



An International Instrument on Conservation and Sustainable Use of Biodiversity in Marine Areas beyond National Jurisdiction

Exploring Different Elements to Consider

PAPER VI

Options and Approaches for Establishing and Managing Marine Protected Areas in ABNJ^{*}

By Elisabeth Druel and Kristina Gjerde, with the assistance of Duncan Currie, Daniela Diz and Robin Warner

Commissioned by the German Federal Agency for Nature Conservation with funds from the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety.



^{*} DISCLAIMER: The views expressed in this paper do not necessarily reflect those of the German Federal Agency for Nature Conservation or the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety.

1. Background

At the 2012 United Nations Conference on Sustainable Development (Rio+20), States committed themselves *‘to address, on an urgent basis, building on the work of the Ad Hoc Open-ended Informal Working Group and before the end of the sixty-ninth session of the General Assembly, the issue of the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, including by taking a decision on the development of an international instrument under the United Nations Convention on the Law of the Sea.’*² This commitment was recalled and reaffirmed by the United Nations General Assembly (UNGA) in its 67th and 68th session.³ In its resolution 68/70, the UNGA also requested the United Nations 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 (UN Working Group) to make recommendations to the UNGA *‘on the scope, parameters and feasibility of an international instrument under the Convention’*.⁴ These recommendations shall help to prepare for the decision to be taken at the 69th session of the UNGA in 2015, whether to start the negotiation of an international instrument on the conservation and sustainable use of biodiversity in areas beyond national jurisdiction (ABNJ).

The International Union for Conservation of Nature (IUCN) in collaboration with different partners has prepared a series of policy briefs to provide technical input to the ongoing ABNJ discussions, and thereby support the UNGA decision-making process. As indicated in **Paper I**, one of the issues to be discussed under ‘parameters’ could be options and approaches for establishing and managing marine protected areas (MPAs) in areas beyond national jurisdiction. The following paper aims to provide an overview of the current challenges to their establishment in ABNJ as well as different approaches on including MPAs in an international instrument for ABNJ under the United Nations Convention on the Law of the Sea (UNCLOS).

2. Challenges

Marine protected areas are widely acknowledged as an important area-based management tool (ABMT) for biodiversity conservation as part of a larger suite of tools to enhance sustainable development. MPAs are important components of ecosystem-based management as they can provide multi-sectoral protection to habitats or ecosystems that are, for example, slow-growing, unique, representative, important for life history stages or especially biodiverse or productive. Ecologically-connected networks of MPAs are considered crucial for sustaining deep sea ecosystems as well as highly mobile seabirds, marine mammals, sea turtles and fish species. Such networks can safeguard spatially dispersed larval sources, migratory routes, feeding, nursery and breeding grounds. On a larger scale, representative networks of MPAs, designed to protect characteristic habitats and species on a biogeographic basis, can be an important component of a precautionary approach, as they offer a scientifically rigorous way to protect not just what is known to be important today, but what may turn out to be important tomorrow. Thus systematically-designed networks of

² UNGA resolution 66/288. *‘The future we want.’* UN doc. A/RES/66/288, of 11 September 2012. Paragraph 162.

³ UNGA resolution 67/78. *‘Oceans and the law of the sea.’* UN doc. A/RES/67/78, of 11 December 2012. Paragraph 181. UNGA resolution 68/70. *‘Oceans and the law of the sea.’* UN doc. A/RES/68/70, of 9 December 2013. Paragraph 197.

⁴ UNGA resolution 68/70. *‘Oceans and the law of the sea.’* UN doc. A/RES/68/70, of 9 December 2013. Paragraph 198.

MPAs can help to sustain marine life in the face of mounting human impacts and pressures from climate change and ocean acidification, in essence insurance for the future, by building resilience and giving time for ecosystems to adapt.⁵

Despite existing obligations to protect and preserve the marine environment and its biodiversity⁶, and globally agreed goals and targets for the establishment of representative systems and networks of MPAs⁷, the current legal system presents multiple challenges that hinder their achievement in ABNJ. Challenges include:

- The lack of a global, legally-binding framework for the establishment and management of a system of multi-sectoral MPAs in ABNJ;
- The lack of clear mandates and shared principles for integrated, ecosystem-based and precautionary management of marine biodiversity in ABNJ;
- The absence of common goals, objectives, criteria, standards and methodology for MPA networks in ABNJ;
- The sector-based approach to management of activities impacting ocean health;
- The lack of common standards or requirements for environmental impact assessments across sectors;
- The difficult cooperation and coordination between different competent organisations at the global and regional levels;
- The absence of a global recognition of the MPAs established at the regional level; and
- The geographical gaps in the current coverage of ABNJ by organisations dedicated to the protection of the marine environment such as the regional seas programmes.⁸

Moreover, even when sectoral organisations may choose to apply ABMT to protect specific areas from activities falling under their organisational mandate (as described in **Paper V**), these alone would not be sufficient to sustain marine biodiversity in ABNJ. Reasons for this include:

⁵ UNEP. (2006). *Ecosystems and Biodiversity in Deep Waters and High Seas.* UNEP Regional Sea Reports and Studies No. 178. UNEP/IUCN, Switzerland. 58 pp. at www.unep.org/pdf/EcosystemBiodiversity_DeepWaters_20060616.pdf

⁶ Article 192 of UNCLOS imposes a general obligation on States to *'protect and preserve the marine environment.'* Article 194.5 further specifies that measures taken are to *'include those necessary to protect and preserve rare and fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.'* The 1995 UN Fish Stocks Agreement calls for States and regional fisheries management organizations (RFMOs) to, *inter alia*, protect biodiversity in the marine environment (Article 5(e)). While the Convention on Biological Diversity (CBD) only applies to processes or activities under national jurisdiction or control that may affect biodiversity beyond national jurisdiction, it reaffirmed that the conservation of biological diversity is a 'common concern of humankind'.

