



## The regional approach to the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction

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### ARTICLE INFO

Available online 28 February 2014

#### Keywords:

Areas beyond national jurisdiction  
High seas  
Oceans governance  
Regional seas

### ABSTRACT

The development of regional initiatives for the protection of the environment is a cornerstone of international environmental policies. With regard to marine and coastal issues, this regionalisation has mainly been taking place through regional seas programmes and Regional Fisheries Management Organisations. Some regional initiatives and organisations have progressively extended their activities to areas beyond national jurisdiction. This paper aims at analysing these recent developments, highlighting their interests and challenges, and proposing options to strengthen the efficiency of regional actions in these areas. It also highlights the need to consider the global discussions on a possible new global agreement and the development of regional actions as two interconnected processes.

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### 1. Introduction

Global treaties and bodies are useful to establish general principles and the overall governance framework in order to tackle a specific and internationally relevant problem. At the same time, the regionalisation of international law is an important cornerstone of environmental politics [1] as “not every international environmental problem needs to be dealt with on a global level [2]”. Regional institutions provide the essential link between the global and national or local level of governance so that there is a system of co-responsibility according to the principle of subsidiarity [3]. As far as the protection of the marine and coastal

environment is concerned, this regionalisation has led to the development of regional seas programmes, many of them directly supported by the United Nations Environment Programme (UNEP) and collectively known as the Regional Seas Programme [4] and now involving over 140 States, and Regional Fisheries Management Organisations (RFMOs) under the Food and Agriculture Organisation (FAO) umbrella. Several decades of experience with the regional approach have demonstrated many advantages [5]. It firstly takes the uniqueness of a marine ecosystem into account before devising and applying the most appropriate legal and management tools; it supports customised management and reflects the political, legal and ecological characteristics of a given region and allows the evaluation of a multitude of approaches from which best practices and lessons learnt can be applied to challenges elsewhere. Moreover, regional arrangements sometimes surpass global protection requirements. Last and more generally, a regional approach often makes cooperative action easier than a global one does, where a more diverse group of stakeholders with conflicting interests make negotiations thornier [6]: regionally driven, bottom-up approaches can hence facilitate a

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more active participation of coastal States as well as other stakeholders and support the co-development and implementation of ecosystem-based management regimes.

Some regional initiatives and organisations have progressively extended their activities to areas beyond national jurisdiction (ABNJ). With regard to the management of high seas fisheries, this has taken place within the 1995 United Nations Agreement for the implementation of the provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks.<sup>1</sup> In terms of biodiversity conservation more broadly, some regional seas programmes or States cooperating through specific mechanisms have recently expanded their traditionally coastal-related fields of cooperation into ABNJ, particularly through the establishment of area-based management tools. The regional seas programmes are growing out of their traditional scope whereas at the same time discussion on a possible new global legal framework for the conservation and sustainable use of biodiversity in ABNJ indicate that concrete implementation frameworks will be required.

This paper aims at taking stock and analysing this development of regional initiatives for the conservation and sustainable use of marine biodiversity in ABNJ. It first presents the actions recently developed in five regions, namely the Mediterranean Sea, the North-East Atlantic, the Southern Ocean, the South Pacific and the Sargasso Sea (2). It then highlights the various gaps created or left by the regional initiatives (3) and discusses options to fill them (4). Finally, given that the question of the articulation between global and regional governance mechanisms is becoming more and more important, the paper considers implications on the regional landscape of a possible new global legal instrument for ABNJ (5).

## 2. Existing regional initiatives for the conservation and sustainable use of ABNJ

Whereas regional fisheries bodies have a long established record of managing living marine resources in ABNJ, until recently regional seas programmes have mainly focused on coastal and near-shore waters and just started to expand their activities into ABNJ. The most advanced current efforts include the Mediterranean Sea, the North-East Atlantic, the Southern Ocean, the South Pacific and the Sargasso Sea.

### 2.1. The Mediterranean sea

In the early 1970s, the newly created United Nations Environment Programme (UNEP) made the oceans a priority action area and advocated the adoption of a regional approach, specifically mentioning the Mediterranean Sea [7]. It was in this context that the Mediterranean Action Plan (MAP) was drawn up in 1975 and the Convention for the Protection of the Mediterranean Sea against Pollution adopted on 16 February 1976 in Barcelona, Spain.<sup>2</sup> The Convention was amended in 1995 and renamed Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean [8]. The Convention

reflects the signatory States' acknowledgement that the Mediterranean is a common heritage and that specific rules must be adopted to protect it. To that purpose, the Parties commit to "individually or jointly take all appropriate measures (...) to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to protect and enhance the marine environment" (Article 4-1).

The 1995 Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (hereafter SPA/BD) includes ABNJ. However, the situation of the Mediterranean Sea is particular in that there is no point located at a distance of more than 200 nautical miles from the closest land or island. Therefore, "any waters beyond the limits of national jurisdiction (high seas) would disappear if all the coastal States decided to establish their own exclusive economic zones (EEZ) [9]". Despite an increasing phenomenon of jurisdictionalisation, this is not the case so far: there are still ABNJ in the Mediterranean Sea because some States did not declare EEZ, because others declared instead Ecological Protection Zones or Fisheries Protection Zones, and because there are "grey zones" where States' declarations overlap [10]. Innovatively, the SPA/BD Protocol not only invites Mediterranean States to create protected areas in their national waters but also envisages the possibility to establish Specially Protected Areas of Mediterranean Importance (SPAMI) in "zones partly or wholly on the high seas" (Article 9-1). Once a marine area is recognised as a SPAMI, all the Contracting Parties must "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). Using this opportunity, the Pelagos Sanctuary for Mediterranean Marine Mammals, a marine protected area (MPA) established in 1999 by France, Monaco and Italy which covers 84,000 km<sup>2</sup> and partly comprises high seas [11], was recognised and officially listed as a SPAMI in 2001 by the Contracting Parties to the Barcelona Convention [12]. The Pelagos Sanctuary was therefore a first MPA partly covering high seas established within the framework of a regional sea.

