

Implementing MARINE MANAGEMENT in the ARCTIC OCEAN

By David Balton and Andrei Zagorski



RIAC - Russian International Affairs Council

8, 4th Dobryninsky Pereulok, Moscow, Russian Federation, 119049.
www.russiancouncil.ru/en

The Polar Institute

Woodrow Wilson International Center for Scholars Ronald Reagan Building and International Trade Center. One Woodrow Wilson Plaza 1300 Pennsylvania Ave. NW Washington, DC 20004-3027
www.wilsoncenter.org/Polar

Statements and views expressed in this report are solely those of the authors and do not imply endorsement by RIAC - Russian International Affairs Council or the Woodrow Wilson International Center for Scholars.

This paper is part of an ongoing dialogue about the future governance of the Central Arctic Ocean facilitated by WWF's Arctic Programme. All opinions expressed in this paper are those of the authors and not WWF. The authors would like to acknowledge the support of the Russian International Affairs Council and WWF in the formulation of this paper. To become involved in WWF's discussions about the governance of the Central Arctic Ocean, please contact Lotta Manninen at Lotta.manninen@wwf.fi

Design and layout by Kathy Butterfield

Copyright 2020 RIAC - Russian International Affairs Council

Table of Contents

Introduction / 2

Review of Current Circumstances / 4

Efforts of the Arctic Council to Improve Marine Management / 4

Other International Efforts Relevant to the Arctic Ocean / 7

Challenges / 10

Suggestions for Strengthening Marine Management in the Arctic Ocean / 12

Suggestions for the short-to-medium term / 14

Suggestions for the longer term / 18

Conclusion / 25



INTRODUCTION

The international architecture that States have erected in the past 25 years to address the growth in human activity in the Arctic Ocean seems impressive at first glance. The Arctic Council, established in 1996, has proven to be a useful forum for coordinating and disseminating analyses relating to the Arctic Ocean and for shaping governmental policy in this area. The Council has launched numerous projects and programs for addressing issues concerning the Arctic Ocean. It has also served as a venue for negotiating three legally binding international agreements that relate, largely or exclusively, to the Arctic Ocean. Outside of the Arctic Council, States have also found ways to cooperate, including by using the International Maritime Organization (IMO) to develop the Polar Code and other measures relating to Arctic shipping, and by negotiating an agreement to prevent unregulated commercial fishing in the high seas portion of the Central Arctic Ocean.

A closer look at the situation reveals that this architecture will likely prove insufficient to address the growing requirements of the region. The Council's Task Force on Arctic Marine Cooperation (TFAMC) identified a wide variety of currently unmet needs, several of which it stated could only be addressed through a new Arctic Council subsidiary body. When the Ministers of the Arctic States met in Rovaniemi, Finland, in May 2019, however, they did not establish such a body. Indeed, for the first time in the history of the Arctic Council, they could not even reach agreement on a Ministerial Declaration. A "Chair's Statement" that did emerge from that meeting called on Senior Arctic Officials (SAOs) to create an "SAO based mechanism" within the Arctic Council to facilitate further cooperation on marine issues,¹ but the prospects that this approach will provide a meaningful, comprehensive remedy to the situation seem slim at best.

The Arctic region today faces serious geopolitical, socioeconomic, and environmental challenges. While one may hope for a decrease in geopolitical tensions, the socioeconomic and environmental problems are likely to grow more acute. The dramatic reduction in Arctic sea ice and the other profound changes brought on by a warming climate have already changed the Arctic Ocean in ways that we are only beginning to understand.² While these changes are making the Arctic Ocean more accessible for a range of human activities, they are also disrupting marine ecosystems and threatening the well-being of Arctic residents whose lives and livelihoods depend on a healthy Arctic Ocean.

Despite these challenges—and in some sense because of them—the common interests of governments, Arctic residents, and other stakeholders in the effective management of increasing human activities in the Arctic Ocean remain very real. The time is ripe to imagine and articulate a vision for a stronger architecture for advancing these common interests, in both the short-to-medium and longer terms, in hopes that policymakers will find the necessary political space in which to move forward on these matters.