⁷ The 2002 World Summit on Sustainable Development adopted a goal of achieving representative networks of MPAs by 2012. In 2010, this goal was elaborated by the Parties to the CBD in Aichi Target 11 according to which *'by 2020, at least [...] 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, 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'*. CBD COP 10, Decision X/2. *'Strategic Plan for Biodiversity 2011/2020.'*

⁸ Ban, N.C., Bax, N.J., Gjerde, K.M., Devillers, R., Dunn, D.C., Dunstan, P.K., Hobday, A.J., Maxwell, S.M., Kaplan, D.M., Pressey, R.L., Ardron, J.A., Game, E.T. & Halpin, P.N. (2013). *'Systematic conservation planning: A better recipe for managing the high seas for biodiversity conservation and sustainable use.'* Conservation Letters 00 (2013) 1–14 first published online: 22 FEB 2013 DOI: 10.1111/conl.12010.

- Most sector-based ABMTs do not aim to protect all the features of conservation importance within their boundaries, including the overall health and diversity of the ecosystem;
- A case-by-case approach to the establishment of ABMT - or even MPAs - is non-systematic and even random and hence unlikely to result in a coherent network of ecologically representative and well-connected systems of protected areas;⁹ and
- There is no mechanism to ensure the coordination of the measures adopted by these organisations, presenting the potential for gaps, duplication of efforts and conflicting results.

3. State of Play

Scientific and technical progress

Much scientific and technological work has already been done that can inform the elaboration of enhanced conservation measures, including MPA networks in ABNJ. To help States and competent international organizations identify areas in need of enhanced management – whether through MPAs, environmental impact assessments or other measures – the CBD in 2008 adopted a set of scientific criteria¹⁰ for ecologically or biologically significant marine areas (EBSAs), including in ABNJ.¹¹ These include, in summary form:

- Uniqueness or rarity;
- Special importance for life history of species;
- Biological productivity;
- Importance for threatened, endangered or declining species and habitats;
- Vulnerability, fragility, sensitivity, slow recovery;
- Biological diversity;
- Naturalness.

The CBD has similarly provided scientific guidance on the design of representative networks of MPAs. In short, MPA networks should incorporate five components¹²:

- Ecologically and biologically significant areas (including officially recognized EBSAs as well as areas likely to be significant);
- Representativity¹³ (capturing the full range of biotic and habitat diversity of the range of marine ecosystems on a biogeographic basis);
- Connectivity (recognizing biotic and functional linkages);
- Replicated ecological features (more than one site to contain examples of species, habitats and ecological processes of a given biogeographic area);
- Adequate and viable sites (sufficient in size and levels of protection).

⁹ Ibid.

¹⁰ CBD COP 9, Decision IX/20. *'Marine and Coastal Biodiversity.'* Annex I.

¹¹ The CBD Conference of the Parties has recognized that *'Areas found to meet the criteria may require enhanced conservation and management measures, and [...] this can be achieved through a variety of measures, including marine protected areas and impact assessments'*.

¹² CBD COP 9, Decision IX/20. *'Marine and Coastal Biodiversity.'* Annex II.

¹³ Representativity is captured in a network when it consists of areas representing the different biogeographical subdivisions of the global oceans and regional seas that reasonably reflect the full range of ecosystems, including the biotic and habitat diversity of those marine ecosystems.

To facilitate the description of areas meeting the EBSA criteria, the CBD is currently convening a series of regional expert workshops.¹⁴ Expert workshops have already been organized in many regions, and the results of the first two workshops, in the Western South Pacific and Caribbean and Mid-Atlantic, have already been reviewed by the CBD Conference of the Parties and transmitted to the UNGA and the relevant competent intergovernmental organizations, but with no clear response to date. While it is not intended that all EBSAs become MPAs, the expert information compiled through the CBD EBSA process can provide an important basis for decisions regarding future cooperation and management.

In ABNJ, the CBD does not have a management role – its role instead is to produce scientific and technical advice which can be used by the competent authorities in these areas. The absence of a global mandate for the establishment and management of MPAs in ABNJ, as well as the issue of the coordination and cooperation between the various existing global and regional organisations, leaves the results of this important scientific endeavour hanging, without any effective mechanism for an appropriate response.¹⁵

Experience in designating MPAs at the regional level

In the meantime, a few regional systems are looking at the issue of MPAs in ABNJ. Although there are 18 regional seas programmes¹⁶, only four of them currently have the mandate to address ABNJ: (i) the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention); (ii) the Convention on the Conservation of Antarctic Marine Living Resources (CAMLR Convention); (iii) the Convention for the Protection of the Natural Resources and Environment of the South Pacific (SPREP Convention); and (iv) the Convention on the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention). To these four conventions must be added the Protocol on Environmental Protection to the Antarctic Treaty, or Madrid Protocol, which also applies in ABNJ.

These five conventions all contain to some extent a legal basis to establish MPAs in ABNJ and four of them are currently engaged in the process of establishing and managing protected areas beyond national jurisdiction.¹⁷ In 2010, Contracting Parties to the OSPAR Convention established the first network of MPAs in ABNJ, comprising as of January 2014 seven MPAs located partly or wholly in ABNJ. In the Southern Ocean, Contracting Parties to the CAMLR Convention established in 2009 the first ever MPA entirely beyond national jurisdiction and are currently looking at the designation of further sites, although efforts to create an MPA in the Ross Sea have failed to date. Work is ongoing in the Mediterranean Sea through the Barcelona Convention to designate Specially Protected Areas of Mediterranean Importance (SPAMIs) in ABNJ.