In line with the UNEP Regional Seas Strategic Direction 2008–2012, UNEP/MAP started through its Regional Activity Centre for Specially protected Areas (RAC/SPA) a strategy to promote the protection of biodiversity in the Mediterranean open seas, including the deep seas. Since 2008, drawing on the provisions of the SPA/BD Protocol, the RAC/SPA has implemented the EU funded project MedOpenSeas, aiming to promote *via* the SPAMI system the setting up of an ecological, representative network of Protected Areas in the Mediterranean, embracing areas lying in the open seas, including deep sea areas. The project's overall aim is to enhance the conservation and biodiversity of Mediterranean marine habitats and ensure that sustainable use is made of the marine resources in the pelagic, bathyal and abyssal zones, including in ABNJ. A Steering Committee to guide the MedOpenSeas project and review outputs was established and started to meet in 2009, with more than ten regional and international organisations participating<sup>3</sup> [13].

<sup>1</sup> Article 8-1 indeed binds States fishing on the high seas to "pursue cooperation in relation to straddling fish stocks and highly migratory fish stocks either directly or through appropriate subregional or regional fisheries management organisations or arrangements, taking into account the specific characteristics of the subregion or region, to ensure effective conservation and management of such stocks".

<sup>2</sup> Contracting Parties include the European Union and all the Mediterranean riparian States: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Montenegro, Slovenia, Spain, Syria, Tunisia and Turkey.

<sup>3</sup> Division for Environmental Policy Implementation – Regional Seas Programme and UNEP Division for Environmental Law and Conventions; Coordinating Unit for the Mediterranean Action Plan (UNEP/MAP); European Commission; Food and Agriculture Organisation of the United Nations (FAO); General Fisheries Commission for the Mediterranean and the Black Sea (GFCM); Secretariat of the OSPAR Convention; International Maritime Organisation (IMO); Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC); Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS); Secretariat of the Pelagos Sanctuary; International Union for the Conservation of Nature's Centre for Mediterranean; Cooperation (IUCN-Med); Mediterranean Science Commission (CIEM); World Wide Fund for Nature's Mediterranean Programme Office (WWF-MedPO); OCEANA.

A first project phase (2008–2009) led to the identification of twelve priority conservation areas in the open seas, including the deep seas, based in *ad-hoc* operational criteria merging among others SPAMI and Ecologically or Biologically Significant Areas (EBSAs) ones [14]. These priority areas are potential candidates for SPAMI listing and proposed by the Contracting Parties to the Barcelona Convention for inclusion in other frameworks, such as EBSAs developed under the Convention on Biological Diversity (CBD). In order to spatially plan and identify the priority sites a number of studies on vulnerable ecosystems for fisheries, marine birds, cetaceans and other species were compiled, as well as a Geographic Information System developed to facilitate the analysis. Geological features (e.g. seamounts, canyons) and oceanographic features (e.g. fronts, currents) were also taken into account. Furthermore, the international legal instruments relevant to the conservation of marine biodiversity and the practicalities of their implementation were evaluated during the first project phase to guide the institutional development of SPAMIs embracing areas beyond national jurisdiction [15–19].

The aim of the project's second phase, completed in December 2011, was to support neighbouring Parties of the above-mentioned priority areas in further evaluating and potentially jointly presenting these sites as candidate(s) for inclusion in the SPAMIs List, in accordance with the provisions of the SPA/BD Protocol. The RAC/SPA has been facilitating this preparatory work, including, legal expertise support and stakeholder negotiations. The programme of work of the second phase included the running of *ad hoc* working groups, composed of representatives from the countries bordering the areas of Alboran Sea and Gulf of Lion.

The current third phase focuses on continuing the above support frame for three priority areas: Adriatic Sea, Alboran Sea, and Sicily Channel-Tunisian Plateau [20].

## 2.2. The North-East Atlantic

The 1992 OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic regulates most human activities that can adversely affect the marine environment with the exception of fisheries, shipping and seabed mining. The OSPAR Commission has 16 Contracting Parties, including the European Union. The Maritime Area covered by the OSPAR Convention is divided into five regions,<sup>4</sup> with approximately 40% of it situated in ABNJ.

In 2010, the OSPAR Commission made a ground-breaking step in international marine conservation by establishing the world's first network of MPAs in ABNJ, responding to its political commitment to establish an ecological coherent network of well-managed MPAs in the OSPAR Maritime Area<sup>5</sup> [21–23]. At a Ministerial Meeting held in Bergen, Norway, the Contracting Parties agreed to establish a network of six sites collectively covering about 286,200 km<sup>2</sup>. Subsequently an additional area extending the network – the Charlie-Gibbs North High Seas MPA – was designated in 2012<sup>6</sup> expanding the area that is protected collectively by OSPAR to 465,165 km<sup>2</sup>. In addition three sites have been nominated by OSPAR Contracting Parties as MPAs that are fully or partly extending beyond their EEZ into an area subject to submissions for an extended continental shelf to the UN Commission on the Limits of the Continental Shelf.<sup>7</sup>

The OSPAR High Seas MPAs were established on the basis of legally-binding OSPAR Decisions, complemented by OSPAR

Recommendations on the management of human activities in these areas. The original proposal to establish the first High Seas MPA in the North-East Atlantic, in the area covering the Charlie-Gibbs Fracture Zone crossing the Mid-Atlantic Ridge, was championed by the World Wildlife Fund for Nature (WWF), acting as an observer organisation in the OSPAR Commission, and taken forward within the Commission's expert group on MPAs lead by Germany under the OSPAR Biodiversity Committee. The official designation of these MPAs was preceded by extensive discussions to establish solid scientific cases for the conservation values in these areas and to confirm the legal mandate of the OSPAR Commission to establish MPAs in ABNJ [24,25].