This article briefly reviews current efforts to improve Arctic marine management and offers several suggestions for building a stronger architecture to implement needed measures.





REVIEW OF CURRENT CIRCUMSTANCES

A. Efforts of the Arctic Council to Improve Marine Management

Since its inception, the Arctic Council has spent a considerable portion of its time and energy on efforts to strengthen marine management in the Arctic. This work has accelerated in the past decade and has embraced the approach known as “ecosystem-based management,” or EBM, as a conceptual basis.

In 2011, for example, the Council’s SAOs reported to Ministers that “human activities in the Arctic are increasing, and planning and management of these activities on a cross-sectoral basis can assist in reducing conflict among activities and in supporting the conservation and sustainable use of natural resources.”³ The Ministers responded by establishing an Expert Group on Ecosystem-Based Management, whose final report in 2013 included a definition of EBM in the Arctic, a set of principles to guide implementation of EBM in the Arctic, and a set of high-priority activities for coordinating and improving the EBM work of the Arctic Council.⁴

Soon thereafter, the Arctic Council adopted its second Arctic Marine Strategic Plan, covering the years 2015–2025, entitled “Protecting Marine and Coastal Ecosystems in a Changing Arctic.”⁵ The Plan recommended 40 Strategic Actions, grouped under four Strategic Goals:

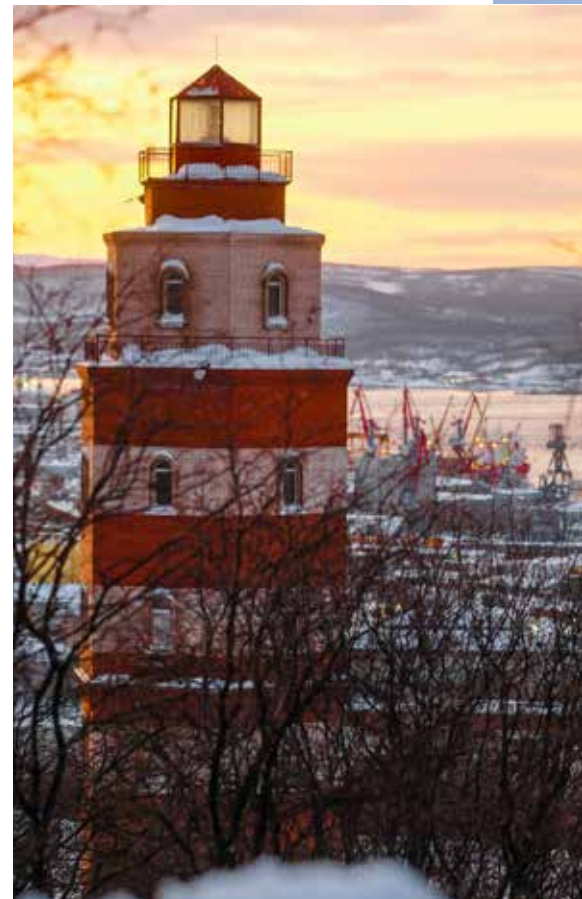
- **Goal 1:** Improve knowledge of the Arctic marine environment, and continue to monitor and assess current and future impacts on Arctic marine ecosystems.
- **Goal 2:** Conserve and protect ecosystem function and marine biodiversity to enhance resilience and the provision of ecosystem services.
- **Goal 3:** Promote safe and sustainable use of the marine environment, taking into account cumulative environmental impacts.
- **Goal 4:** Enhance the economic, social, and cultural well-being of Arctic inhabitants, including Arctic indigenous peoples, and strengthen their capacity to adapt to changes in the Arctic marine environment.

