ISA), the intergovernmental body that LOSC has authorized to regulate exploration for and exploitation of seabed minerals of the deep-sea floor in areas beyond national jurisdiction, uses the concept of Areas of Particular Environmental Interest (APEI) to protect certain areas of the sea floor from the harmful effects of mining.

The International Whaling Commission under the International Convention on the Regulation of Whaling has designated two sanctuaries where commercial whaling is prohibited – in the Indian Ocean (1979) and in the Southern Ocean (1994). Both comprise extremely large areas of high seas waters.

2.4 Legal status of EBSAs
The CBD COP has established that “the description of marine areas meeting the criteria for ecologically or biologically significant marine areas does not imply the expression of any opinion whatsoever concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Nor does it have economic or legal implications and is strictly a scientific and technical exercise.” Thereby EBSAs do not have the legal effect of, for example, the VME and PSSA instruments, which include management response measures, as discussed above.

This understanding of EBSAs can be seen as a shift from the initial stages of developing the concept when EBSAs were more closely associated with considerations under UNGA for the establishment of marine protected areas (MPAs) in areas beyond national jurisdiction. The current understanding is relevant for a wider range of conservation and management measures and also in marine areas within national jurisdiction.
Even though EBSA descriptions do not have legal implications in themselves, they may have important legal implications in providing scientific justification for subsequent legal measures to protect the ecosystems, habitats and species they describe. Thus, EBSAs can be related to the objectives of the CBD on conservation and sustainable use (Article 1) and its preamble stating that Parties are “aware of the general lack of information and knowledge regarding biological diversity and of the urgent need to develop scientific, technical and institutional capacities to provide the basic understanding upon which to plan and implement appropriate measures”. EBSAs can facilitate the implementation of several CBD provisions including, in particular, Articles 7 (identification and monitoring), 17 (exchange of information) and 18 (technical and scientific cooperation). Other Articles linking to EBSAs are 8 (in-situ conservation), 10 (sustainable use of components of biodiversity), 12 (research and training) and 14 (impact assessment and minimizing adverse impacts).

Similarly, EBSAs can find a legal basis in the general obligation of LOSC to protect the marine environment, including “rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life” addressed in Article 194.5. They also support the implementation of the LOSC obligation to promote international cooperation in marine scientific research by States and competent international organisations (Article 242).

As described above, EBSA descriptions have been used to strengthen the scientific arguments in requests for protective measures under other treaties than the CBD and LOSC.

2.5 EBSAs in rough waters
From 2004 to 2012, there was a steady evolution in the development of the EBSA criteria and the description of areas that met the criteria, as described above. In 2014, considerations of improving and enhancing methodologies of the EBSA process began, in recognition that EBSA description is not a stand-alone exercise. There is a clear need for periodic reviews as well as modifications of existing EBSAs, to ensure that data and descriptions reflect the current understanding of the regions, and for description of new areas that meet the EBSA criteria. CBD COP 12 requested the Executive Secretary to develop practical options, methodologies and approaches for an ongoing process. However, the COP 13 in 2016 was not ready to decide on this; a process involving an expert workshop and the 22nd meeting of the CBD SBSTTA was prepared for decision at COP 14 in 2018.

After protracted negotiations at COP 14, States were still unable to reach consensus on modalities for modifying the description of EBSAs, for describing new areas, and for strengthening the scientific credibility and transparency of this process. A key area of disagreement was national sovereignty and the power of coastal States in the identification and description of new EBSAS or modifying existing EBSAs located within or partly within their jurisdiction. Moreover, whereas some States
called for distinguishing between areas within and beyond national jurisdiction, others called for uniform modalities, emphasizing the spirit of EBSAs as multilateral and collaborative, not unilateral.

The COP decision mandated an expert workshop to identify options for modifying the description of EBSAs and describing new ones. That workshop was held in February 2020 in Brussels. The issue was again discussed at the first part of the 24th Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA24) held digitally in May and June 2021. These discussions are to be resumed during the second part of SBSTTA24 in March 2022. Based on the recommendations from SBSTTA, a decision is to be taken at COP 15, to be held in the third quarter of 2022 in Kunming, China.

