22

The International Law of the Sea and Arctic Governance

Paving the Way to Integrated Ecosystem-Based Marine Management

Andrey Todorov

22.1 INTRODUCTION

The existing framework for Arctic Ocean governance is an excellent example of the law of the sea as a legal framework, which, on the one hand, supports stability and predictability in regional relations and, on the other hand, has to evolve in tune with emerging challenges and structural changes. By endorsing the 2008 Ilulissat declaration,[1] the five Arctic coastal States – Canada, the Kingdoms of Denmark and Norway, Russia and the United States – agreed that an extensive international legal framework applies to the Arctic Ocean. This framework, with the 1982 United Nations Convention on the Law of the Sea (UNCLOS[2]) at its core, provides the basis for orderly settlement of any potential overlapping claims and the main types of ocean use. Since the Arctic Ocean consists of both areas under sovereignty and jurisdiction of the coastal States and areas beyond national jurisdiction (ABNJ), UNCLOS is crucially important for defining the rights and obligations of the Arctic coastal States and non-regional States, as well as for regional cooperation.

However, the existing concept of management of marine use, which is the same for the Arctic maritime areas as for the rest of the world ocean, is facing a crisis. As anthropogenic pressure and threats stemming from climate change increase, traditional management of ocean resources is widely considered insufficient and ineffective.[3] This gives rise to a clear global trend to replace conventional sectoral

[1] The Ilulissat Declaration, adopted in Ilulissat, Greenland on 28 May 2008, available at: ttps://arcticportal.org/images/stories/pdf/Ilulissat-declaration.pdf.

[2] United Nations Convention on the Law of the Sea of 10 December 1982 (UNCLOS), entered into force 16 November 1994.

[3] Long, R. D., Charles, A. and Stephenson, R. L., 'Key principles of marine ecosystem-based management' (2015) *Marine Policy* 57, 53–60. doi:10.1016/j.marpol.2015.01.013, 53; Katsanevakis, S., Stelzenmüller V., South A. et al., 'Ecosystem-based marine spatial management: Review of concepts, policies, tools, and critical issues' (2011) *Ocean & Coastal Management* 54(11), 807–820. doi:10.1016/j.ocecoaman.2011.09.002, 808.

regulation of different maritime activities with a more holistic approach known as Integrated Ecosystem-Based Marine Management (IEBMM).[4]

In this context, the Arctic is also on the threshold of a paradigm shift. Due to climate change and sea ice decline, the Arctic Ocean[5] is becoming more accessible, with new shipping lanes opening for trade and tourism, opportunities for fisheries and the mining industry multiplying. The negative side of the same processes consists in new challenges to the safety of life at sea, a fragile environment and the local population, resulting from oil spills, ship collisions, overexploitation of living resources and so on. Accordingly, new legal instruments are being introduced: the Polar code,[6] which provides standards for safety at sea and pollution prevention in the polar seas; the first three binding agreements under the auspices of the Arctic Council (AC);[7] and others. But are these instruments sufficient for the Arctic region today to keep up with constant changes and challenges?

The main purpose of this chapter is to discuss how the instruments and tools of the IEBMM could be used to improve ocean governance in the Arctic. Given that the ecosystems of the Arctic are cross-boundary and include waters under the national jurisdiction of two or more Arctic States, as well as ABNJ,[8] the key rule-of-law question to be addressed in this regard is how to ensure that IEBMM-related tools and measures are adopted and enforced in a holistic cross-border manner in full compliance with international law. While the waters within 200 nautical miles (nm) and continental shelf fall within the national jurisdiction of the Arctic coastal States, whose competence to adopt and enforce binding decisions with respect to these marine areas is not disputed, a number of freedoms and rights are enjoyed by all States in the vast ABNJ in the region that can be restricted only in limited cases

[4] Long et al., (n 3), 53; Halpern, B. S., McLeod, K. L., Rosenberg, A. A. and Crowder, L. B., 'Managing for cumulative impacts in ecosystem-based management through ocean zoning' (2008) *Ocean & Coastal Management* 51(3), 203–211. doi:10.1016/j.ocecoaman.2007.08.002; Elliott, M., 'Integrated marine science and management: Wading through the morass' (2014) *Marine Pollution Bulletin* 86(1–2), 1–4. doi:10.1016/j.marpolbul.2014.07.026 ,1.