The OSPAR High Seas MPAs offer interesting cases reflecting the complex legal and political characteristics governing the sites that might inform initiatives in other marine regions or at the global level. To illustrate this, three different types of High Seas MPAs with a decreasing degree of comprehensiveness from an ecological and management perspective can be distinguished in the OSPAR Maritime Area as follows:

- MPAs comprising both the seabed and superjacent water column in an area that is situated entirely in ABNJ, e.g. the Milne Seamount Complex Marine Protected Area;
- MPAs comprising the water column superjacent to the seabed of a site (i.e. “the high seas component”) in an area that is subject to a submission to the Commission on the Limits of the Continental Shelf, designated in coordination with, and complementary to, protective measures for the seabed taken by the submitting coastal State, e.g. the Mid-Atlantic Ridge North of the Azores High Seas Marine Protected Area;
- MPA comprising the water column superjacent to the seabed of the site (i.e. “the High Seas component”) in an area that is subject to a submission by a Coastal State to the Commission on the Limits of the Continental Shelf (without additional protective measures by the coastal State for the seabed), e.g. the Charlie-Gibbs North Marine Protected Area.

## 2.3. The Southern Ocean

Human activities in the Southern Ocean are regulated by the 1959 Antarctic Treaty (AT) and related agreements, collectively called the Antarctic Treaty System<sup>8</sup> (ATS). The AT suspends sovereignty claims while it is in force. The Southern Ocean is mostly an area beyond national jurisdiction managed under the auspices of the ATS. As part of this framework, the Convention for the Conservation of Antarctic Marine Living Resources (CAMLR Convention) is of particular importance for the conservation and sustainable use of marine resources and biodiversity in the waters around Antarctica.

The CAMLR Convention set many precedents for multilateral environmental agreements when it entered into force in 1982. It encompassed not only the ecosystem and precautionary principles but also provided the institutional platform to support a balance between the long-term conservation of marine living resources and rational use [26,27]. This mandate, which provides for a broad management impact as well as responsibility, differentiates this arrangement from many other regional fisheries and conservation arrangements where the focus is on political and social elements of fisheries and other, often separate collaborative arrangements are responsible for broader conservation and environmental protection. The Commission for the Conservation of Antarctic

<sup>4</sup> Arctic waters, Greater North Sea, Celtic Seas, Bay of Biscay and Iberian Coast, Wider Atlantic.

<sup>5</sup> OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas.

<sup>6</sup> OSPAR Decision 2012/1 on the Establishment of the Charlie-Gibbs North High Seas Marine Protected Area and OSPAR Recommendation 2012/1 on the Management of the Charlie-Gibbs North High Seas Marine Protected Area.

<sup>7</sup> OSPAR Commission, 2012 Status Report on the OSPAR Network of Marine Protected Areas, Table 1 (2013).

<sup>8</sup> The Antarctic Treaty Consultative Meeting (ATCM) adopts measures, decisions and resolutions to give effect to the principles of the Antarctic Treaty and the Protocol on Environmental Protection to the Antarctic Treaty, also known as the Madrid Protocol, provides regulations and guidelines for the management of the Antarctic Treaty area.

Marine Living Resources (CCAMLR) – i.e. the decision body which adopts binding conservation measures (CM) through decisions by consensus of its currently 25 members<sup>9</sup> – has, since the mid-1980s, adopted mechanisms for protecting sites of particular ecological interest as part of CCAMLR Environmental Monitoring Programme (CEMP). CCAMLR's dedicated work on MPAs started in 2000<sup>10</sup> and in 2009, CCAMLR adopted CM 91-03 on the Protection of the South Orkney Islands southern shelf, which designates a MPA covering 94,000 km<sup>2</sup>. This was the world's first high seas MPA recognised by the WWF with a "Gift to the Earth Award". It prohibits fishing and associated activities (except for exemptions relating to scientific research), including the discharge of any type of waste by fishing vessels, and transshipment.<sup>11</sup> In 2011, recognising the need for a harmonised approach for developing, designating and managing MPAs, CCAMLR adopted CM 91-04 a "General framework for the establishment of CCAMLR Marine Protected Areas".

Negotiations to establish additional MPAs in the CAMLR Convention Area are on-going, demonstrating that consideration of high seas MPAs requires considerable resources over an extended period of time. Topics of debate in relation to current proposals focussed on the Ross Sea and East Antarctica include the demonstration of the scientific evidence for setting protection targets and identifying conservation threats, the extent of spatial boundaries, administrative arrangements as well as the period of designation [28,29]. A Special Meeting of the Commission held in Bremerhaven, Germany, in July 2013 and the 32nd meeting of the Commission held in November 2013 in Hobart, Tasmania, were unable to reach agreement on the formal establishment of MPAs in either the Ross Sea Region or East Antarctica with negotiations scheduled to resume at next year's annual session.