The technical discussions held since COP14 in 2018 indicate little controversy as regards modifications and descriptions of EBSAs fully beyond national jurisdiction (comprising 33 out of the current 321 EBSAs). However, disagreement persists as to who can be the proponents of new or modified EBSAs straddling marine areas beyond and within national jurisdiction (38 of the current EBSAs). Should it be any State or competent international organization, or only the State(s) within whose jurisdiction(s) the area is partially located? Or should competence be divided, with the former as the proponent for the part beyond, and the latter for the part within national jurisdiction? In any case, future procedures for describing and modifying EBSAs within different types of jurisdictions will be an overall package.

3 EBSAs as a result of controversy on the mandate of CBD over ABNJ vis-à-vis LOSC

The following account presents the development of the EBSA concept in the light of tensions within the CBD on the scope of its legal mandate vis-à-vis LOSC concerning marine areas beyond national jurisdiction. We begin by examining legal aspects of LOSC and CBD provisions in this context.

3.1 LOSC

LOSC sets forth the rights and obligations of States regarding the use of the oceans, their resources, and the protection of the marine environment. The general duties of States, as stipulated in LOSC Part XII to protect and preserve the marine environment, also apply to the high seas and the seabed beyond national jurisdiction: the Area. This indicates that the freedoms of the sea are not absolute rights but are subject to several limitations and corresponding duties. Article 192 establishes the general obligation to protect and preserve the marine environment. Article 194. 5 specifies that the measures States shall take to prevent pollution include “those 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”.

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Part VII, section 2 of LOSC includes provisions on the conservation and management of high-seas living resources. Both for marine environmental protection and high-seas living resources, LOSC obliges States to cooperate with each other and through appropriate global and regional organizations. LOSC contemplates that global and regional rules, standards, procedures etc. emerging from such cooperation will be adopted through other bodies.

Relevant in this context is also Article 237 stipulating that provisions on protection and preservation of the marine environment are without prejudice to obligations assumed by States under special conventions and agreements concluded previously on this matter. Such obligations under special conventions should be carried out in a manner consistent with the general principles and objectives of LOSC.

Although the LOSC provisions referred to above do not refer expressly to biodiversity, UNGA assumes that LOSC provides a legal framework for conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction as reflected in many of its resolutions.

3.2 CBD

CBD Article 8 includes an obligation for States to establish a system of protected areas irrespective of the legal condition of the sea waters concerned.

Article 4 on Jurisdictional Scope contains a limitation in the mandate of the CBD over areas beyond national jurisdiction. It stipulates that the provisions of the Convention apply (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 the jurisdiction or control of a State, within the area of its national jurisdiction or beyond the limits of national jurisdiction.

The differentiation between components of biodiversity on the one hand, and processes and activities potentially harmful to biodiversity on the other, may seem peculiar and difficult to handle in a legal sense, as the components of biological diversity are necessarily affected by human processes and activities. The designation of MPAs is an illustrative example: It regulates processes and activities to protect biodiversity and its components in a certain area. Environmental Impact Assessments (EIAs) also relate to processes and activities. It could thus be argued that both MPAs and EIAs – two of four main topics to be covered by a coming LOSC implementing agreement on marine biodiversity beyond national jurisdiction, as further discussed below, fall under the mandate of the CBD.

Article 5 stipulates that each party shall, as far as possible and as appropriate, cooperate with other parties, “directly or, where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biological diversity”.

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Relevant here is also Article 22.1, according to which the provisions of the 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 serious damage or threat to biological diversity. This provision has been interpreted as supporting the precedence of the CBD over LOSC if serious damage or threat to biological diversity would result from the exercise of rights and obligations under LOSC. Thus, according to this interpretation, in principle the CBD must be implemented consistently with LOSC, but with the CBD taking precedence for the protection of biodiversity in the high seas when marine biodiversity is at risk, to ensure the fulfilment of its conservation objective under Article 1.28