[5] The term 'Arctic Ocean' is used in this chapter as defined by the International Hydrographic Office, covering the East Siberian Sea, the Laptev Sea, the Kara Sea, the Barents Sea, the White Sea, the Greenland Sea, the Norwegian Sea, the Iceland Sea, the Davis Strait, Hudson Strait, Hudson Bay, Baffin Bay, the Lincoln Sea, the North Western Passages, the Beaufort Sea and the Chukchi Sea. See IHO (International Hydrographic Office), 'Limits of Ocean and Seas'.

[6] International Code for Ships Operating in Polar Waters, adopted in November 2014 and May 2015.

[7] Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, adopted 12 May 2011, entered into force 19 January 2013; Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, adopted 15 May 2013, entered into force 25 March, 2016; Agreement on Enhancing International Arctic Scientific Cooperation, adopted 11 May 2017, entered into force 23 May 2018.

[8] 'Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems. Arctic Council Joint PAME, CAFF, AMAP, SDWG Ecosystem Approach Expert Group' (2019), 6.

and through relevant international mechanisms. Other important problems to address are finding the best way of engaging third States in implementing regional IEBMM tools for ABNJ and achieving the cross-sectoral nature of the regulations.

The second section of this Chapter gives a brief overview of the concept of integrated ecosystem-based marine management, as well as the challenges it implies specifically for ABNJ. The third part provides a comparative study of how IEBMM tools (in particular, creation of marine protected areas) are implemented in other regions with a focus on those regional mechanisms that to some extent have succeeded in implementingthe IEBMM in ABNJ. Despite the unique challenges of the Arctic Ocean, some achievements of other regional instruments in implementing the IEBMM could be valuable for the Arctic. Therefore, an attempt is made in the fourth part to refer the results of the comparative study to Arctic Ocean governance. The work concludes with some recommendations on possible ways forward.

22.2 INTEGRATED ECOSYSTEM-BASED MARINE MANAGEMENT

The concept of integrated ecosystem-based marine management has evolved as an alternative to the traditional sector-by-sector approach, where each type of human activity is managed separately.[9] Ecosystem-based management is a place-based approach, focusing on a specific ecosystem and the range of human activities affecting it, rather than considering single industries or species in isolation. This entails cross-boundary and cross-sectoral regulation of all types of economic activity in certain sea areas, where they might result in negative impacts on the marine environment, and development of a holistic strategy for all parties and industries concerned. IEBMM is implemented through different tools: key among these are Marine Spatial Planning (MSP), Marine Protected Areas (MPAs) and Ocean Zoning (OZ).[10]

Implementation of IEBMM requires solution of several major legal and organizational questions. The boundaries of ecosystems do not, as a rule, overlap with the boundaries of national jurisdiction of coastal States. The zonal approach enshrined in the UNCLOS implies a variable balance between coastal State sovereignty and jurisdiction, and third-State rights and freedoms. Thus, relevant policies of IEBMM in various sea areas with different legal status and regime should be coordinated. Most of the efforts to develop IEBMM deal with areas of national jurisdiction (within 200 miles)[11] and therefore require either commitment by one coastal State or cooperation between several neighbouring coastal States. However, the case of the Arctic Ocean is a special one since it covers the vast ABNJ. Consequently, a

[9] Halpern et al. (n 4), 203.
[10] Katsanevakis et al. (n 3).
[11] Ibid.

https://doi.org/10.1017/9781009253741.029 Published online by Cambridge University Press

crucial challenge in this regard is how to make regional measures in ABNJ binding and ensure compliance by non-Arctic stakeholders.

UNCLOS contains provisions that oblige all States to prevent marine environmental pollution (in particular, Articles 192, 196). These obligations are supplemented by the provisions of the 1992 Convention on Biological Diversity,[12] which set out the responsibility of States to cooperate for the sustainable use of biological diversity, including in ABNJ (e.g., Articles 3,4, 7). However, there is a condition that regional agreements are not to affect the basic principles of the UNCLOS (Article 311), including freedom of the high seas, without the explicit consent of the States concerned. Members of regional mechanisms can establish a regime modifying the common legal framework, thus restricting freedom of the high seas for those persons subject to their respective jurisdiction. Nevertheless, they are not entitled to limit the rights of third States absent their express consent.[13]

This challenge could to some extent be addressed through different global management organizations, which are allowed to adopt decisions related to ABNJ, binding on all States. However, the mandates of relevant international bodies are fragmented and may be considered insufficient for an effective IEBMM.[14] There is no clear answer to the question how ecosystem-based policies are to correlate with measures developed by sectoral international organizations.