In 2015, the Arctic Council determined that efforts to address Arctic marine issues more effectively might benefit from further international cooperation and, accordingly, established the TFAMC, with a mandate to “assess future needs for a regional seas program or other mechanism, as appropriate, for increased cooperation in Arctic marine areas.”⁶

The TFAMC worked intensively for two years and produced a report to Arctic Council Ministers in 2017 that

- anticipated continued growth in marine issues confronting the Arctic;
- recognized that the “ecosystem approach” that underpins work on Arctic marine issues requires extensive knowledge inputs;
- sought opportunities to stretch scarce science resources further through regional cooperation;
- identified nine “functional needs” for exercising effective stewardship of the Arctic marine environment; and
- suggested several possible mechanisms for fulfilling those needs, including through the possible creation of a new Arctic Council subsidiary body.⁷

The unmet needs identified in the TFAMC 2017 report included one at the heart of EBM:



Extending cooperation throughout marine stewardship cycle. The Task Force assesses a need to extend the reach of Arctic regional cooperation throughout the entire cycle of marine stewardship: from the planning of scientific research, to obtaining the requisite knowledge (including traditional and local knowledge), to carrying out observations and monitoring, to the conduct of scientific assessments, to formulation of policy and recommendations, to implementation of policy, and to monitoring and assessment of the policy's effectiveness. [...]⁹

The TFAMC identified this unmet need as one of several that the Council could not address simply by enhancing its working procedures or by improving internal coordination. In the view of the TFAMC, the Council would need a new subsidiary body through which Arctic States could “extend cooperation throughout the marine stewardship cycle.”

The Council adopted this report at its 2017 Ministerial Meeting and gave the TFAMC a new two-year mandate to present “terms of reference for a possible new subsidiary body, and recommendations for complementary enhancements to existing Arctic Council mechanisms,” for consideration by Ministers in 2019.⁹ The final report of the TFAMC focused solely on the second part of this mandate, however, providing some recommendations for enhancing the manner in which the Arctic Council operates but delivering no Terms of Reference for a possible new subsidiary body.

As noted above, when the Arctic Council Ministers met in Rovaniemi in May 2019, they could not reach consensus on a Declaration of the type that had emerged from every prior Ministerial meeting. Instead, they signed a brief “Joint Ministerial Statement” that did not mention the TFAMC or its work. Finland’s Minister of Foreign Affairs, Timo Soini, also issued a non-consensual Chair’s Statement that included the following:

Our meeting adopted the report of the Task Force on Arctic Marine Cooperation II and its recommendations on complementary enhancements to existing Arctic Council institutions, noted that further work is required to meet all needs identified by the Task Force, and decided to establish a SAO based mechanism to coordinate marine issues in the Arctic Council.

The Arctic Council must now determine what this “SAO based mechanism” will really do, how it will operate, and whether it can fulfill at least some of the unmet needs identified by the TFAMC, particularly the need to enhance EBM. The effort of the Council to make these determinations comes at a particularly challenging moment, given the current geopolitical tensions, the lack of a long-term strategic plan for the Council, and other unresolved structural and financial concerns about the operations of the Council noted by auditors and commentators in recent years.¹⁰

B. Other International Efforts Relevant to the Arctic Ocean

The past decade has seen extraordinary growth in high-level attention accorded to ocean issues. For example, in 2015 the United Nations General Assembly (UNGA) adopted Agenda 2030, which included Sustainable Development Goal (SDG) 14: *conserve and sustainably use the world’s oceans, seas and marine resources*.¹¹ Following the adoption of all 17 SDGs, the United Nations devoted its first high-level ocean conference, in June 2016, to implementing SDG 14. This gathering brought together States, international organizations, the private sector, and civil society in a spirit of partnership and commitment, resulting in a wide range of initiatives to strengthen ocean conservation and governance. A second such conference will occur in June 2020.

The United Nations has also embarked on negotiations toward a possible new implementing agreement to the 1982 United Nations Convention on the Law of the Sea to deal with biodiversity in marine areas beyond national jurisdiction (the BBNJ Agreement).¹² Although negotiators have not yet resolved many of the complicated



issues before them, the BBNJ Agreement could reshape and improve ocean governance in significant ways, including in the Arctic Ocean and its adjacent seas, which contain several areas beyond national jurisdiction.