The work currently undertaken through regional agreements, however, raises a number of important issues. Regional seas conventions involved in ABNJ are in essence framework agreements and their

¹⁴ CBD COP 10, Decision X/29 'Marine and Coastal Biodiversity.' Paragraph 26.

¹⁵ Ardron, J., Rayfuse, R., Gjerde, K. and Warner, R. (in press). 'The sustainable use and conservation of biodiversity in ABNJ: what can be achieved using existing international agreements?' Marine Policy.

¹⁶ 13 established under the auspices of the United Nations Environment Programme (UNEP) and 5 partners programmes.

¹⁷ The SPREP Convention has not been active on the subject yet. For a detailed overview of the legal provisions of these five regional agreements, see Table 1 at the end of the paper.

regulatory mandate is rather limited. Although they may establish MPAs, when it comes to management, there are a number of human activities which fall under the competence of other bodies. At the regional level, this is often the case for fisheries: with the notable exception of the CAMLR Convention, fishing activities in the high seas are regulated through regional fisheries management organisations (RFMOs) and thus regional seas conventions at present have to gain the cooperation of RFMOs to protect any MPA they seek to establish from fishing impacts. The same is true with respect to shipping activities regulated by the IMO and seabed mining activities regulated by the ISA. It is up to the Contracting Parties of the regional conventions to turn to these organisations to seek the adoption of complementary management measures for the MPAs they have established at the regional level.

Current problems in cooperation and coordination mean that these sectoral processes apply different criteria and procedures for protecting a given area (hence complicating an already complex issue) and may involve a much larger number of States than the original Contracting Parties to a regional seas convention. Many of these States may not have any interest in the concerned regions and therefore no reason to consider its protection as a priority. This could also lead to situations where the extent of protection granted to a given area would vary considerably depending on the number of Contracting Parties to the agreement through which a human activity would be regulated. For example, an area may be declared as an MPA at the regional level: this decision would only apply to Contracting Parties to the regional seas convention. These Contracting Parties may seek additional protection at the IMO: a decision regarding shipping may (or may not) be adopted there which would apply to all members of the IMO. In the meantime, fisheries would be regulated through the competent RFMO, with a number of Contracting Parties being distant-water fishing nations, present there because they have an economic interest in the fisheries of the region.

One major gap here is therefore the lack of global recognition granted to the MPAs adopted at the regional level, which are legally-binding only for the Contracting Parties to the regional agreement, and not for third States. At the same time, it must be recognized that some States question the competence of regional organizations to adopt any measures that may affect global interests or resources.

In addition, whilst some progress at the regional level is being made, it is very slow and patchy, and it should be noted that there are important gaps in the current coverage of ABNJ by regional seas conventions. In most parts of the oceans, only RFMOs exist (when they do exist, as there are gaps in RFMOs coverage as well) and their role is certainly not to replace regional seas conventions when it comes to addressing the full range of biodiversity concerns. In order to address this situation, the establishment of *ad hoc* collaborations between interested States, in order to enhance the level of protection in a given area, might be sought. This is the case for example in the Sargasso Sea, with the work undertaken by the Sargasso Sea Alliance. But this kind of process also suffers from severe limitations, similar to the ones met by the regional seas conventions: difficulty to achieve cooperation and coordination between competent authorities, and lack of global recognition of any

MPAs established.¹⁸ This also raises equitable concerns as it is clear that under the current system, not all parts of the oceans will benefit from the same level of attention.

4. Possible Future Approaches

A new international instrument under UNCLOS could help to fill weaknesses and gaps regarding the adoption of ABMT for biodiversity conservation purposes, including networks of MPAs by, at a minimum:

- Establishing a binding global and uniform objective and framework for the establishment of ecologically-connected and representative MPA networks and reserves in ABNJ;
- Giving Contracting Parties an explicit mandate to submit MPAs proposals, including for areas where there is currently no regional seas programme;
- Giving States and competent international organisations an explicit mandate to cooperate and coordinate for, among other things, the establishment and management of MPA networks;
- Providing a mechanism for international endorsement of MPA proposals which, as a consequence, would make it mandatory for Contracting Parties to the new instrument to comply with agreed management measures; and
- Requiring States and competent organizations to consider adopting measures to prevent significant adverse impacts throughout ABNJ, but with more stringent procedures for areas of ecological or biological significance. This would be similar to what is already done in the context of deep sea bottom fishing in the high seas for areas meeting the FAO criteria for ‘vulnerable marine ecosystems.’

With respect to the actual content of such an instrument, much can be learned from what has already been done through existing regional agreements (see Table 1 and Annex I at the end of the paper for further information). With respect to legal basis, criteria, objectives, establishment procedures and protective measures, approaches include:

Legal mandate

As with UNCLOS, most regional seas agreements did not start out with a specific mandate for marine protected area networks, but adopted them in many cases with a view to implementing global commitments under the CBD and the World Summit on Sustainable Development. Only the CAMLR Convention had a pre-existing mandate to designate 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 (Article IX.2 (f) and (g) of the CCAMLR). It should be noted that the SPREP Convention directly translated the UNCLOS obligation in Article 194.5 (on the protection of rare and fragile ecosystems and habitat of depleted, threatened and endangered species) into a direct obligation to establish protected areas (Article 14). SPREP however has not yet adopted a Protocol to further elaborate this obligation. Such Protocols, Annexes and even ministerial level declarations may create a legally binding mandate amongst their parties, but not with respect to third parties.