The problem of IEBMM has been the focus of growing attention from global international organizations. The most comprehensive effort came from the United Nations, which launched negotiations on a possible new UNCLOS implementing agreement related to biodiversity in marine areas beyond national jurisdiction (the BBNJ Agreement). Although many complicated issues have not been resolved so far,[15] the BBNJ Agreement could be a major contribution to establishing a global framework for the implementation of IEBMM, creating a set of unified principles for this purpose.

22.3 REGIONAL EXPERIENCE

It should be noted that the Arctic does not play a pioneering role in terms of implementing the concept of IEBMM on the regional level. Yet, although some regions have achieved significant progress, the IEBMM concept has been applied mainly to areas within national jurisdiction. Only a few regional organizations have

[12] Convention on Biological Diversity, adopted in 1992 (entered into force on 29 December 1993).

[13] Tanaka, Y., 'Reflections on high seas marine protected areas: A comparative analysis of the Mediterranean and the North-East Atlantic models' (2012) *Nordic Journal of International Law* 81, 295, 316.

[14] Wright, G., Gjerde, K. M., Johnson D. E. et al., 'Marine spatial planning in areas beyond national jurisdiction' (2019) 132 *Marine Policy*, https://doi.org/10.1016/j.marpol.2018.12.003.

[15] For the progress of negotiations see the UN official website www.un.org/bbnj/

developed IEBMM tools in marine ABNJ.[16] For the purposes of this chapter, it would be useful to look into the experience of some of these regional mechanisms to identify optimal responses to the questions raised in this study (engaging third States in implementing IEBMM regulations for ABNJ and achieving the cross-sectoral aspect of such regulations) in the context of Arctic governance. Special focus is on the practice of using such IEBMM tools as designation of MPAs, for it has been successfully implemented in the ABNJ in some regions.

22.3.1 *CAMLR Commission*

The Commission for the Conservation of Antarctic Marine Living Resources (CAMLR Commission) is a regional organization in the Southern Ocean acting within the framework of the 1980 CAMLR Convention.[17] Though the CAMLR Convention is an independent international instrument managing the living resources of the Antarctic, it is an integral part of the Antarctic Treaty System (ATS). It is important to note that, taking into account the special status of the Antarctic, the overwhelming majority of marine areas within the CAMLR Commission mandate constitute ABNJ.[18]

The South Orkney Islands MPA established in 2009 by a decision of the CAMLR Commission became the first MPA in world history to cover ABNJ.[19] All types of commercial fishing activities, dumping of any type of waste and trans-shipment activities are prohibited within the area. This makes it an MPA with one of the highest levels of protection in the world.[20] In 2017 a decision of CCAMLR came into effect establishing another MPA in the Ross Sea, which is the largest marine protected area in the world and covers zones with different levels of protection with the aim of conserving krill resources.[21] The CCAMLR has also developed proposals for MPAs in other regions of the Southern Ocean.[22]

It is clear that the CCAMLR has significantly contributed to the promotion of IEBMM and marine spatial planning. However, this is possible not least because of the special status of the Antarctic region. Being an integral part of the Antarctic

[16] Regional Seas programmes covering Areas beyond National Jurisdictions. UNEP Regional Seas Reports and Studies No. 202, 2017 // UN. Available at: www.un.org/Depts/los/biodiversityworkinggroup/Regional_seas_programmes_ABNJ.pdf; Wright et al. (n 14), 4.

[17] The Convention on the Conservation of Antarctic Marine Living Resources, adopted in 1980, entered into force 7 April 1982.

[18] Sothieson, D., '*Marine Protected Areas in the North-East Atlantic Ocean And Southern Ocean: The Role of Regional Organisations in Areas beyond National Jurisdiction*', LLB Degree thesis, Victoria University of Wellington (2014), 38–39.

[19] Ibid., 15.

[20] Ibid., 16.

[21] 'Marine Protected Areas (MPAs)', CCAMLR official website. Available at: www.ccamlr.org/en/science/marine-protected-areas-mpas

[22] Ibid.

https://doi.org/10.1017/9781009253741.029 Published online by Cambridge University Press

Treaty System, which to a large extent represents *lex specialis* towards the provisions of UNCLOS[23] and was designed as an integrated framework, the CCAMLR holds a broad mandate, including adoption of legally binding decisions related to marine ABNJ. This gives the ATS and CCAMLR a significant advantage in promoting integrated ecosystem management.[24] Since most of the marine areas of the Arctic are governed by UNCLOS with the traditional sectoral approach and significant freedoms of States in ABNJ are implied, the experience of the CCAMLR and ATS could hardly be considered relevant for the Arctic.