#### 2.4. The South Pacific

In the South Pacific, the Convention for the Protection of the Natural Resources and Environment, commonly called the "SPREP Convention", was adopted in Nouméa, New Caledonia, in 1986. The Convention applies to ABNJ, specifically to the four "high seas pockets" located in the South Pacific.<sup>12</sup> According to Article 14, the Contracting Parties<sup>13</sup> "shall (...) establish protected areas (...) and prohibit or regulate any activity likely to have adverse effects on the species, ecosystems or biological processes that such areas are designed to protect". This provision therefore invites States to

<sup>9</sup> Argentina, Australia, Belgium, Brazil, Chile, People's Republic of 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 of America, Uruguay.

<sup>10</sup> The Commission expanded the mandate of CEMP to include the review of management plans containing marine areas that are submitted to CCAMLR for approval by the Antarctic Treaty Consultative Meeting (ATCM). In 2003, this was further revised to include the provision of advice on the implementation of MPAs that may be proposed in accordance with provisions of Article IX.2(g) of the CCAMLR Convention. In 2004, the Commission reaffirmed the need to develop advice on MPAs commensurate with Articles II and IX of the CAMLR Convention. In 2005, a CCAMLR Workshop on MPAs was held in the United States: its objectives included a discussion of how the establishment of MPAs could be used to advance CCAMLR's work in respect of conservation and rational use. For the last seven years, CCAMLR's Scientific Committee has sustained a high level of work in pursuit of this endeavour.

<sup>11</sup> The MPA will be reviewed by the Commission at its 2014 meeting, based on advice to be provided by the Scientific Committee.

<sup>12</sup> According to Article 2 of the Convention, the Convention area shall comprise the Exclusive Economic Zone of the coastal States and "those areas of high seas which are enclosed from all sides by the 200 nautical mile zones" of the coastal States.

<sup>13</sup> There are currently 12 Contracting Parties to the SPREP Convention: Australia, Cook Islands, Micronesia, Fiji, France, Marshall Islands, Nauru, New Zealand, Papua New Guinea, Samoa, Solomon Islands and the United States.

create MPAs, including in ABNJ, and provides them with the competence to regulate or prohibit any human activity, such as fishing, navigation or seabed mining for instance [30]. Despite this mandate, no MPA has been established in ABNJ so far and it is mainly thanks to the adoption of fishing regulation measures that South West Pacific countries have been able to achieve progress on the protection of marine biodiversity in ABNJ [30]. Several conservation and fishery management measures applicable to the high seas have indeed been adopted in recent years through the framework of the Western and Central Pacific Fisheries Commission (WCPFC).<sup>14</sup>

#### 2.5. The Sargasso Sea

A four million square kilometres ecosystem in the North Atlantic primarily located in ABNJ, the Sargasso Sea provides an example of an ocean area where no regional seas programmes or dedicated RFMOs exist, and where an initiative is however currently taking place to enhance the protection of marine biodiversity in ABNJ [30–32]. Led by the government of Bermuda,<sup>15</sup> the Sargasso Sea Alliance aims to secure legal protection measures for the Sargasso Sea and to enhance coordination and cooperation between existing regional, sectoral and international organisations [31]. The Alliance has three main objectives: (i) building an international partnership that will secure recognition of the ecological significance of the Sargasso Sea and the threats that it faces; (ii) using existing regional, sectoral and international organisations to secure a range of protective measures for all or parts of the Sargasso Sea to address key threats; and (iii) using the process as an example of what can and cannot be delivered through existing institutions in ABNJ [32].

### 3. Gaps in the regional approach for the conservation and sustainable use of ABNJ

Although promising advances have been made in developing high seas governance approaches at the regional level, these initiatives face many challenges, in particular with regard to the management, geographical coverage and regulatory gaps.

#### 3.1. Management gaps

##### 3.1.1. The Mediterranean Sea

In 2001, the Pelagos Sanctuary was the first MPA partly covering high seas established within the framework of a regional sea and the Mediterranean Action Plan was therefore considered as a model. Since then, the management of the Pelagos Sanctuary has encountered difficulties, due to the lack of a proper management body over several years [33]. However, the Sanctuary is today revitalised, with a permanent secretariat recently having been re-established. Moreover, rules governing the area could be strengthened in the coming months thanks to a proposal to designate parts of the Sanctuary as a Particularly Sensitive Sea Areas (PSSA).

<sup>14</sup> It is also worth noting that, in the South East Pacific, Member States of the Permanent Commission for the South Pacific (CPPS) met in Galapagos on 17 August 2012 and committed themselves to promote a coordinated action of Member States "regarding their interests on living and non living resources in marine areas beyond national jurisdiction": Permanent Commission for the South Pacific, VIII Meeting of Ministers of Foreign Affairs, Puerto Ayora, Galápagos, Ecuador, 17 August 2012.

<sup>15</sup> Other members of the Alliance are the International Union for Conservation of Nature (IUCN), Woods Hole Oceanographic Institution, WWF International, Marine Conservation Institute, and Mission Blue/Sylvia Earle Foundation, together with the Bermuda Underwater Exploration Institute, the Bermuda-based Atlantic Conservation Partnership and the Bermuda Institute for Ocean Sciences.

The MedOpenSeas project has since 2008 contributed to promote establishment of a representative network of MPAs in the open sea, including areas beyond national jurisdiction, as mandated by several international decisions including the World Summit on Sustainable Development (2002) and the Aichi Targets (CBD X/2, 2010). The Barcelona Convention and its SPA/BD Protocol provide a suitable legal and institutional framework for the development of MPAs in ABNJ as well as in national waters. Furthermore, political support for the project has been documented by a number of decisions, such as the 2008 Almeria Environmental Ministerial Declaration and the 2009 Marrakesh Ministerial Declaration. In addition, Contracting Parties have throughout the process stated their interest in actively participating in the MedOpenSeas project in order to develop sites within or close to their national waters as SPAMIs.