Outside of the United Nations, six Our Ocean Conferences, launched by the United States and taken up by others, have also generated commitments by governments, international organizations, philanthropies, and other civil society groups. The commitments focus on sustainable fisheries, marine pollution, and climate-related impacts on the ocean. States have also used these Conferences to announce or confirm efforts to protect millions of square kilometers of ocean. Palau has announced a commitment to hold the next Conference in 2020.

Through the IMO, the Arctic States worked with the rest of the IMO's membership to develop and adopt a mandatory Code for Ships Operating in Polar Waters (Polar Code). The Polar Code, which entered into force in 2017, took the form of a package of amendments to existing IMO instruments designed to strengthen rules for maritime safety and environmental protection relating to ships sailing in both polar regions. At present, the IMO is considering possible new measures for Arctic shipping, including a second phase of the Polar Code to ensure coverage of additional classes of vessels, and possible measures to restrict the use and carriage of heavy fuel oil in the Arctic.



Finally, nine States and the European Union signed the *Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean* (CAO Fisheries Agreement), a treaty developed through a freestanding negotiating process. The need for this Agreement stemmed from the awareness that a significant and growing part of the large high seas area in the Central Arctic Ocean is now, for the first time in human history, ice-free for several months each year. The possibility that fishing vessels, particularly those registered in non-Arctic States, might launch commercial fisheries there in the absence of adequate scientific information and without any international fishery management mechanism in place, caused serious concern among several Arctic States. The CAO Fisheries Agreement, signed in 2018 and likely to enter into force in 2020, prohibits commercial fishing in the high seas area of the Central Arctic Ocean for at least 16 years following its entry into force. It also commits the parties to create and implement a Joint Program of Scientific Research and Monitoring designed to increase understanding of the changing ecosystem(s) of the Central Arctic Ocean, particularly as those changes might relate to the possibility of future commercial fisheries.¹³

This brief summary of developments is hardly exhaustive. It nevertheless illustrates that policymakers have an increasing awareness of the need to enhance cooperation among nations and stakeholders in addressing ocean issues, as well as a determination to take action. Further efforts to strengthen marine management in the Arctic must take into account and build on these and other developments.



C. Challenges

Although the preceding review of initiatives relating to Arctic marine management suggests a kind of momentum in favor of additional positive actions, a variety of challenges also exist that policymakers will need to overcome if effective EBM in the Arctic is to become a reality. These include the following:

- **Political challenges:** Current geopolitical tensions and varying attitudes among Arctic governments toward climate change have made diplomacy more problematic. The failure of the 2019 Arctic Council Ministerial Meeting to agree on a Declaration underscores the difficulty of making significant progress at this moment.
- **Ecological challenges:** The jurisdictional lines dividing marine areas under national jurisdiction from those areas beyond national jurisdiction generally do not align with boundaries separating one marine ecosystem from another. The Arctic is no exception to this rule (see figure 1 below). Thus, policymakers must confront the difficulty of coordinating marine spatial planning measures so that they can apply in areas with differing legal regimes.
- **Legal/Diplomatic challenges:** In a related vein, the fact that the Arctic contains large areas beyond national jurisdiction, particularly in the Central Arctic Ocean, raises difficulties in balancing the interests of Arctic and non-Arctic States, or in securing the necessary commitments from non-Arctic States if they remain non-members of the Arctic Council or other Arctic regional mechanisms.
- **Climatic challenges:** The profound and alarming changes occurring in the Arctic Ocean, including reduction of sea ice, sea surface temperature warming, and ocean acidification, among other concerns, are affecting the region at a rate never previously recorded and remain poorly understood.¹⁴ The measures that policymakers take to promote effective marine management in the Arctic Ocean may struggle to keep pace with changing climatic conditions.
- **Scientific challenges:** More broadly, overall knowledge of the Arctic Ocean is in many ways still rudimentary and largely uncoordinated, and is still at a very early stage of determining the specific needs for integrated EBM measures.