22.3.2 *Mediterranean Instrument*

Another quite efficient regional mechanism is the Mediterranean instrument run under the UNEP Regional Seas Program and based on the 1976 Barcelona Convention[25] and Protocols thereto. The Barcelona Convention also applies to ABNJ (high seas) until all of the coastal States in the region establish their EEZ.[26] In 1999 in Rome, France, Monaco and Italy concluded an agreement for the establishment of a sanctuary for marine mammals (PELAGOS Agreement[27]) in the form of SPAMI. Today it is the only MPA in the Mediterranean to cover ABNJ (potential EEZ).[28] Any taking of marine mammals (except for the purpose of scientific research) is prohibited in that MPA (Article 7a of the PELAGOS Agreement), along with some other human activities (in particular, high-speed vehicle competitions – Article 9). Parties are to take measures to prevent marine pollution (Article 6).

Although the experience of the Barcelona mechanism could seem useful in terms of applying IEBMM in ABNJ in the Arctic, a specific feature of the Mediterranean Sea considerably distinguishes it from the Arctic Ocean – namely, the distance between the opposite coasts in the Mediterranean does not exceed 400 nautical miles. To date, not all of the coastal States bordering the Mediterranean Sea have

[23] Rothwell, D., 'A maritime analysis of conflicting international law regimes in Antarctica and the Southern Ocean' (1995) *Australian Year Book of International Law* 16, 168.

[24] Molenaar, E., 'Managing biodiversity in areas beyond national jurisdiction' (2007) *The International Journal of Marine and Coastal Law* 22(1), 89–124. doi:10.1163/157180807781475263, 95.

[25] The Convention for the Protection of the Mediterranean Sea Against Pollution, adopted on 16 February 1976 in Barcelona, entered into force in 1978.

[26] 'Note on the legal framework for the protection of marine biological diversity in Mediterranean Sea areas beyond national jurisdictions (BBNJ) or for which the limits of sovereignty or jurisdiction have not yet been defined'. UNEP(DEPI)/MED WG.431/Inf.9, 25 April 2017. Available at: www.rac-spa.org/nfp13/documents/02_information_documents/wg_431_inf_9_note_on_legal_framework_for%20bbnj.pdf

[27] Agreement related to the creation of a Sanctuary for marine mammals in the Mediterranean Sea, adopted in 1999, entered into force in 2002.

[28] Sothieson (n 18), 51.

claimed EEZ\CS,[29] leaving some ABNJ. Still, this situation implies that in case (if, or rather– when) all coastal States establish their 200 nm EEZ, there will be no ABNJ. Legally, this would mean the extension of national jurisdiction of coastal States, related to protection and conservation of the marine environment, to the entire Mediterranean Sea, thus eliminating one of the main challenges to IEBMM – namely, the legality of imposing regulatory measures on third States in ABNJ. The Law of the Sea furnishes coastal States with sufficient rights and jurisdiction to adopt and enforce measures related to protection of the marine environment within EEZ (e.g., Articles. 56, 211, 216, 234). Moreover, the fact that the total area of the Mediterranean Sea is covered by national jurisdiction makes it redundant to coordinate regional IEBMM measures with relevant global organizations such as the International Maritime Organization (IMO), or the International Seabed Authority (ISA). Therefore, inter-organizational coordination in the Mediterranean, in reality, is limited to ad hoc cooperation with the General Fisheries Commission for the Mediterranean.[30] Since the Arctic Ocean is not entirely covered by 200-nm zones of the coastal States, it is practically impossible to form a regional mechanism in the Arctic similar to that of the Barcelona model.