However, given the challenge of establishing protected areas in ABNJ, strengthened political support is urgently needed for the action to achieve its ambitious objective of declaring MPAs embracing ABNJ in the Mediterranean. Notably, regulation of fisheries activities in the region falls under the competence of the General Fisheries Commission for the Mediterranean and Black Sea (GFCM). That includes the adoption of spatial management measures such as the declaration of Fisheries Restricted Areas (FRAs): there is therefore a need for coordination among both bodies. To that purpose, cooperation with the GFCM for the management of the potential new SPAMIs is on the agenda of the Mediterranean Action Plan. A Memorandum of Understanding concluded in 2012 states that the two organisations “will cooperate to promote respective Parties adoption of eventual management schemes developed within SPAMIs”. The pursuing of a joint strategy on open seas MPAs regarding the enhanced sustainability of living resources using areas based management tools lead so far to the “GFCM Parties Resolution GFCM37/2013/1 on area based management of fisheries, including through the establishment of Fisheries Restricted Areas (FRAs) in the GFCM convention area and coordination with the UNEP-MAP initiatives on the establishment of SPAMIs decision”. Such resolution of the Thirty-seventh session of the GFCM (Split, Croatia, 13–17 May 2013) allows for better institutional coordination as well as clear GFCM institutional framing at GFCM Secretariat level regarding synergies on marine areas conservation and management in collaboration with UNEP/MAP. Further collaboration of the above institutions on pursuing a joint strategy will continue along the project, benefitting from preliminary discussions and the creation of a Working Group on MPAs.

### 3.1.2. The North-East Atlantic

The limited scope of non-binding OSPAR Recommendations on the management of high seas MPAs in the OSPAR Maritime Area reflects the ‘non-comprehensive’ competence of the OSPAR Commission with regard to regulating human activities in ABNJ. Indeed, the currently most impacting activity, i.e. fishery, falls outside its competence and, in the oceanic waters of the North-East Atlantic, is primarily regulated through the North-East Atlantic Fisheries Commission (NEAFC).<sup>16</sup> Moreover, shipping is primarily regulated through the International Maritime Organisation (IMO).<sup>17</sup> However, a number of other human uses may be subject

to OSPAR regulations, including scientific research, cable laying, dumping, construction of installations and artificial islands and potential deep-sea tourism. OSPAR also has a wide mandate when it comes to assessing and monitoring the effects of all human activities on the marine environment. Both OSPAR and NEAFC clearly have the competence to adopt spatial management measures on the high seas – NEAFC by closing certain areas for fisheries, OSPAR by establishing MPAs. In a parallel process, NEAFC established in 2009 areas closed to bottom trawl fisheries that largely corresponded with the MPAs proposed within OSPAR at that time.<sup>18</sup> Area-based management measures with regard to shipping, such as designating PSSAs or Special Areas under MARPOL, would need to be proposed by OSPAR Contracting Parties within the framework and procedures of IMO and agreed at the global level. So far, no site-specific shipping-related measures have been adopted for any of the OSPAR high seas MPAs. Last, in terms of mining, no exploratory licenses as issued by the International Seabed Authority (ISA) for seabed mining have been applied for by mining contractors in the OSPAR Maritime Area to date. However, immediately to the South, the government of Portugal has engaged in the search for various mineral deposits. These exploratory activities included search on various seamounts in six defined areas. One of the concessions under consideration (Verdelho) is located outside the Portuguese EEZ in the vicinity of the Rainbow Hydrothermal Vent field OSPAR Marine Protected Area (Azores Marine Park) and, another one (Saldanha) is partially inside the EEZ and partially outside.

Therefore, against this complex background and in order to establish an integrating platform for cooperation amongst relevant international organisations, the OSPAR Commission has developed and proposed a “Collective Arrangement between competent authorities on the management of selected areas in ABNJ in the North-East Atlantic” that is underpinned by a set of more formal MoUs with the relevant sectoral management organisations, including NEAFC. Although not a legally binding instrument, the Collective Arrangement seeks to foster commitment to cooperate and to coordinate information exchange in the development and implementation of appropriate measures for the conservation and management of certain areas that would be selected by the different organisations. In particular, this would see the respective competent authorities bringing issues of mutual interest to each other's attention. So far only the OSPAR Commission has endorsed the Collective Arrangement in principle. Other competent authorities, including NEAFC,<sup>19</sup> ISA and the IMO, are still in the process of considering this proposal in their respective meeting cycles while its acceptance remains unclear. Although specifically designed for the institutional framework in the North-East Atlantic, this international soft-law agreement might provide a model for other areas where collaboration is essential to sustainable stewardship [21,34]. Lessons learnt might also be applicable to the discussion of a possible new legal instrument under the United Nations Convention on the Law of the Sea (UNCLOS) and the development of coordination and cooperation mechanisms under such an agreement.

### 3.1.3. The Southern Ocean

Not all Members of CCAMLR are Parties to the 1959 AT – the AT has 50 Parties whereas CCAMLR has 25 Members plus 11 Acceding States. Article V of the CAMLR Convention provides that Parties to

<sup>16</sup> With the exception of Russia, all other four parties to NEAFC are also parties to the OSPAR Convention. Since the EU has the exclusive competence for the conservation of marine biological resources under the Common Fisheries Policy, the Member States of the EU are not parties to NEAFC but are represented by the delegation of the European Commission.

<sup>17</sup> However, there are a few examples where OSPAR has taken measures to regulate shipping, as e.g. the Voluntary the Guidance on Ballast Water Exchange from Shipping.