¹⁸ Freestone, D., Johnson, D., Ardron, J., Killerlain Morrison, K., Unger, S. (in press). *‘Can existing institutions protect biodiversity in areas beyond national jurisdiction? Experiences from two on-going processes.’* Marine Policy.

Criteria

The sets of criteria in most of the agreements contain some common elements. These common elements are also reflected at the global level in IMO's ecological criteria for identifying particularly sensitive sea areas (PSSAs) and the CBD EBSA criteria and guidance for the design of representative networks of MPAs. Timing for the adoption of criteria has varied: some sets of criteria were elaborated after the agreement/annex was adopted; other agreements such as the Madrid Protocol contained comprehensive criteria from the outset.

Objectives

The regional seas agreements focus on the establishment of networks of MPAs for purposes ranging from protection of wilderness areas, protection for scientific study; to the protection of representative habitats or areas of particular importance to the region or the functioning of ecological processes. CCAMLR, in the conservation measure adopted in 2011 (CCAMLR Conservation Measure 91-04 (2011)) provides the most recently agreed range of objectives. Under this measure MPAs are to be adopted on the basis of best available scientific evidence and consistent with UNCLOS to achieve the following objectives:

- The protection of representative examples of marine ecosystems, biodiversity and habitats at an appropriate scale to maintain their viability and integrity in the long term;
- The protection of key ecosystem processes habitats and species, including populations and life history stages;
- The establishment of scientific reference areas for monitoring natural variability and long term change or for monitoring the effects of harvesting and other human activities on marine living resources and on the ecosystems of which they form part;
- The protection of areas vulnerable to impact by human activities, including unique, rare or highly biodiverse habitats and features;
- The protection of areas critical to the functioning of local ecosystems; and
- The protection of areas to maintain resilience or the ability to adapt to the effects of climate change.

Designation process

In many agreements, proposals for MPAs may come from a variety of sources not limited to Contracting Parties. For example, under the Antarctic Madrid Protocol, proposals may also come from the Committee on Environmental Protection (CEP), the Scientific Committee for Antarctic Research, or CCAMLR. Protected areas with a marine component require the prior approval of CCAMLR (the result of this requirement has essentially shifted responsibility for designation of MPAs to CCAMLR and lack of involvement in ABNJ within the CEP). In the Mediterranean, proposals for protected areas (SPAMIs) with any area beyond national jurisdiction must be submitted by two or more Parties and require full consensus.

Protective measures

The type and stringency of measures adopted through regional agreements varies greatly. Under the Madrid Protocol, there are two types of protected areas: Antarctic Specially Protected Areas (ASPAs) and Antarctic Specially Managed Areas (ASMAs). ASPAs are designed to provide strict protection:

entry to an ASPA is prohibited except in accordance with a permit. The designation of an ASMA is designed to assist in the planning and coordination of activities in the area, avoid possible conflicts, improve cooperation between the Parties and minimise environmental impacts. Entry into ASMAs does not require a permit but these areas may contain one or more ASPAs where entry is prohibited without a permit. IUCN Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas Guidelines describe the various types of MPAs which range in level of expected protection (see **Paper V**).¹⁹ They recognise that *'areas subject to some form of management could be MPAs or parts of MPAs in some cases, but MPA status should not be assumed and decisions must be made on a case-by-case basis, the essential criterion being whether nature conservation is the primary objective.'*

Regulatory mandate

CCAMLR, with its mandate for conservation (including rational use) of living marine resources, has the authority to close discrete areas to all fishing activity but no authority to regulate other activities. OSPAR, on the other hand, can adopt MPAs through a decision binding on its members, but cannot regulate activities relating to fishing, shipping or seabed mining. While OSPAR has adopted management objectives, it has been able to adopt only limited management measures (such as requiring environmental impact assessments and strategic environmental assessments) for the seven OSPAR MPAs it has designated. In terms of direct management of human activities in ABNJ, the North East Atlantic Fisheries Commission (NEAFC) has adopted a recommendation closing five areas to bottom trawling in the North-East Atlantic. The boundaries of these five areas match more or less the boundaries of the OSPAR MPAs, with the exception of the Josephine Seamount MPA, in which bottom trawling is still allowed.

5. Conclusions

Thus with respect to a new international instrument under UNCLOS, these observations suggest a range of options:²⁰

- **Detail**

The instrument could be comprehensive, with rules, procedures, criteria and objectives for MPA networks and other ABMTs spelled out or it could be a framework providing a clear legal mandate for the establishment of MPA networks but with details specified in an Annex or Guidelines adopted by a decision of the Parties. A comprehensive instrument has the advantage of certainty, while a framework instrument may be quicker to adopt and more flexible in application.

- **Designation process**

Proposals for MPAs could be invited from multiple sources, including a dedicated scientific advisory body, or nominations might come from one or a specified number of Contracting Parties. A dedicated scientific advisory body is more likely to have the expertise to develop appropriate nominations

¹⁹ Day J., Dudley N., Hockings M., Holmes G., Laffoley D., Stolton S. & Wells, S. (2012). *'Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas.'* Gland, Switzerland: IUCN.

²⁰ Many of these options are based on the options developed in Druel, E. and Gjerde, KM. (2013). *'Sustaining marine life beyond boundaries: Options for an implementing agreement for marine biodiversity beyond national jurisdiction under the United Nations Conventions on the Law of the Sea.'* Marine Policy.

based on agreed criteria that could address the full range of objectives (e.g. connected, representative) for MPA networks than would a process based on a case by case approach requiring national champions. Or the scientific body may only have an advisory role, with nominations being made by States and/or other stakeholders.