Article 22 para. 2 of the CBD affirms that Parties must implement the Convention consistently with States’ rights and obligations derived from the law of the sea. This corresponds to LOSC Article 237. Since CBD and LOSC are consistent in their provision of legal frameworks for conservation and sustainable use of marine biodiversity, implementation should also be consistent and reinforcing. Hence, the two regimes exist in parallel, and both are mandated to protect biodiversity in ABNJ. Only if application of the CBD would infringe upon the rights and obligations of States will LOSC prevail.29

It has also been indicated that a combined reading of Article 8 and Article 22(2) can be interpreted as allowing the CBD to work on protected areas for the conservation of marine biodiversity “irrespective of the legal condition of the waters and of the seabed”.30

From the above interpretations, we see that the LOSC and CBD together constitute an international legal framework for biodiversity in ABNJ – with LOSC providing the broader legal framework for all activities on the oceans, and the CBD providing a limited, specialized mandate in relation to the protection and sustainable use of marine biodiversity. Under that understanding, the two could co-exist and be complementary in the manner that LOSC is intended to work with several other specialized global and regional agreements. Wolfrum and Matz even see the CBD as an instrument that could fill out and strengthen more general LOSC provisions, in the same manner as an implementing agreement under LOSC itself, such as the 1995 Agreement on Fish Stocks.31 However, this option has never been close to being chosen, as discussed below.

3.3 Contestation of CBD mandate over ABNJ
The scope of the legal authority of CBD over ABNJ was the subject of heated discussions in 2005 and 2006 under CBD negotiations related to high-seas protected areas.

The CBD COP 7 in 2004 included new items on marine protected areas and high-seas biodiversity in the CBD’s programme of work on marine and coastal biodiversity. It highlighted the urgent need for international cooperation and action to
improve the conservation and sustainable use of biodiversity in marine areas beyond national jurisdiction, including through the establishment of further marine protected areas. COP 7 also established a programme of work and an ad hoc open-ended working group on protected areas, among other things, to explore “options for cooperation for the establishment of marine protected areas in marine areas beyond the limits of national jurisdiction, consistent with international law, including the United Nations Convention on the Law of the Sea, and based on scientific information”.

Also in 2004, the UNGA established an ad hoc open-ended informal working group on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. With two parallel processes addressing related questions on protection of biodiversity in ABNJ, it is hardly surprising that attention gradually shifted, from how to establish a network of high-seas protected areas to where to discuss this issue and which international body should have overall responsibility and ensure cooperation among other institutions and processes.

3.4 The CBD working group on protected areas

The first meeting of the CBD Working Group on Protected Areas was held in Montecatini, Italy, in 2005, and served as a preparatory meeting of the CBD COP in 2008. From the preparatory meeting document and its draft recommendations on marine protected areas in ABNJ, it appears that the CBD expected to establish a role for itself in identifying appropriate mechanisms for the future establishment and effective management of marine protected areas beyond national jurisdiction. The proposed recommendations included the identification of priority biodiversity areas for establishing protected areas in the high seas, and options for cooperation and coordination among the international and regional treaties and processes. The role foreseen for the CBD was to coordinate the development of a global framework based on agreed goals and criteria for selecting sites and establishing priorities on a scientific basis.

As to the legal framework, the draft recommendations offered a set of options which included an implementing agreement to LOSC and to the CBD – the latter requiring an amendment to the Convention, to expand its mandate in areas beyond national jurisdiction.

At the Montecatini meeting, many parties supported a role for the CBD in proposing procedures and criteria for high-seas protected areas and establishing registers of marine areas requiring protection. It was also suggested to establish some pilot marine protected areas beyond national jurisdiction. However, this proposal was highly controversial, and discussions were crippled by objections that the CBD was not the most appropriate forum in which to discuss international governance aspects of the oceans. A few parties opposed allowing the CBD practically any role as regards marine areas beyond national jurisdiction and thereby proceedings from the meeting on this matter. Norway, traditionally a strong opponent of restrictions
on the freedom of the seas, was the leading country to hold this position, supported by Iceland and to some degree Japan.