<sup>18</sup> Although both OSPAR and NEAFC draw upon scientific advice provided by the International Council for the Exploration of the Sea (ICES), the requests for advice regarding their respective envisaged spatial measures were at that time not coordinated amongst both organisations.

<sup>19</sup> Signing of the Collective Arrangement by NEAFC was supported by its Permanent Committee on Management and Science (PECMAS) and the 32nd Annual Meeting of NEAFC (November 2013) has mandated the NEAFC President to arrive at a final decision through a postal voting procedure.

the CAMLR Convention that are not Parties to the AT acknowledge, inter alia, the special obligations and responsibilities of Antarctic Treaty Consultative Parties (ATCPs) for the protection and preservation of the environment of the AT area. The ATCPs, through the 1998 Madrid Protocol, may establish Antarctic Specially Managed Areas (ASMAs) and Antarctic Specially Protected Areas (ASPAs). Prior to the establishment of protected areas with a marine component, the Madrid Protocol provides that those with a marine component be forward to CCAMLR for review. Various resolutions since have further elaborated on this provision.<sup>20</sup> Collaboration between CCAMLR and the Committee on Environmental Protection (CEP) to discuss the relative roles and responsibilities of the two bodies in relation to environmental protection in the Antarctic resulted in agreement that CCAMLR will take the lead in relation to MPAs [35].

To that end, CCAMLR has established formal relations with several other multilateral arrangements responsible for fishery regulation and conservation with a primary interest in those arrangements with convention areas contiguous with the CCAMLR Convention Area. In this regard, CCAMLR maintains formal relations with the Convention for the Conservation of Southern Bluefin Tuna (CCSBT), the Western and Central Pacific Fisheries Commission (WCPFC) and the Agreement for the Conservation of Albatross and Petrels (ACAP). It maintains consultative relations with other regional organisations responsible for areas to the north of the CCAMLR Convention Area, including the South East Atlantic Fisheries Organisation (SEAFO) and relatively recently established organisations such as the South Pacific Regional Fisheries Management Organisation (SPRFMO) and the South East Indian Ocean Fisheries Agreement (SIOFA). CCAMLR Members also take a strong interest in negotiations taking place in other fora such as those in IMO relating to the development of a Polar Code.

The formal arrangements between CCAMLR and other agreements provide for “consultation, cooperation and collaboration”. These arrangements, approved by the Commission, provide for each body to invite the other to observe their meetings, as appropriate and generally periodic email exchanges, for example, do take place between the Secretariats. While some CCAMLR members are also members of the organisations with which CCAMLR has established formal arrangements, and can thus take up issues of mutual interests in the formal meetings of either body, these formal arrangements are limited in the extent that they support collaborative action. Their use and effectiveness is largely confined to communications between the respective secretariats rather than formal meetings involving the members of each body which may lead to an agreed course of action on any particular matter.

### 3.1.4. The South Pacific

As previously mentioned, most of the progress made in the South Pacific has been realised in the WCPFC framework, through fishing regulation measures. Despite an explicit mandate, Contracting Parties to the Nouméa Convention did not create MPAs in the “high seas pockets”. An important challenge is therefore to coordinate the actions of the WCPFC and the South Pacific regional system. More broadly, it is worth noting that the South Pacific institutional framework is highly complex and fragmented, with several regional institutions dealing with, or having the potential to, the protection of marine biodiversity [30]. Strengthening the coordination and cooperation between competent organisations will therefore be key to any future successes.

### 3.1.5. The Sargasso sea

In the Sargasso Sea, there is no regional environmental treaty covering the area, nor is there a regional fisheries treaty applicable to the whole area for non-tuna species. Bermuda, the lead country of the Sargasso Sea Alliance, is an associate member of the International Convention for the Conservation of Atlantic Tunas (ICCAT), and attends as a United Kingdom Overseas Territory. In the IMO, Bermuda is not an independent member and sits as part of the UK delegation. Proposals for conservation measures in ICCAT are underway and the need for shipping related measures in the IMO are being assessed. Inspired by the process initiated by OSPAR to develop a Collective Arrangement, the Sargasso Sea Alliance is also developing cooperation agreements with competent authorities. A first MoU has been agreed with the OSPAR Commission and others with the Inter-American Turtle Convention and the Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (the Abidjan Convention) are currently being developed. The Sargasso Sea – although a unique case – also demonstrates in the same manner the particular need and challenges to coordinate competent organisations [32].

## 3.2. Geographical gaps

Even if some promising steps have been made at the regional level towards the conservation and sustainable use of ABNJ, not all regional organisations currently have the mandate to address issues beyond national jurisdiction. Indeed, even though the UNEP Regional Seas Strategic Direction 2008–2012 recognised the need for regional seas conventions and action plans to focus on “addressing the protection of (i) marine biodiversity beyond areas of national jurisdiction; and (ii) deep-sea biodiversity [36]”, many regional seas programmes still focus largely on coastal areas within national jurisdiction only. For instance, the Abidjan Convention only applies to “marine environment, coastal zones and related inland waters falling within the jurisdiction” (Article 1) of Contracting Parties. Similarly, the Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region and the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean do not cover ABNJ. Furthermore, there are also marine regions where no regional seas programme has been established at all. That is the case, for instance, in the upper South West Atlantic. Similarly, high seas fisheries in some regions are currently not (yet) regulated by RFMOs, e.g. in the North Pacific,<sup>21</sup> the Central Atlantic (for bottom fisheries) or the Arctic<sup>22</sup> for instance. Moreover, some fish stocks are sometimes not managed even in areas where there are RFMOs. Despite the overarching tendency to expand regional activities and interest into ABNJ, it has to be acknowledged that a complete coverage of ABNJ by regional organisations is far from being established.