- **Decision-making process**

Decisions to establish a specific MPA could require consensus from all Contracting Parties. Such decisions could be taken through a voting procedure when consensus cannot be achieved, as provided for in the OSPAR Convention, or there could be an opt-out provision such as is included in some modern RFMOs, such as the South Pacific RFMO.

- **Protective measures**

There are a wide variety of ways that protective measures for MPAs could be approached. For example, MPAs could automatically be closed to all activities other than transiting vessels; MPAs could automatically be closed to all or certain types of extractive activities but open for other uses; or MPAs could be open just to those activities that can be shown to have no more than a minor or transitory impact or not have the potential to cause significant adverse impacts. All such approaches would be highly precautionary, easily enforceable, and come with a high certainty that the MPA would meet its desired objectives. On the other hand, MPA protective measures could remain subject to the decisions and processes of existing sectoral organizations. Such a provision would not interfere with the mandate of existing organizations and hence help to gain consensus. However, the results could potentially be very slow, cumbersome, duplicative, and inconsistent and not result in a change in the status quo. Additional measures to ensure timely and effective cooperation and coordination would still be needed, as described below and more fully in *Paper II*.

- **Regulatory mandate**

As noted above, if the authority to adopt regulatory measures for MPAs were to remain with existing sectoral organizations, provisions to ensure that these organizations amended their mandates and decision-making processes to incorporate biodiversity objectives into their decision-making processes could be adopted. Strong mechanisms, including compliance mechanisms, in the overarching instrument could be adopted to encourage cooperation and coordination across and between competent organizations and regions. For example, the instrument could require or invite States and competent organizations to adopt area-based and other management measures necessary to achieve the objectives for which the MPA has been established within a finite period, of one or two years, with regular reports on progress to a Conference of Parties or other body. Default provisions could be included where certain protective measures might come into effect automatically – or would revert to a Conference of Parties, if a competent body failed to act within a specified period of time. Default mechanisms might also be needed to address unregulated activities, including new and emerging activities.

- **Global versus regional**

The agreement could establish a wholly global approach to the designation and management of MPAs. This would have the advantage of centralizing the decision-making processes, giving all States with an interest in the conservation of biodiversity in ABNJ a voice, and ensure that all regions were

equitably addressed. However, it could undermine the significant progress that has already been made in some regions, and undercut existing legal agreements and procedures. Thus some process might be needed to ensure global-level endorsement of regional agreements. At the other extreme, the agreement could adopt a wholly regional approach by initiating the development of regional oceans management organizations to integrate and coordinate activities within a specific region or sub-region. This could have the advantage of stimulating the development of regional systems in parts of the world where one does not exist for the moment, thereby building regional capacity where regional seas organizations were lacking, ensuring a harmonized approach at the regional scale, streamlining decision-making processes, and safeguarding that biodiversity concerns were injected into decision-making processes.

- **Institutional mechanisms**

Careful design of the institutional framework would be necessary to ensure that an efficient process for establishing and managing MPAs in ABNJ be established. Necessary actions in this respect might involve the establishment of a Conference of the Parties (COP) to the UNCLOS instrument. The COP could be competent to examine issues and adopt decisions regarding internationally recognised MPAs, the reform of existing institutions to enable proper collaboration and cooperative initiatives, consistency with the governing principles and objectives of the instrument, the development of regional capacity, as appropriate, to protect, conserve and sustainably use marine biodiversity in ABNJ, through, for example, the improvement of regional oceans management organisations and the amendment of mandates of existing regional organisations.

Table 1: Overview of Current Establishment and Management Processes for MPAs in ABNJ

Organisation	Contracting Parties	Legal basis to establish MPAs in ABNJ	Criteria for the establishment of MPAs	Establishment process	Management
OSPAR Commission	European Union, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom	<p>Article 1 (a) of the OSPAR Convention (geographical scope);</p> <p>Article 2 (1) (a) of the OSPAR Convention (conservation of ecosystems and restoration of marine areas);</p> <p>Articles 2 (a) and 3 (1) (b) of Annex V of the Convention on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area (establishment of protection and conservation measures).</p>	<p><u>Ecological criteria/considerations:</u></p> <ol style="list-style-type: none"> 1. Threatened or declining species and habitats/biotopes; 2. Important species and habitats/biotopes; 3. Ecological significance; 4. High natural biological diversity; 5. Representativity; 6. Sensitivity; 7. Naturalness. <p><u>Practical criteria/considerations:</u></p> <ol style="list-style-type: none"> 1. Size; 2. Potential for restoration; 3. Degree of acceptance; 4. Potential for success of management measures; 5. Potential damage to the area by human activities; 6. Scientific value. <p>(From Agreement 2003-17, Guidelines for the Identification and Selection of MPAs in the OSPAR Maritime Area).</p>	<p>Establishment through a decision of the OSPAR Commission (legally-binding).</p> <p>To date, 7 MPAs already established, partially or wholly in ABNJ, through Decisions 2010/1; 2010/2; 2010/3; 2010/4; 2010/5; 2010/6; 2012/1.</p>	<p>Adoption of management measures through a recommendation of the OSPAR Commission (non-legally binding).</p> <p>To date, 7 recommendations already adopted:</p> <p>Recommendations 2010/12; 2010/13; 2010/14; 2010/15; 2010/16; 2010/17; 2012/1.</p> <p>No competence of the OSPAR Commission to regulate fishing, seabed-mining or shipping (Article 4, Annex V of the OSPAR Convention).</p> <p>Necessity to engage in cooperation with other competent authorities (NEAFC, IMO, ISA...) to regulate human activities in OSPAR MPAs (Madeira process and Collective Arrangement).</p>