- Architectural challenges: The various pieces of the existing international regime for the Arctic are not well coordinated. More broadly, as the negotiations toward a BBNJ Agreement are demonstrating, there does not yet seem to be an obvious solution to the challenge of coordinating the management of human activities that bodies such as the IMO, the International Seabed Authority (ISA), various regional fisheries management organizations, and others currently undertake.

ARCTIC LARGE MARINE ECOSYSTEMS (LMEs)

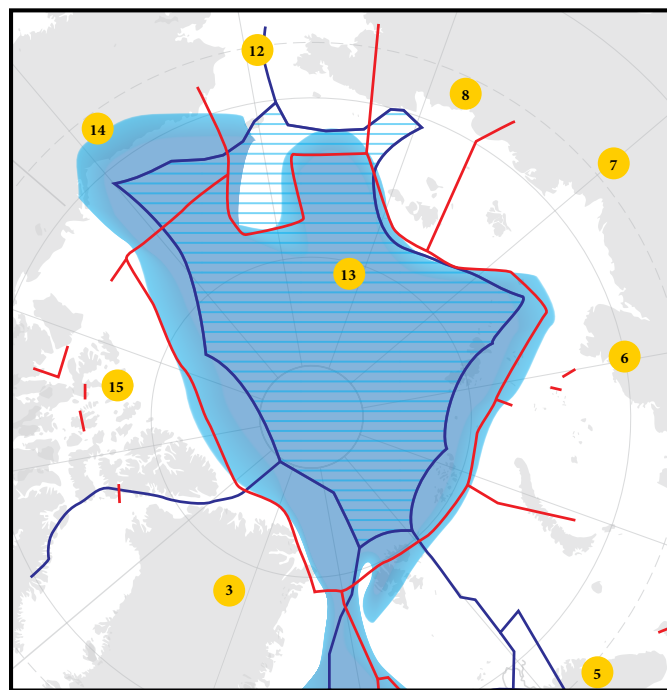


Figure 1. National boundaries (blue) and boundaries of the LMEs (red). The High Seas area (International waters) is hatched. Numbers refer to LMEs defined by red boundaries: 13 Central Arctic Ocean LME, 5 Barents Sea LME, 6 Kara Sea LME, 7 Laptev Sea LME, 8 East Siberian Sea LME, 12 Northern Bering-Chukchi Seas LME, 14 Beaufort Sea LME, 15 Canadian High Arctic – North Greenland LME, 3 Greenland Sea LME (northern portion only).

Source: *Interim Report of the ICES/PICES/PAME Working Group on Integrated Ecosystem Assessment (IEA) for the Central Arctic Ocean (WGICA). WGICA 2017 Report 19-21 April 2017. Seattle, USA. – Copenhagen: ICES, 2017, p. 5 (<https://meetings.pices.int/publications/other/members/WG-39-WGICA-2017-full-report.pdf>).*