## 3.3. Thematic gaps

Apart from the examples where regional seas programmes have taken measures on the designation and management of MPAs, or measures taken by RFMOs such as temporary fisheries closures or gear restrictions, very few other types of management measures have been implemented by regional bodies in ABNJ as

<sup>20</sup> See in particular: ATCM XXVIII – Decision 9 (2005) Marine Protected Areas and other areas of interest to CCAMLR.

<sup>21</sup> The treaty establishing a Regional Fisheries Management Organisation for High Seas areas of the North Pacific Ocean is not yet in force.

<sup>22</sup> See <http://www.fao.org/fishery/topic/4440/en>.

yet. There is indeed no regionally binding agreement or guidance on the use of environmental impact assessments or regulations on access to marine genetic resources in ABNJ, for instance.

In the North-East Atlantic however, measures adopted by the OSPAR Commission, such as the recommendations on the protection and restoration of threatened and/or declining species and habitats, apply in principle also to ABNJ. Furthermore, a specific Code of Conduct for responsible Marine Research in the Deep Seas and High Seas of the OSPAR area was adopted in 2008. Lastly, the Recommendations on the Management of OSPAR High Seas MPAs put forward provisions with regard to awareness raising, information building, marine science, exchange of information on new developments and stakeholder involvement and the implementation of Environmental Impact Assessments and Strategic Environmental Assessments. The current areas of regulation through OSPAR very much reflect its limited competence in the management of human activities but also suggest a possible role as regional platforms for a multi-sector cooperative approach, including information exchange, cumulative impact assessment, scientific cooperation and marine spatial planning. This would require agreement on joint standards and general guidelines for information sharing, modes of reporting and notifications of planned activities between the most relevant sectors in a given region.

In the context of discussions of a new legal instrument for ABNJ under UNCLOS, much attention has been given to the discussion on marine genetic resources [37]. Both at the global and the regional level, different tools already exist with regard to access and benefit sharing (ABS). While they do not necessarily apply to ABNJ, they still provide an interesting source of information [38,39]. The Mediterranean Science Commission is now in the process of adopting a Charter on access and benefit sharing (ABS) to facilitate the dialogue among the different parties engaged in the negotiations for the access and use of MGR. In principle, regional seas programmes could play a more prominent role in ABS of marine genetic resources in ABNJ [40]. Whereas there are many arguments in favour of creating a global regime [37,41], regional frameworks may support the creation of common and open-access pools to share information on marine genetic resources among countries and stakeholders.

#### 4. Options to strengthen the efficiency of regional initiatives in ABNJ

In light of the progress made so far and challenges faced by regional organisations, this section suggests options to strengthen the efficiency of regional initiatives in ABNJ.

##### 4.1. Strengthening cooperation and coordination

Today, governance of ABNJ takes place through multiple sectoral agreements and institutions. Expanding regulation of human activities, such as fisheries, shipping or deep sea-bed drilling and mining, and marine environmental protection has led to functional overlaps between competent authorities both at the regional and global level, reflecting a general trend in international environmental policy of a growing degree of fragmentation and regime complexity [42]. As several studies have shown, arrangements for inter-institutional and cross-sectoral coordination and cooperation are key to successful conservation and sustainable use of biodiversity in ABNJ [21,43–45]. In the absence of adequate mechanisms for cooperation and coordination between competent institutions, such fragmented governance systems can lead to un-coordinated actions or even conflicting management decisions along the different sectoral lines. At best it can prove synergistic and trigger complementary actions by other bodies, as happened

for instance in the parallel processes of NEAFC and OSPAR to identify and establish fishing closures and MPAs in ABNJ. Currently however, there are very few actual examples for cooperation or coordination activities between institutions governing ABNJ at the regional level.

The cases of the North-East Atlantic and the Mediterranean have shown that the development of MoUs between the various bodies is important to clarify competences and ways of interaction, such as mutual observation of meetings or regular exchange between secretariats. But the challenge is to make such MoUs operational as highlighted by the Performance Review of NEAFC that identified the relationship and future links between NEAFC and OSPAR as an area for improvement given the overlap in management goals and responsibilities [46]. The Collective Arrangement put forward by the OSPAR Commission is a first attempt to come to practical arrangements at the regional level for mutual reporting and notification of activities between competent management authorities. Also, a common scientific or technical advisory body, such as the International Council for the Exploration of the Sea (ICES) for the North-East Atlantic, can enhance cooperation, e.g. through joint requests for scientific advice, and could provide the same scientific basis for measures taken by the different competent authorities. Kvalvik [21] in her study of the institutional overlap in the North-East Atlantic argues that in addition to inter-institutional interaction also corresponding coordination at the national level is important for successful management [32].

As pointed by Gjerde et al. [41], interaction may be most successful if it occurs early in the process of establishing conservation and management measures, and if developed into an ongoing process. This was demonstrated in the Southern Ocean where cooperation benefited from the joint decision taken by CCAMLR and the Antarctic Treaty's CEP early in the process to establish a representative network of MPAs as a priority, with CCAMLR as leading body within the Antarctic Treaty System as regards MPAs [47].

Both the North-East Atlantic and the Southern Oceans have demonstrated that conservation and sustainable use of biodiversity benefit from cross-institutional cooperation at the regional level. Even in the relatively favorable legal and institutional situations in the North-East Atlantic, as in the Southern Ocean, this interaction requires considerable coordination efforts and political will which might be difficult to achieve in other regions. A crucial challenge therefore is the identification of the right type and level of cooperation for a given region.