<p>Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)</p>	<p><u>Contracting Parties members of the Commission:</u> Argentina, Australia, Belgium, Brazil, Chile, China, European Union, France, Germany, India, Italy, Japan, Republic of Korea, Namibia, New Zealand, Norway, Poland, Russia, South Africa, Spain, Sweden, Ukraine, United Kingdom, United States, Uruguay.</p> <p><u>Contracting Parties non-members of the Commission:</u> Bulgaria, Canada, Cook Islands, Finland, Greece, Mauritius, Netherlands, Pakistan, Peru, Vanuatu.</p>	<p>Article 1 (1) of the CCAMLR (geographical scope);</p> <p>Article IX (2) (g) of the CCAMLR (designation of closed areas for purposes of conservation).</p> <p>Conservation Measure 91-04 (2011), general framework for the establishment of CCAMLR MPAs.</p>	<p>Establishment on the basis of the best available scientific evidence following advice of the Scientific Committee of CCAMLR, to achieve:</p> <ol style="list-style-type: none"> 1. The protection of representative examples of marine ecosystems, biodiversity and habitats; 2. The protection of key ecosystems processes, habitats and species; 3. The establishment of scientific reference areas; 4. The protection of areas vulnerable to impact by human activities; 5. The protection of features critical to the function of local ecosystems; 6. The protection of areas to maintain resilience or the ability to adapt to the effects of climate change. <p>(From Conservation Measure 91-04 (2011), general framework for the establishment of CCAMLR MPAs).</p>	<p>Establishment through a Conservation Measure of the CCAMLR, adopted by consensus.</p> <p>To date, 1 MPA already established in ABNJ (Conservation Measure 91-03 (2009) on the Protection of the South Orkney Islands southern shelf).</p> <p>Additional proposals (Ross Sea and East Antarctica) currently under consideration.</p>	<p>Activities restricted, prohibited or managed in the MPA include in the conservation measure establishing the MPA, together with priority elements for a management plan. Management plan to be annexed to the conservation measure.</p> <p>CCAMLR regulates fishing, research and monitoring. Need to cooperate with other organisations (ATCM, IMO...) to regulate other human activities such as tourism or navigation.</p>
<p>Antarctic Treaty Consultative Meeting (ATCM)</p>	<p><u>Consultative parties:</u> Australia, Belgium, Brazil, Bulgaria, Chile, China, Ecuador, Finland, France, Germany, India, Italy,</p>	<p>Article VI of the Antarctic Treaty (AT) (geographical scope);</p> <p>Article IX.2 (g) of the AT</p>	<p><u>ASPAs:</u> protection of outstanding environmental, scientific, historic, aesthetic or wilderness values, including:</p>	<p>Proposal made through the submission of a management plan to the ATCM by any Contracting Party, the Committee on</p>	<p>Article 5 of the Madrid Protocol: list of components of the management plans.</p>

	<p>Japan, Republic of Korea, Netherlands, New Zealand, Norway, Peru, Poland, Russian Federation, South Africa, Spain, Sweden, Ukraine, United Kingdom, United States, Uruguay.</p> <p><u>Non-Consultative Parties:</u> Austria, Belarus, Canada, Colombia, Cuba, Czech Republic, Denmark, Estonia, Greece, Guatemala, Hungary, Korea, Malaysia, Monaco, Pakistan, Papua New Guinea, Portugal, Romania, Slovak Republic, Switzerland, Turkey, Venezuela.</p>	<p>(adoption of measures to preserve and conserve living resources);</p> <p>Article 1 of the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol) (geographical scope);</p> <p>Annex V to the Madrid Protocol on Area Protection and Management, including Article 3 (creation of Antarctic Specially Protected Areas – ASPAs) and Article 4 (creation of Antarctic Specially Managed Areas – ASMAs).</p>	<ol style="list-style-type: none"> 1. Areas kept inviolate from human interference; 2. Representative examples of major terrestrial and marine ecosystems; 3. Areas with important or unusual assemblages of species; 4. The type locality or only known habitat of any species; 5. Areas of particular interest to ongoing or planned scientific research; 6. Examples of outstanding geological, glaciological or geomorphological features; 7. Areas of outstanding aesthetic and wilderness value; 8. Sites or monuments of recognised historic value; <p><u>ASMAs:</u> protection to assist in the planning and coordination of activities, avoid possible conflicts, improve cooperation between Parties or minimise environmental impacts. Include:</p> <ol style="list-style-type: none"> 1. Areas where activities pose risks of mutual interference or cumulative environmental impacts; 2. Sites or monuments of recognised historic value. 	<p>Environmental Protection, the Scientific Committee for Antarctic Research or the CCAMLR (Article 5, Madrid Protocol).</p> <p>Adopted through a measure (legally-binding) which becomes effective after being approved by all Contracting Parties. Protected areas with a marine component require the prior approval of CCAMLR.</p> <p>To date, designation of 6 exclusively marine ASPAs, 4 ASPAs with both marine and terrestrial components and 3 ASMAs with both marine and terrestrial components.</p>	<p>Article 3 of the Madrid Protocol: entry into an ASPA is prohibited except in accordance with a permit.</p> <p>Article 4 of the Madrid Protocol: entry into an ASMA may not require a permit.</p> <p>Article 6 of the Madrid Protocol: designation of the ASPAs and ASMAs for an indefinite period unless the management plan specifies otherwise and review of the management plan at least every five years.</p>
--	---	---	--	--	--