Norway requested the inclusion of a lengthy statement in the meeting report reflecting, *inter alia*, that the possible establishment of marine protected areas in the high seas would have to be consistent with international law, that the CDB has no role in this endeavour, and that there was no need for a new legal framework specifically pertaining to the establishment of high-seas marine protected areas. 39

Thus, the final outcome of the CBD working group consisted of agreement on the lack of implementation and enforcement of the international legal framework concerning biodiversity in marine areas beyond national jurisdiction, without reference to piloting high-seas protected areas or to the role of the CBD in facilitating the development of a framework for integrated ocean management.40

This author, who participated in the meeting as a national delegate and negotiator for Denmark, remembers the meeting as difficult and held in an unusually strained atmosphere. It was unusual for smaller countries like Norway and Iceland to take such a prominent role at a global UN meeting. The two even opposed the recording of recommendations from the meeting in square brackets, as is normally done to reflect lack of consensus. This opposition was, however, not accepted by the working group.41

3.5 The UNGA working group on BBNJ
The issue of high-seas protected areas was re-discussed in 2006 in New York in the parallel forum, the UNGA’s *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 Working Group’s mandate included examining the scientific, technical, economic, legal, environmental, socio-economic and other aspects of the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction and indicating, where appropriate, possible options and approaches to promote international cooperation and coordination for the conservation and sustainable use of such biodiversity.42

The meeting was opened by its co-chairs, who highlighted “the unique opportunity that the Working Group offered to promote cooperation and coordination in the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction”. 43 Clearly the meeting was not troubled by lengthy discussions on which was the primary legal instrument for addressing biodiversity in marine areas beyond national jurisdiction. The final report noted: “The General Assembly was generally considered to be the appropriate forum for addressing marine biological diversity beyond areas of national jurisdiction, owing to its role as the global forum with competence to deal comprehensively with complex, multidisciplinary issues”.44

Morgera (2007) stresses two elements that contributed to the relative success of the discussions in New York as opposed to those in Montecatini: First, the meeting
provided the unprecedented opportunity to address, in an integrated manner, sectoral issues related to marine biodiversity in areas beyond national jurisdiction (thereby including not only high-seas protected areas, but also marine genetic resources and destructive fishing practices). Second, the meeting convened in an informal setting and produced a non-negotiated outcome, both of which facilitated a frank exchange of views among national delegations. A third element could be that the national delegates were quite different at the two meetings, although they addressed similar issues. The Montecatini delegates were mainly from the CBD constituency, with a few lawyers to “defend” the role of the LOSC. The New York meeting delegates were probably mostly from the LOSC constituency.

The success can also be attributed to the fact that the meeting was intended to pave the way for a follow-up process – which it did. This process, still ongoing, is expected to result in the adoption of an implementing agreement under LOSC on BBNJ.

3.6 CBD COP-8

Although the question was now settled on the leading role of UNGA and LOSC in relation to high-seas protected areas, positions continued to diverge a month later at CBD COP 8 in Curitiba, Brazil, on the supplementary role (if any) left to the CBD. Views differed on whether this role should be solely scientific or both scientific and technical. From the minimalist approach, a technical component would improperly impinge on policy or legal matters related to ocean governance, from which the CBD should refrain. Others saw the combination of scientific and technical input to UNGA as important because of the specific role of the CBD regarding the 2010 global biodiversity target on reducing biodiversity loss, and the ecosystem and precautionary approaches adopted by the CBD (but not by LOSC).

After lengthy negotiations, the CBD COP 8 decision settled upon a scientific and “where appropriate technical” role for CBD work on high-seas protected areas. This assumed that the UNGA would initiate a follow-up process to its own working group. Thus, COP 8 requested the CBD to continue to provide relevant input to a UNGA-led process; it recognized the CBD’s key role in relation to the application of the ecosystem and precautionary approaches and in delivering the 2010 target of significantly reducing current rates of biodiversity loss.

At the subsequent CBD COP 9 in 2008, the EBSA concept was formally adopted, with a set of seven scientific criteria, as described above.

3.7 Concluding remarks on the divisions of mandates between UNGA/LOSC and the CBD

It seems that the division of mandates between UNGA/LOSC and the CBD did not emerge from a strict legal interpretation of the two instruments. The legal texts do not provide a clear answer to this question, and the CBD can be interpreted
as having a broader mandate than often declared in support of UNGA/LOSC superiority.