##### 4.2. Strengthening regional capacities

While pleading for a better conservation and sustainable use of ABNJ through the regional approach, it seems important to keep in mind that many regional organisations already face important difficulties to manage the marine environment and its resources under their charge and often restricted mandate: this is true both for regional seas programmes [43] and RFMOs [48]. As is the case at the global level [49], the implementation of regional instruments is far from comprehensive and systematic [4,50]. Many reasons, often cumulative, can explain this situation, including the lack of political will, funding issues, political instability in some States, lack of capacity or weak enforcement mechanisms – all weaknesses in the enabling conditions for an effective implementation of legal instruments. In this particular context of regional seas, there is another major explanation: while legal agreements have developed significantly in recent decades, the institutional frameworks in which they are adopted have often remained “frozen”. In particular, despite the adoption and entry into force of regional protocols, many regional seas programmes still have

the same institutional framework they had when they were created, with limited human and financial resources. Consequently, the necessary assistance and support to States in implementing the legal agreements are hardly provided by the secretariats, which are almost fully focused on administrative tasks. This limited technical and legal assistance is a major reason for the weak implementation of many regional agreements [43].

Therefore, in many cases, an expansion of regional organisations' mandates to ABNJ would necessarily need to go hand in hand with a provision of adequate means in order to achieve the conservation objectives and not to increase difficulties for the regional cooperation frameworks. It therefore seems urgent to strengthen the regional institutional frameworks, making them robust enough to support the implementation of the instruments adopted and resilient to the development of possible new agreements. This is all the more important as the role of the regional approach might further expand in the framework of a possible UNCLOS Implementing Agreement on the conservation and sustainable use of marine biodiversity in ABNJ.

#### 4.3. Cooperating across regions

Cooperation between regional seas programmes is mainly taking place under the umbrella of the UNEP Regional Seas Programme. Likewise RFMOs collaborate through the FAO. These mechanisms provide important frameworks for the exchange of information and best practice. So far cooperation is mainly taking place at the Secretariat level. However, there are also examples where measures have been taken jointly by regional agreements across boundaries of the Conventions. One interesting example from the North-East Atlantic, Mediterranean Sea and Baltic Sea are the Voluntary Guidance on Ballast Water Exchange from Shipping [51]. This Guidance has been developed and agreed by all 40 Contracting Parties to the OSPAR Convention, the Helsinki Convention and the Barcelona Convention in anticipation of the entering into force of the 2004 IMO International Convention for the Control and Management of Ships' Ballast Water and Sediments to cover vessels operating between these marine areas. Such common agreements instruments could provide inspiration for further inter-regional measures also in other marine areas of the world. Another interesting example is the cooperation and twinning between the Abidjan Convention and the OSPAR Commission, formally in Montego Bay on 1st October 2013. If further expanded, this cooperation could potentially connect the work in both marine areas in the Northern and Southern parts of the East Atlantic. Such examples, if supported adequately with sufficient capacities, could provide promising perspectives for ecosystem-based management at a regional scale, including in ABNJ.

### 5. Conclusion: coupling global discussion and regional actions

As demonstrated in this paper, some regional organisations have progressively extended their attentions and actions to ABNJ. Undoubtedly, these emerging examples establish interesting pathways for the future development of high seas governance that should be further explored. In particular, advancing regional approaches makes it possible to advance the conservation and sustainable use of ABNJ while the global discussions on a potential UNCLOS Implementing Agreement are still on-going [37]. Since these discussions could take many years before leading to concrete results, regional initiatives appear to be of major relevance, in particular since they support the development of scientific knowledge, regulatory practice and the elaboration of management tools in ABNJ. A major disadvantage though is the limited legal scope of regional agreements. Indeed, regional agreements on ABNJ are

binding only for the Contracting Parties to the regional organisations. Furthermore, the fragmentation of oceans governance requires the cooperation and coordination between all competent authorities to make a multi-sectoral management of ABNJ possible. The framework established by OSPAR provides a possible way forward while at the same time also highlight its limitations. Also the complete coverage of ABNJ by regional organisations is far from established and many geographical gaps therefore remain. Last and no less importantly, capacities are lacking in many regional organisations, which make their involvement in ABNJ difficult.

The discussion of regional approaches to ABNJ also influences the current global discussions on a potential UNCLOS Implementing Agreement. Even if the formal debates are focused on the process by which a negotiation for a new legal agreement could be launched, there are however discussions among delegations and observers (including international and regional organisations, NGOs, research centres, etc.) on the possible role of regional organisations within the framework of such an agreement. Some experts recently pointed out that the global discussions could have repercussions on progress at the regional level and slow-down or attempt to block progress there. However, global discussions and regional actions should be considered as two complementary processes and there is therefore no reason for States to choose between them. Regional initiatives could inspire the content of a potential UNCLOS Implementing Agreement and provide regional implementation and coordination frameworks. At the same time an UNCLOS Implementing Agreement would fill existing gaps and strengthen the effectiveness of regional organisations to address ABNJ issues. Through developing regional initiatives in ABNJ, States would be able to address urgent conservation issues in ABNJ already today and buy time whatever the outcome of the global discussions. MPAs or other regulatory measures in ABNJ, which are being created by regional organisations could later be “upgraded” through a mechanism established by an UNCLOS Implementing Agreement which would facilitate their international recognition. In the same manner, strengthening the regional organisations and increasing their capacities to effectively address marine issues, including in ABNJ, appears to be crucial both within the current and potential future oceans governance framework. The Implementing Agreement is therefore “not an “either/or” with the use of existing regional (...) organisations” [52]: global discussions and regional actions are two interconnected processes which feed each other and both need to be strengthened.

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