22.3.3 *OSPAR*

In contrast, the OSPAR model seems to perfectly fit the criteria of the Arctic Ocean. The 1992 OSPAR Convention[31] covers various economic activities in the North-East Atlantic that could have adverse effects on marine ecosystems and biodiversity. However, the Convention provides two major exceptions from OSPAR's jurisdiction – fisheries management and certain limitations for the regulation of shipping. OSPAR has made great efforts to implement IEBMM tools in ABNJ, given that the North-East Atlantic is not entirely covered by national jurisdiction zones of coastal States. OSPAR has its own MPA Network, which covers 5.9 per cent of the OSPAR Maritime Area,[32] including ten MPAs beyond the EEZ of its parties.[33] Some MPAs seek to conserve the biological diversity of the seabed and superjacent waters, while others aim to conserve the biological diversity of the water superjacent to the sites.[34]

A solution by the OSPAR mechanism (the OSPAR Commission) of the key challenges of the IEBMM in ABNJ, raised in this chapter, seems to originate from its commitment to active cooperation with regional and global sectoral organizations

[29] 'Maritime Space: Maritime Zones and Maritime Delimitation'. The United Nations. Available at: www.un.org/Depts/los/LEGISLATIONANDTREATIES/europe.htm

[30] Sothieson (n 18), 51.

[31] Convention for the Protection of the Marine Environment of the North-East Atlantic, adopted on 22 September 1992, entered into force on 25 March 1998.

[32] Ibid.

[33] Status Report of the OSPAR Commission on the OSPAR Network of Marine Protected Areas (2018). Available at: www.ospar.org/documents?v=40944

[34] See Tanaka (n 13), 311ff.

https://doi.org/10.1017/9781009253741.029 Published online by Cambridge University Press

and mechanisms governing different maritime activities. The OSPAR Commission has signed memoranda of understanding (MoU) with The North East Atlantic Fisheries Commission (NEAFC), ISA, the IMO and other organizations.[35] Close coordination with these institutions provides the OSPAR Commission with a range of important benefits. First, this enhances the legitimacy of OSPAR's regulatory measures in ABNJ, in particular aimed at marine environmental protection. The IMO and ISA have indisputable authority to legally restrict different sectors of States' marine use, including in ABNJ. The same effect is achieved by cooperation with NEAFC, which can legally impose measures on third States under the 1995 Fish Stock Agreement[36] (inspections of fishing vessels and putting on the blacklist of IUU fishing).

Second, active collaboration with sectoral organizations enables the regime to achieve a cross-sectoral effect. While shipping and fisheries fall outside the OSPAR regulatory regime, coordination with the IMO and NEAFC fills this gap. The ISA mandate to regulate exploitation of mineral resources of the Area also takes precedence over regional efforts, so that coordination with ISA increases the efficiency of regulations adopted by OSPAR.

And finally, this provides a great possibility to engage a wide range of third States. Membership of global international organizations, such as the IMO or ISA, is much wider than that of any regional mechanism. Coordination with these organizations enables the OSPAR Commission to indirectly involve States non-parties to the OSPAR Convention in regulation related to ABNJ. The legitimacy of the duty to comply with the measures developed by these international organizations is indisputable for the States parties thereto. On the other hand, a difficulty that may arise in this respect is coordination of measures in the region for a State that is a party to different international organizations in case the decisions of these organizations are not harmonized between each other.[37]

22.4 POSSIBLE SOLUTIONS TO IEBMM CHALLENGES IN THE ARCTIC OCEAN

The experience of other regional instruments dealing with IEBMM, including in ABNJ, allows us to propose the following measures related to implementation of IEBMM in the Arctic region.

[35] Memoranda of Understanding and Cooperation Arrangements. *OSPAR*. Available at: www.ospar.org/about/international-cooperation/memoranda-of-understanding

[36] 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, New York, 4 August 1995. In force 11 December 2001.

[37] Molenaar, E. J., and Elferink, A. G. O., 'Marine protected areas in areas beyond national jurisdiction: The pioneering efforts under the OSPAR Convention' (2009) *Utrecht Law Review* 5(1), 19.

22.4.1 *Efficient Regional Management Organization*

The efficiency of a regional mechanism depends to a large extent on the efficiency of its main body responsible for carrying out the entire workload related to IEBMM. This implies that there should be a strong executive body endowed with a wide mandate to implement IEBMM measures – whether it is the OSPAR Commission or the CCAMLR.