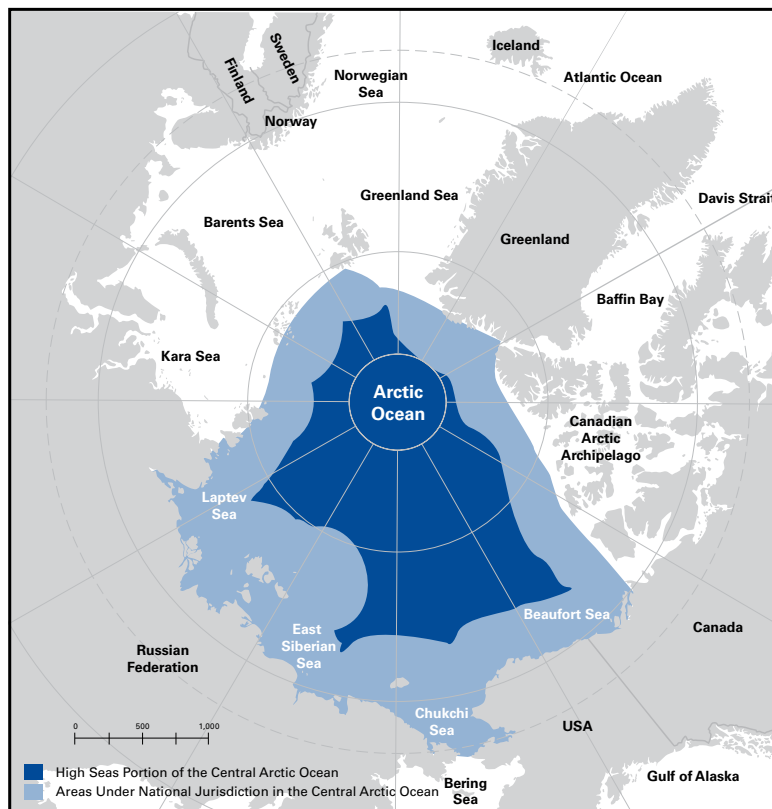


SUGGESTIONS FOR STRENGTHENING MARINE MANAGEMENT IN THE ARCTIC OCEAN

In the hope that policymakers can overcome, or at least mitigate, the difficulties identified above, we offer some ideas for strengthening governance of increasing human activities in the Arctic Ocean. While the goal of these ideas is to promote EBM throughout the Arctic Ocean as a whole, we focus mainly on the Central Arctic Ocean (CAO), particularly in our suggestions concerning possible new international institutions or arrangements outlined in Section III.B. The reasons for focusing on this part of the Arctic Ocean include (1) that it is the most poorly understood marine area in the Arctic, and (2) that limiting the geographic scope of the suggested new institutions to the CAO will reduce the area of overlap with certain existing institutions. For purposes of this article, the CAO includes both the light and dark shaded areas indicated in the map on next page:

In the short-to-medium term, our suggestions largely involve building on the work

CENTRAL ARCTIC OCEAN



and the institutions that currently exist. In the longer term, should the Arctic Council fail to develop the appropriate capacity to perform as an effective marine management body, it should be possible to develop one or more new institutions to work with—or, in some cases, possibly replace—parts of the present governance architecture for the Arctic region.

The ultimate goal for the Arctic Ocean as a whole should be to build a system of governance that performs two primary functions effectively:

1. The Arctic Ocean requires a mechanism to undertake and coordinate scientific research to provide the basis for effective EBM. This mechanism would, among other things,
 - allow a better understanding of the ecosystems of the marine Arctic;
 - provide comprehensive risk assessments linked to observed and projected economic activities;
 - generate appropriate proposals for management measures; and

- continuously monitor the effects of management measures and generate updated recommendations for management measures.
2. The Arctic Ocean also requires a mechanism to receive and act on proposals for management measures based on the best scientific information available, including the scientific information and proposals generated by the mechanism described above. This management mechanism should be an intergovernmental body that either has the authority to take decisions binding all relevant actors, or to engage effectively with a range of sectoral intergovernmental bodies that could take such decisions.

A. Suggestions for the short-to-medium term

The Arctic Council, despite its lack of legal personality, ad hoc funding arrangements, and other limitations, remains at the center of the governance architecture for the Arctic Ocean as things stand today.¹⁵ The Council has the proven capacity to shape governmental decision-making and to coordinate in useful ways with other entities whose work touches on the Arctic Ocean. Notwithstanding the failure of the TFAMC to fulfill its entire mission—and despite the inability of Arctic State Ministers to agree on a Declaration in 2019—it should be possible in the short-to-medium term to improve the functioning of the Arctic Council as it addresses marine management, both on its own and in coordination with other bodies. Initial steps would include the following:

- **Create a robust “SAO based mechanism” with the participation of high-level marine policymakers and give the mechanism a strong mandate and a meaningful agenda.**

Most immediately, the Council needs to decide how to give effect to the language in the “Chair’s Statement” from the 2019 Rovaniemi meeting to create an “SAO based mechanism” for enhancing marine cooperation. This initiative, while not among the recommendations of the TFAMC, nevertheless represents—for the time being—the most visible step that the Council is likely to take in the near future to address some of the needs identified by the TFAMC. That said, the step of creating such a mechanism would almost certainly need to be interim in nature, given the inherent structural and resource-related limitations that the Council faces today.