			(From Articles 3 and 4 of the Madrid Protocol)		
Meeting of the Parties to the Convention for the Protection of the Natural Resources and Environment of the South Pacific and Related Protocols (the Nouméa or SPREP Convention)	Australia, Cook Islands, Micronesia, Fiji, France, Marshall Islands, Nauru, New-Zealand, Papua New Guinea, Samoa, Solomon Islands, USA.	Article 2 (a) (ii) of the SPREP Convention (geographical scope – includes high seas pockets); Article 14 of the SPREP Convention (establishment of protected areas).	Article 14 of the SPREP Convention: protected areas should be established to protect and preserve rare or fragile ecosystems and depleted, threatened or endangered flora and fauna, as well as their habitats.	No MPA already established in the high seas pockets under the geographical scope of the SPREP Convention.	No MPA already established in the high seas pockets under the geographical scope of the SPREP Convention.
Meeting of the Parties to the Convention on the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and Meeting of the Parties to the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol)	Albania, Algeria, Bosnia and Herzegovina*, Croatia, Cyprus, European Union, Egypt, France, Greece*, Israel*, Italy, Lebanon, Libya*, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey. (* Parties to the Barcelona Convention but not to the SPA/BD Protocol).	Article 2 SPA/BD Protocol (geographical scope); Section 2 of the SPA/BD Protocol on Specially Protected Areas of Mediterranean Importance (SPAMIs), and especially Article 9 on the procedure for the establishment and listing of SPAMIs; Annex I of the SPA/BD Protocol on common criteria for the choice of protected marine and coastal areas that could be included in the SPAMI list.	SPAMIs should: 1. Be of importance for conserving the components of biological diversity in the Mediterranean; and/or 2. Contain ecosystems specific to the Mediterranean area or the habitats of endangered species; and/or 3. Be of special interest at the scientific, aesthetic, cultural or educational levels. Criteria to evaluate the Mediterranean interest of an area: 1. Uniqueness; 2. Natural representativeness; 3. Diversity;	Proposals for inclusion in the SPAMI list to be submitted by two or more neighbouring Parties concerned if the area is situated partly or wholly on the high seas (Article 9 of the SPA/BD Protocol). After approval by national focal points, the proposals are transmitted for inclusion in the SPAMI list to the Meeting of the Parties to the Barcelona Convention. Decision to include the proposal should be taken by consensus (Article 9 of the SPA/BD Protocol).	Proposals for inclusion in the SPAMI list must be accompanied by a management plan (Article 9 of the SPA/BD Protocol). To be included in the list, the protected area must have a management body (Annex I of the SPA/BD Protocol, Section D on protection, planning and management measures). Protection measures included in the management plan may cover a large variety of activities (dumping, navigation, fishing, scientific research...) (Article 6 of the SPA/BD Protocol).

			<p>4. Naturalness; 5. Presence of habitats that are critical to endangered, threatened or endemic species; 6. Cultural representativeness.</p> <p>Other criteria to take into consideration:</p> <ol style="list-style-type: none"> 1. Existence of threats likely to impair the values of the area; 2. Involvement of the public in the process of planning and management of the area; 3. Existence of a body representing stakeholders involved in the area; 4. Existence of an integrated coastal management plan. <p>(From Article 8 and Annex I of the SPA/BD Protocol).</p>	<p>Through a joint submission of France, Italy and Monaco, inclusion in 2001 of the Pelagos Sanctuary in the SPAMI list (UNEP(DEC)/MED IG13.8, 30 December 2001, Annex IV).</p>	<p>Protocol). Formal cooperation is needed with other competent authorities to establish the management plans of the MPAs.</p>
--	--	--	--	---	--

Annex I: MPA Approaches under Existing Regional Agreements

Protected Areas under the Environmental Protocol to the Antarctic Treaty (Madrid Protocol)

The 1991 Madrid Protocol was the first comprehensive environmental protection instrument to apply to the whole of the Antarctic Treaty area including the Antarctic continent and the marine areas south of 60 degrees south latitude. The Madrid Protocol has five Annexes. Annex V on Area Protection and Management provides for the establishment of a two tiered system Antarctic Specially Protected Areas (ASPAs) and Antarctic Specially Managed Areas (ASMAs). Under Article 3.1 of Annex V, any area including marine areas may be designated as an ASPA to protect outstanding environmental, scientific, historic, aesthetic or wilderness values, any combination of those values or ongoing or planned scientific research. Criteria for inclusion in the series of ASPAs reflect biodiversity concepts such as the conservation of representative examples of marine ecosystems and the type, locality or only known habitat of any species. Entry to an ASPA is prohibited except in accordance with a permit. The second type of area regulated by Annex V is the ASMA which also includes both land and marine areas. The designation of an ASMA is designed to assist in the planning and coordination of activities in the area, avoid possible conflicts, improve cooperation between the Parties and minimise environmental impacts. These areas may be designated where activities pose risks of mutual interference or cumulative environmental impacts and where there are any sites or monuments of recognised historical value. Entry into ASMAs does not require a permit but these areas may contain one or more ASPAs where entry is prohibited without a permit.

Marine Protected Areas under CCAMLR

Marine protected areas are also envisaged under CCAMLR. CCAMLR has a mandate to conserve and manage all marine living resources, except whales and seals, in the area south of 60 degrees south latitude and in the area between 60 degrees south latitude and the Antarctic convergence.²¹ The Convention explicitly adopts a precautionary and ecosystem-based approach to marine living resource management which recognises the complex interconnections between all parts of the Antarctic ecosystem. Antarctic Treaty parties have agreed to give the responsibility for the designation of MPAs at least those in open ocean areas away from the coast areas to CCAMLR.