As is widely acknowledged, the main intergovernmental forum for regional cooperation in the Arctic is the Arctic Council. Since its establishment in 1996, the AC has considerably contributed to collaboration among the eight Arctic States with the active involvement of third States-observers and representatives of Arctic Indigenous Peoples. The focus of its work has been protection of the marine environment and sustainable development of the region. Under its auspices, three legally binding agreements have been signed.[38]

Despite some progress achieved by the AC on IEBMM-related issues,[39] today the Arctic Council is facing serious challenges. Put in a nutshell, these relate to the following:[40]

- legally, the AC is not an international organization and is not allowed to adopt legally binding decisions – a significant impediment for implementing the tools of a regional IEBMM;
- the AC suffers from a lack of proper instruments for measuring the effectiveness of numerous projects and programmes the AC undertakes;
- funding is inadequate: almost all projects are funded on an *ad hoc* basis by the States who advocate for them, but the AC has insufficient programmatic and discretionary funding;
- issues of environmental protection outbalance the problems of sustainable development.

This gives room for fears that the AC would not be able to succeed in promoting the concept of IEBMM in the Arctic[41] and lead the AC further away from the OSPAR model. However, it would surely be easier to work with existing instruments than to create new ones from ground zero. Proceeding from that assumption, there is a compelling need for significant expansion of the competence and mandate of the

[38] See (n 7).

[39] See Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems (n 6).

[40] See Exner-Pirot, H., Ackrén, M., Loukacheva, N. et al., 'Form and function: The future of the Arctic Council' (2015) *The Arctic Institute*. Available at: www.thearcticinstitute.org/form-function-future-arctic-council/; Balton D. and Ulmer F., 'A Strategic Plan for the Arctic Council: Recommendations for Moving Forward', Working Paper (Wilson Center, Harvard Kennedy School, 2019).

[41] Balton, D. and Zagorski, A., 'Implementing Marine Management in the Arctic Ocean', Russian International Affairs Council, Woodrow Wilson International Center, 2020, 23.

AC and its bodies. In particular, this would imply moving towards endowing the Arctic Council and its Secretariat with international legal personality; establishing a subsidiary body with a broad mandate comparable to that of the OSPAR Commission, or transforming the Secretariat into an 'Arctic Council Commission'; authorizing that subsidiary body to initiate discussions on relevant issues in the decision-making bodies of the Arctic Council (Ministerial meetings); a substantial increase of financing of the subsidiary body (the 'AC Commission').

22.4.2 *Coordination with Sectoral Organizations*

The experience of OSPAR and other regional mechanisms shows that the most effective and legitimate (if not the only) way to ensure the cross-sectoral synergy of regulative measures is to cooperate and coordinate efforts with global international organizations responsible for different types of marine use. The most rapidly growing sector of marine activities in the Arctic is shipping. This has drastically risen in the region over the past two decades and is expected to intensify further as northern routes become increasingly accessible.[42] Bearing that in mind, in the short-term period Arctic States (through the Arctic Council) will need to develop a joint position in the IMO. This is not a new challenge for the AC, though. For instance, the AC supported the work on a legally binding Polar Code, negotiated within the framework of the IMO, which is reflected in the decisions of Ministerial meetings.[43] However, technically the initiative in the IMO was put forward by individual members of the AC.[44]

The process of coordinating positions in global organizations is not settled among the AC member States. Notably, the relatively successful implementation of IEBMM tools by OSPAR relies not least on cohesion and a spirit of shared interest among the States-parties.[45] However, for the AC it could be a hard task to fulfil, mainly due to a lower level of members' cohesion in the AC compared to OSPAR.

As far as other sectoral organizations are concerned, the urgency of coordination is less evident. Emergence of the Area in the Arctic Ocean governed by ISA directly depends on accomplishing the process of establishing coastal States' extended continental shelf. Since this process takes much time, collaboration with ISA is an

[42] 'Ocean and Cryosphere in a Changing Climate', Special Report of the Intergovernmental Panel on Climate Change (2019), Chapter 3, section 3.2.4.3.

[43] Report of the Senior Arctic Officials to the Ministers of the Arctic Council Member States, adopted May, 2011. Available at: https://oaarchive.arctic-council.org/bitstream/handle/11374/1535/SAO_Report_to_Ministers_-_Nuuk_Ministerial_Meeting_May_2011.pdf?sequence=1&isAllowed=y; Report of the Senior Arctic Officials to the Ministers of the Arctic Council Member States, adopted 15 May 2013. Available at: https://oaarchive.arctic-council.org/bitstream/handle/11374/848/MM08_Kiruna_SAO_Report_to_Ministers_Final_formatted.pdf?sequence=1&isAllowed=y

[44] IMO Document MSC 86/23/9, adopted on 24 February 2009.