As suggested by Morgera, the choice of the UNGA as the most appropriate forum, and the side-lining of CBD, may have been based on “practical considerations and on the shared confidence that the UNGA will be better placed to consider the multiple, multidisciplinary issues related to the protection and sustainable use of marine biodiversity in an integrated and balanced way with respect to fisheries interests, as well as being best situated to coordinate the myriad of other relevant international institutions and processes”.49 In any case, the two instruments could, to a greater extent, have been regarded as mutually supportive than was the case, establishing an interrelationship like that between UNGA/LOSC and other bodies such as IMO and FAO.

It is likely that the institutional dispute between the two bodies speeded up the launch of a process under UNGA on the conservation and sustainable use of biodiversity in areas beyond national jurisdiction in which area-based management, including marine protected areas, is an important component. This process is further discussed below.

4 The possible role of EBSAs in a coming BBNJ implementing agreement

The process that began with the meeting in 2006 of the UNGA Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of biodiversity beyond national jurisdiction is still ongoing. This group held nine meetings; on the basis of its recommendations, UNGA established a Preparatory Committee which in 2017 presented substantive recommendations on the elements of a draft text of a legally-binding instrument on BBNJ under LOSC. The UNGA followed up by adopting a resolution to convene an Intergovernmental Conference (IGC) to negotiate the text of an implementing agreement on the conservation and sustainable use of BBNJ.50

The IGC was to meet for four sessions, with one in 2018, two in 2019 and one in 2020, but the fourth meeting has been postponed until 2022 due to the COVID-19 pandemic. Given the many unresolved issues, the process may well be extended beyond four meetings.

Since 2011, discussions in the various UN forums on the BBNJ instrument have focused on a package of four topics: 1) marine genetic resources, including questions on benefit-sharing, 2) measures such as area-based management tools, including marine protected areas, 3) environmental impact assessments and 4) capacity-building and the transfer of marine technology. The UNGA Resolution establishes that the IGC negotiations shall also address this package “in particular, together and as a whole”.51

The potential role of EBSAs is important, not least in relation to “measures such as area-based management tools, including protected areas”. Designation of MPAs
and application of other area-based management tools must be based on the best available scientific information. Here the EBSA instrument is well-placed, with its many and representative area identifications and descriptions. EBSA scientific information could also prove important in the preparation of EIAs and strategic environmental assessments (SEAs) of plans and programmes likely to be covered by the BBNJ implementing agreement.

In the lengthy BBNJ process, the EBSA concept has been mentioned only sporadically, and the process has not interacted with the parallel CBD process of describing EBSAs. The 2011 UNGA Resolution on Oceans and Law of the Sea merely “notes” the work of the CBD on marine issues, with no reference to EBSAs.52

However, there are some indications of openness as to letting EBSAs serve as scientific backing for decisions taken under the future instrument. The President of the IGC has issued a draft text of an agreement as basis for negotiations at IGC 4, including a wide range of options to reflect the diverging opinions on the topics expressed at the IGC meetings and in writing by the negotiators. The draft text includes an Annex 1 with indicative criteria for identification of areas requiring protection. These criteria largely cover the EBSA criteria described above.53 Further, a draft article on Environmental Impacts Assessments (EIA) is titled “Areas identified as ecologically or biologically significant or vulnerable” stipulating that planned activities in such areas shall be subject to EIA.54

The following illustrates the potential value of the EBSA instrument as scientific justification of protection of marine biodiversity in ABNJ's, using the Central Arctic Ocean as an example.

5 The Central Arctic Ocean as a regional example of the potential importance of EBSAs for protecting marine biodiversity beyond national jurisdiction

Due to ecological and biological uniqueness, two areas, together covering the entire Central Arctic Ocean beyond national jurisdiction, have been identified and described as EBSAs and included in the EBSA Repository.55 The descriptions were elaborated by a regional EBSA workshop in 2014.56 Among other scientific sources they build on the well-reputed scientific programmes conducted by the Arctic Council Working Group on the Conservation of Arctic Flora and Fauna (CAFF) and other working groups of the Arctic Council.