Although the mechanism is to be “SAO based,” it should involve the active participation of officials responsible for making decisions and for implementing policy on marine issues in each of the Arctic Council Member States. Those officials usually work in ministries dealing with oceans, marine resources, environmental protection,

science, shipping, and other substantive matters affecting the ocean. The mechanism may also need to engage scientific and technical experts, whose role should be to inform sound decision-making. The involvement of experts may be necessary, but is certainly not sufficient. For the mechanism to work properly it needs to have people at the table capable of making decisions—and capable of ensuring that those decisions get implemented back home.

Even if the SAO based mechanism involves officials with responsibility for addressing various ocean issues (e.g., marine pollution, marine spatial planning, ocean science), the mechanism could at best produce decisions that are politically binding on Arctic Council Members. Like the Arctic Council as a whole, the mechanism will lack the authority to adopt legally binding decisions of the sort that a marine commission with such authority could produce.¹⁶

- **Building on the Council’s commitment to EBM, develop a comprehensive program of scientific research for the purpose of substantiating marine spatial planning measures in the Arctic Ocean, including in marine protected areas.**

In 2015, the Council developed a “Framework for a Pan-Arctic Network of Marine Protected Areas (MPAs)” to “inform the development of MPAs and networks of MPAs that are located within the national jurisdiction of Arctic States and chart a course for future collaborative planning, management and actions for the conservation and protection of the Arctic marine environment.”¹⁷ The Chair’s Statement from the 2019 Rovaniemi Ministerial Meeting encouraged further cooperation in the development and effective management of such a network. To aid in this endeavor, the Council should now work—on its own and in cooperation with other relevant



bodies—to create a better scientific basis for establishing and implementing marine spatial planning measures, including MPAs.

- **Complete the PAME-ICES-PICES exercise and use its results to improve EBM in the Central Arctic Ocean.**

The Working Group on Integrated Ecosystem Assessment of the Central Arctic Ocean (WGICA)¹⁸ has worked slowly since 2016, largely under the political radar screen. Its 2018 Interim Report¹⁹ suggests that the ecosystem assessment that the WGICA is developing will draw together the latest scientific information concerning the portion of the Arctic Ocean that is least understood—a large area surrounding the North Pole that includes mostly “high seas” waters but also some waters under the jurisdiction of Arctic coastal States. As certain types of human activity will almost certainly expand in and into this area in the coming years, this information will prove critical for making sound management decisions, not only by the Arctic Council but also by such other groups as the Parties to the CAO Fisheries Agreement.²⁰

- **Strengthen coordination with other entities and regimes with the aim of achieving cross-sectoral integration of measures.**

As highlighted by some of the previous examples, the work of the Arctic Council on marine issues does not take place in a vacuum. The ways in which the Arctic Council has engaged with other bodies has grown since its inception. Indeed, the flexible nature of the Council allows it to establish many kinds of relationships with other entities, some of which have authority that the Council lacks to make binding decisions affecting human activity in the Arctic Ocean. Some other intergovernmental bodies—such as ICES, the IMO, and the OSPAR Commission—are Arctic Council Observers. In some cases—such as the WGICA—the Arctic Council enters into partnerships with other bodies to undertake specific projects. The Arctic Council has also facilitated the creation of yet other bodies, such as the Arctic Coast Guard Forum.

The Arctic Council can take greater advantage of these and other relationships it has formed with other intergovernmental entities in promoting effective marine management in the Arctic. For instance, Arctic States can make greater use of the Council as a venue for developing common positions they might advance together in other intergovernmental bodies, such as the IMO. The Arctic States could also take better advantage of the presence of Arctic Council Observer States to consult with them on such matters as appropriate.