[45] Sothieson (n 18), 28.

issue of a more distant perspective. Issues relating to conservation and regulation of fisheries in the central part of the Arctic Ocean could be partly dealt with within the framework of the 2018 Agreement on prevention of unregulated fisheries on the high seas in the Central Arctic Ocean,[46] which directly or indirectly involves (through participation in the EU) all member States of the AC and major non-Arctic fishing powers (China, the EU, Japan, Iceland, South Korea). In future, the agenda could include cooperation between the AC and NEAFC over a small area in the central part of the Arctic Ocean, covered by the NEAFC's mandate.

22.4.3 *Greater Involvement of Non-Arctic States*

As mentioned previously, in order to ensure that the IEBMM mechanism works well in the entire Arctic region, including in ABNJ, where non-regional States enjoy certain freedoms and rights, it should engage a wide group of non-Arctic stakeholders. Certainly, cooperation of the Arctic regional mechanism with global and regional sectoral organizations would contribute to resolving this problem, since their membership is much broader than that of the Arctic Council. But apart from that the AC has another powerful resource to tackle this challenge – the pool of its observer States.

To date, thirteen non-Arctic nations as well as twenty-seven international and non-governmental organizations are observers to the AC. Observers are invited to meetings and other activities of the Arctic Council and contribute to its work primarily at the level of working groups.[47] However, the role of observers has recently become an issue of major concern both for the Arctic States and for third countries. The scope of their capabilities in the AC is significantly limited. They may, at the discretion of the chair, make statements after the Arctic States and Permanent Participant. Observers are not entitled to participate in the decision-making process and to propose projects independently, while total financial contributions from all observers to any given project may not exceed the financing from Arctic States.[48] What is more important in relation to IEBMM: observers are not invited to participate in negotiations of legally binding agreements under the auspices of the AC. All three agreements mentioned here were signed by the eight Arctic States only. Though the 2018 Fishery Agreement for the Central Part of the Arctic Ocean was negotiated with non-Arctic States, it was concluded outside of the AC. Few observers seem to be satisfied with their position in the Council, with some

[46] Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean, signed 3 October 2018.

[47] Arctic Council Rules of Procedure as revised by the Arctic Council at the Eighth Arctic Council Ministerial Meeting, 15 May 2013.

[48] Ibid.

of them calling for greater transparency, better communication and more opportunities to engage in the work of the AC.[49]

Limitations on the role of observers may be largely motivated by fear on the part of the 'Arctic Eight' to surrender to non-members too much influence over Council activities. On the one hand, this is a natural concern on the part of regional nations. But on the other, the AC could make better use of its observers to implement IEBMM measures for the Arctic Ocean. This could facilitate engagement of third States in implementing decisions developed by the AC or within other regional fora, as well as in promoting joint initiatives in international organization, provided that observers are more intensively involved in discussion and development of recommendations within the working bodies of the AC. To start with, the Arctic Council could consider promoting global awareness of issues related to sustainable development of the Arctic and polar competence-building in the observer States.

22.4.4 *Coordination of Research Efforts in the Arctic*

One of the main prerequisites of a potent IEBMM mechanism is support by scientific groups. The Arctic Council's definition of the Ecosystem Approach implies that integrated management of human activities should be based on 'best available scientific and traditional knowledge about the ecosystem and its dynamics, in order to identify and take' management actions.[50] This principle can also be traced to the practice of other regional instruments.

A wide range of scientific groups are active in the Arctic: ICES, PICES, the Pacific Arctic Group (PAG) of the International Arctic Science Committee (IASC), bilateral Russian-US and Russian-Norwegian Fisheries Commissions and the like. However, it is often recognized[51] that none of them is dedicated to coordinating integrated marine science activity throughout the entire Arctic Ocean, as well as transferring research results to regional institutions for management decision-making (except for ICES[52]). For instance, the geographic area of ICES, with all the eight Arctic States being parties to it, covers the Atlantic Ocean with an explicit emphasis on the North Atlantic and touches only a part of the Arctic.[53] PICES is an

[49] Balton and Ulmer (n 40), 7.

[50] Report submitted to the Senior Arctic Officials by the Expert Group on Ecosystem-Based Management, May 2013. Available at: https://oaarchive.arctic-council.org/bitstream/handle/11374/1210/D0c3–7a_EBM_Experts_Group_Report_to_SAOs.pdf?sequence=1&isAllowed=y

[51] Baker, B., 'ICES, PICES, and the Arctic Council Task Force on Arctic Marine Cooperation' (2016) *UC Irvine Law Review* 6(1), 4.