The Arctic Ocean is encircled by five coastal states – Canada, Denmark/Greenland, Norway, Russia and the USA, with much of the Ocean under their national jurisdiction. A large central portion, ca. 2.8 million square kilometres, is high seas beyond national jurisdiction.

The Arctic Ocean is unique in terms of marine biodiversity. Its shelves are the most extensive of all oceans, covering about half its area and comprising diverse ecosystems – such as millennia-old ice shelves, multi-year sea ice, cold seeps and
hot vents and associated life-forms.\textsuperscript{57} It houses approximately 5000 animal species, 2000 types of algae, and unknown numbers of ecologically critical microbes.\textsuperscript{58} This multitude of life-forms is well adapted to the extreme and seasonal conditions of the Arctic Ocean environment – but is also highly sensitive to changes in these conditions. The ice of the Arctic Ocean is crucial to the global environment, given its key role in shaping the world’s climate system.\textsuperscript{59} For decades, the dominant multi-year ice of the Arctic Ocean was a relatively stable ecological system with a consistent species composition of flora and fauna. In recent years, however, up to 40% of the Ocean has been ice-free during summer due to global warming, and ice thickness has diminished by 65% over the period 1975–2012.\textsuperscript{60} Arctic marine ecosystems are also vulnerable to ocean acidification.\textsuperscript{61}

In addition, new stressors and pressures to this fragile ecosystem have emerged as previously inaccessible marine areas have been opened. This has created new opportunities for economic development in the form of shipping routes, fishing, extraction of natural resources and tourism. The commercial interest comes from both within and outside the Arctic region.

The climatic and environmental changes of the Arctic region – not least, the retreating sea ice – have led to growing international attention and perceptions of the Arctic Ocean as a global common, with calls for greater protection from human activity.\textsuperscript{62} This has become particularly relevant after the protection of another polar common: the declaration in 2016 of the world’s largest marine protected area in the Ross Sea, Antarctica.\textsuperscript{63}

There is no regime in place for the Arctic Ocean to protect biodiversity \textit{per se}. The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean between the coastal states the EU, China, Japan and South Korea, is as yet the only biodiversity related legal regime that covers the Central Arctic Ocean specifically. Concluded at a time when there was still no commercial fishing in this area, it bans unregulated fishing for an initial period of 16 years after entering into force in June 2021. This period can be extended every five years until scientists confirm that commercial fishing can be done sustainably and until the parties agree on mechanisms to ensure the sustainability of fish stocks.\textsuperscript{64}

To some degree, other global and regional regimes are also relevant for protecting biodiversity in the Arctic Ocean, but together they provide a legal framework that is patchy in terms of geographical coverage, content and associated countries.\textsuperscript{65} For instance, no regime covers the extractive industry, or authorizes the designation of marine protected areas and the invocation of EIAs, thereby leaving gaps in applying a holistic ecosystem approach.

These shortcomings largely mirror those of other marine regions around the world, and thereby justify key rationales for having a global instrument on BBNJ: to fill gaps, to provide a global mechanism for coordinating existing bodies and treaties across geographic areas and sectors, and to provide common environmental standards without hindering more ambitious ones.\textsuperscript{66}
The EBSA descriptions of the Central Arctic Ocean may have dual functions in terms of possible future protection of the Ocean: First they may provide a strong scientific argument overall for decision-makers to develop an ecosystem-based protection regime for the Central Arctic Ocean. If so decided, the EBSA descriptions could serve as scientific justification for the specification of the most adequate protective measures.

6 Discussion and Conclusions

The Convention on Biological Diversity is often portrayed in a negative light, with the focus on issues like its broad intangible scope, the qualified legal provisions, and the unachieved ten-year targets set by the CBD COP. In this context, the EBSA process and mechanism are an obvious, albeit little-noted, CBD success. The identification and scientific description of the 321 EBSAs contained in the repository hosted in the CBD Clearing-House Mechanism is indeed an important achievement. The EBSAs have improved our understanding of the ecological and biological significance of many components of the oceans and have provided a scientific basis for States and intergovernmental authorities to select the most adequate measures to protect marine biodiversity. EBSAs provide information that is not only useful for management planning, but also offers a focus for research and monitoring of various ocean features. Moreover, the EBSA regional workshop process has facilitated scientific collaboration, networking, and capacity-building at various scales around the world.