A key component of CCAMLR's suite of conservation and management tools is the power to designate 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 (CCAMLR Art IX.2 (f) and(g)). CCAMLR Conservation Measure 91-04 (2011) provides a general framework for establishing MPAs in the CCAMLR area. Under this measure MPAs are to be adopted on the basis of best available scientific evidence and consistent with the 1982 United Nations Convention on the Law of the Sea (UNCLOS) to achieve the following objectives:

- The protection of representative examples of marine ecosystems, biodiversity and habitats at an appropriate scale to maintain their viability and integrity in the long term;

²¹ The Antarctic Convergence is the region of the Southern Ocean encircling Antarctica, roughly around latitude 55 degrees south (but deviating from this in places) where the cold waters of the Antarctic Circumpolar Current meet and mingle with warmer waters to the north.

- The protection of key ecosystem processes habitats and species, including populations and life history stages;
- The establishment of scientific reference areas for monitoring natural variability and long term change or for monitoring the effects of harvesting and other human activities on marine living resources and on the ecosystems of which they form part;
- The protection of areas vulnerable to impact by human activities, including unique, rare or highly biodiverse habitats and features;
- The protection of areas critical to the functioning of local ecosystems; and
- The protection of areas to maintain resilience or the ability to adapt to the effects of climate change.

CCAMLR establishes MPAs following the advice of its Scientific Committee by adopting conservation measures that include the following elements:

- Specific objectives of the MPA;
- Spatial boundaries of the MPA;
- Activities restricted, prohibited or managed and spatial and temporal limits on those activities;
- Priority elements for a management plan including research and monitoring plan;
- Period of designation.

Protected Areas in the Mediterranean

The 1995 Convention on the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol), provide for the establishment of a regional network of MPAs as well as the listing and regional recognition of Specially Protected Areas of Mediterranean Importance (SPAMIs). Sites included in the SPAMIs list may:

- Be of importance for conserving the components of biological diversity in the Mediterranean; and/or
- Contain ecosystems specific to the Mediterranean area or the habitats of endangered species; and/or
- Be of special interest at the scientific, aesthetic, cultural or educational levels (Article 8 of the SPA/BD Protocol).

Criteria to evaluate the Mediterranean interest of an area are provided in Annex I to the SPA/BD Protocol and are:

- Uniqueness;
- Natural representativeness;
- Diversity;²²
- Naturalness;
- Presence of habitats that are critical to endangered, threatened or endemic species;
- Cultural representativeness.

²² There are still areas of high seas in the Mediterranean as some states have not declared EEZs.

Proposals for inclusion in the SPAMI list must be submitted by two or more neighbouring Parties concerned if the area is situated partly or wholly on the high seas (Article 9 of the SPA/BD Protocol). As the areas to be selected are generally already protected through national measures, to be included in the list, the protected area must have a management plan, a management body, and protection measures (Annex I to the SPA/BD Protocol, Section D on protection, planning and management measures). Upon the inclusion of a protected area in the SPAMI list, Parties to the SPA/BD Protocol agree *'to comply with the measures applicable to the SPAMIs and not to authorise nor undertake any activities that might be contrary to the objectives for which the SPAMIs were established'* (Article 8.3 (b) of the SPA/BD Protocol).

Protected Areas in the North East Atlantic

The 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) focused largely on marine pollution and was updated in 1998 through Annex V to address the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area falling under the mandate of the Convention. Annex V specifically encourages the Contracting Parties to *'take the necessary measures to protect and conserve the ecosystems and the biological diversity of the maritime area, and to restore, where practicable, marine areas which have been adversely affected.'* However, due to the mandate of other international sectoral or global organisations, OSPAR's regulatory competences are limited to certain human activities. In this regard, Annex V specifies that the Commission does not have the mandate to adopt measures related to fisheries or maritime transport. It is also implicitly implied that the OSPAR Commission does not have the mandate to adopt measures related to seabed mining in the Area, as these activities fall under the mandate of the International Seabed Authority (ISA).

In 2003, the OSPAR Commission committed to create an *'ecologically coherent network of well-managed MPAs'* by 2010 (OSPAR Recommendation 2003/3). At the same time it adopted Guidelines for the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area (Agreement 2003-17) containing, among other things, ecological and practical criteria and considerations for the establishment of OSPAR MPAs. Ecological criteria/considerations include:

- Threatened or declining species and habitats/biotopes;
- Important species and habitats/biotopes;
- Ecological significance;
- High natural biological diversity;
- Representativity;
- Sensitivity; and
- Naturalness.

Practical criteria/considerations include:

- Size;
- Potential for restoration;
- Degree of acceptance;
- Potential for success of management measures;
- Potential damage to the area by human activities; and
- Scientific value.

MPAs are currently established through a (legally binding) decision of the OSPAR Commission and management measures adopted as a recommendation, which is not legally-binding.

List of Papers

Paper I: Introduction on Scope, Parameters and Feasibility

Paper II: Enhancing Cooperation and Coordination

Paper III: Options and Approaches for Access and Benefit-sharing

Paper IV: Governance Principles

Paper V: Understanding Area-based Management Tools and Marine Protected Areas

Paper VI: Options and Approaches for Establishing and Managing MPAs

Paper VII: Relation between Environmental Impact Assessments, Strategic Environmental Assessments and Marine Spatial Planning

Paper VIII: Options for Environmental Impact Assessment Elements

Paper IX: Technology Transfer and Capacity-building

Paper X: Existing Regulatory, Institutional and General Governance Gaps

Paper XI: Basic Ideas for a Possible Institutional Structure

Paper XII: International Procedures to Ensure Science-based Decision-making

Paper XIII: Compliance and Verification Mechanisms