[52] 'ICES stocktaking of its role and capabilities in ocean and coastal sustainability', Report of the International Council for the Exploration of the Sea (2012). Available at: https://perma.cc/KJ7Y-UPW3, 1.

[53] Convention for The International Council for the Exploration of the Sea, adopted 12 September, 1964.

organization similar to ICES, active in the Northern Pacific, which adjoins only three Arctic States. Besides, unlike ICES, it does not provide management advice to competent authorities. Despite the fact that the area of IASC covers the entire marine Arctic and the range of research issues is quite wide, this scientific organization was created 'bottom-up' – by scientists' initiative and efforts. This is a nongovernmental organization with all relevant challenges in funding, especially for research across national boundaries.[54]

Today, discussion is ongoing on the issue of how to proceed towards coordinating and accumulating marine scientific research for the purposes of IEBMM.[55] Some experts believe that, despite notable efforts by various research organizations in the Arctic, currently gaps remain in scientific understanding of the marine Arctic, especially in its central part. In that light, they suggest that there is a need to establish a new stand-alone coordination mechanism.[56] Others consider such a measure premature and suggest amending the mandates of existing mechanisms, in particular, ICES, instead of establishing an entirely new scientific organization.[57]

It would certainly seem feasible to work towards a comprehensive integrated regional programme within the Arctic Council for scientific research for the purpose of adopting scientific-based decisions related to spatial planning in the Arctic Ocean. Both national scientific organizations of the AC member States and external international scientific organizations and programmes could participate in such initiatives, including IASC and ICES, among others. A good starting point could be establishment of the mechanism under the 2018 Agreement on prevention of unregulated fisheries in the central part of the Arctic Ocean. This could provide a platform for a subsequent build-up of coordinated research of marine ecosystems in the region.

22.5 WAYS FORWARD

Implementation of integrated ecosystem-based marine management in the Arctic will be associated with major challenges, both legal and organizational. This refers to the need to ensure that ecosystem-based measures are in full compliance with international law, especially in terms of ABNJ, finding ways to engage non-regional countries in complying with IEBMM measures in ABNJ, as well as tackling the problem of achieving a cross-sectoral effect of ecosystem-based management by coordination among different marine industries.

[54] Van Pelt, T., Huntington, H. P., Romanenko, O. V. et al., 'The missing middle: Central Arctic Ocean gaps in fishery research and science coordination' (2017) *Marine Policy* 85, 79–86. doi: 84.10.1016/j.marpol.2017.08.008, 84.

[55] See, e.g., ibid., 85; Baker, 'ICES, PICES' (n 51) 19.

[56] Van Pelt et al. (n 54), 85; Balton and Zagorski (n 41), 18.

[57] Baker, 'ICES, PICES' (n 51) 19.

Solutions to these challenges would seem to lie in unfolding the Arctic Council's potential. Efficient implementation of IEBMM tools is possible through a significant build-up of the AC: moving towards endowing the AC with international legal personality; transforming the AC Secretariat into an authoritative Commission with relevant functions similar to that of the OSPAR Commission. Bearing in mind, however, the limited possibilities of the Arctic Council to adopt binding decisions restricting third States' rights and freedoms in marine ABNJ, additional measures would also be reasonable. The AC could play the central role in coordinating IEBMM tools (such as applying marine spatial planning or creation of marine protected areas) with global and regional sectoral organizations active in the Arctic. This includes: the IMO in relation to shipping; the NEAFC and possible future mechanisms under the 2018 Agreement on fisheries in the central part of the Arctic Ocean; and the ISA in relation to exploration and exploitation of the resources of the Area (long-term perspective). Collaboration with these institutions with much broader membership would also provide compliance with AC policies by third States parties to these organizations. However, the mandates of global and regional sectoral organizations do not cover all economic activities that could pose a potential threat to the marine environment in the Arctic. This refers to reduction of marine environmental pollution from land-based sources, the oil and gas industries, construction of artificial islands and installations, laying cables and so on, which should be the subject of further consideration.

A more rational use by the AC of its observers could also serve the purposes of IEBMM: observers could be involved to a larger extent in discussions on relevant regional regulations; they could be allowed to participate in negotiations of legally binding agreements and to sign them. Synergetic effects could be further increased by establishing a regional scientific programme within the AC (or under its auspices) aimed at systematic planning, coordination and integration of scientific research for the purpose of introducing the integrated approach to marine management.