EBSA identification and description is not a once-and-for-all exercise. The process must remain ongoing, keeping track of the constant growth in scientific information by identifying new areas that meet the EBSA criteria and modifying the description of existing areas as new information emerges. Using the Central Arctic Ocean EBSAs again as an example: While these are important as they stand for any measures to protect the Ocean, they address marine ecosystems undergoing rapid changes. This illustrates the need for periodic modifications of the descriptions.

The current stalemate among CBD parties on how to incorporate new information on EBSA features is a serious setback – especially at a time when the EBSA mechanism has the potential for increasing its importance as a scientific support mechanism for the coming BBNJ instrument under LOSC. As argued by Dunn et al., it indicates that the current commitment of the parties to the CBD to advance the EBSA process is now several steps removed from their earlier ambition to use the information gathered throughout the EBSA process to establish a representative network of marine protected areas.67

Disagreement on how to continue the EBSA process is rooted in old disputes on the mandate of the CBD vis-à-vis LOSC. These issues were thought to have been settled by assigning CBD to provide scientific information and advice on biologically and ecologically sensitive sea areas. However, some States apparently still see
any mandate of the CBD with its conservation objective as a threat to the LOSC regime of freedom of the seas. This perception seems to disregard that the duty to protect and preserve the marine environment is well established under international law – not only by the CBD but also by LOSC. The UNGA process for establishing an implementing legally binding instrument under LOSC on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction clearly underscores this duty.

Moreover, CBD COP decisions over the years have taken care to stress that the identification of an area as an EBSA does not imply that specific conservation measures must necessarily be adopted by States. Such CBD decisions indicate recognition of the ecological significance of an area, leaving the States to determine the specific measures necessary according to international law.

The EBSA process under the CBD should be placed in the broader context of international law, under which no treaty is to work in isolation from others but according to a logic of mutual supportiveness. Regarding a future BBNJ instrument, if an EBSA mechanism is not in place, something similar will have to be established to provide scientific justification for area-based measures under the instrument. If disagreement continues under the CBD on the future EBSA process, it would behove the Intergovernmental Conference negotiating the BBNJ instrument to put pressure to bear on the CBD, by sending a clear message on the importance of the EBSA mechanism for operationalization of the future instrument.

NOTES
10. Ibid.


19. IMO Assembly Resolution A.982(24). Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (PSSAs).

20. LOSC Article 156.


24. Diz et al.

25. LOSC Articles 197, 207.4, 208.5, 209.1, 210.4, 211.1, 212.3, and 117–118.


Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks was adopted in 1995 and came into force in 2001. (Accessed 26 January 2022).

33. UNGA Resolution A/RES/59/24, para. 73. (Accessed 26 January 2022).
34. Morgera.
36. Ibid.
37. Ibid.
38. However, no country expressed support for CBD as a host for an implementing agreement, whereas many supported such an agreement under LOSC.
40. Morgera.
44. Ibid.
45. Morgera.
46. This assumption is based on observations by the present author from participating in several meetings in this field under the CBD and LOSC.
49. Discussions on high-seas protected areas at CBD COP 8 were dominated by industrialized countries. For developing countries, the overriding priority concerned access and benefit-sharing related to genetic resources.
50. Morgera.
52. Ibid.
55. Ibid., Article 27.
58. Ibid.
59. Ibid.
62. Ibid.
65. This includes the IMO International Code for Ships Operating in Polar Waters (Polar Code) that entered into force in January 2017; it covers the full range of design, construction, equipment, operational, search and rescue and environmental protection matters relevant to ships operating in the inhospitable waters surrounding the two poles. It also includes the two regional regimes on the Protection of the Marine Environment of the North-East Atlantic (OSPAR) and the North-East Atlantic Fisheries Commissions (NEAFC) that cover eastern parts of the Central Arctic Ocean.
67. Dunn et al.
68. Diz et al.