In particular, the Arctic Council could more actively engage its Observer States, many of whom have experience in implementing EBM in waters over which they exercise



jurisdiction, in planning and conducting the relevant scientific research, as well as in designing relevant measures to be recommended. Some Observer States might be willing to contribute, financially or otherwise, to the implementation of an agreed scientific program in the Arctic Ocean. Indirectly, engaging the Observer States could help raise broader awareness of the needs for certain measures, and promote such measures, whenever necessary, in broader international institutions, such as the IMO. Although Observer States are not eligible to join any of the binding agreements previously negotiated under Arctic Council auspices (on search and rescue, on marine oil pollution, and on scientific cooperation), future Arctic regional agreements and less formal arrangements should not necessarily exclude non-Arctic States, particularly those addressing the problems of conservation of biological diversity in the Arctic Ocean.

- **Build capacity within the Arctic Council to facilitate and coordinate action by Arctic States in the event of an environmental emergency relating to the Arctic Ocean.**

The Council, primarily through its Working Group on Emergency Prevention, Preparedness and Response (EPPR), has certain limited abilities to assist its Member States in coping with unexpected environmental changes or crises. If a marine oil pollution incident occurs in the Arctic, or should a search-and-rescue need arise, the Arctic States also have commitments to assist one another by virtue of two agreements developed under Arctic Council auspices over the past decade.²¹

The dramatic warming of the Arctic climate and related ecological changes taking place in the region suggest that possible widespread, unexpected, and rapid adverse change may be on the horizon. Recent studies, including the IPCC's Special Report on the Ocean and Cryosphere in a Changing Climate,²² indicate that the chance that Arctic States may need to address such broader and more complex emergency conditions will increase in coming years, perhaps sharply. Arctic Council Members could make much greater use of the Council as a vehicle to facilitate and coordinate



the scientific, economic, and social aspects of responses they would take in the event of such broader emergencies.

- **Systematically monitor and review implementation of relevant Arctic Council recommendations.**

One long-standing criticism of the Arctic Council is that it lacks accountability or, more accurately, that its Members lack accountability for fulfilling commitments they have made in Ministerial Declarations and other key documents adopted by the Arctic Council.²³ The Council could rectify this, and could do so without any amendment to the Ottawa Declaration, simply by instituting the practice of regular monitoring and reporting on implementation of relevant decisions. Concerning marine management issues, that function could become one of the responsibilities of the SAO based mechanism; officials from each Member could periodically report on implementation of commitments made in prior sessions.²⁴

B. Suggestions for the longer term

The suggestions in Section III.A above represent incremental steps that might be feasible in the next few years, despite current geopolitical tensions and other challenges discussed earlier. Taking these steps would not, however, create an international governance regime that fulfills the basic functions relating to science and management highlighted above. Over the longer term, we therefore suggest the building of a stronger architecture to achieve effective EBM in the Arctic Ocean, particularly in the CAO.

1. Create a marine science body for the Central Arctic Ocean

The startling changes that are already taking place in the Arctic Ocean call into sharp relief the absence of a dedicated marine science organization for most of that Ocean. There is a palpable and increasing need for better scientific information about the Arctic marine environment. No existing body adequately fills this gap. ICES and PICES are spending a portion of their time and effort on the Arctic Ocean, including in collaboration with PAME, but their primary missions relate to the North Atlantic Ocean and North Pacific Ocean, respectively.²⁵

The Arctic Ocean, particularly the CAO, needs a scientific body of its own that would study the ecosystems, do the risk assessments, produce recommendations for management measures, undertake continuous monitoring, and submit further proposals. This scientific body would need to have a formal relationship with a separate but complementary marine management body that would receive and act on such proposals (see Section 2, below).

It may be possible to build a marine science body under the umbrella of the Arctic Council, possibly by transforming the Working Group on Protection of the Arctic Marine Environment into such a body. However, in order to provide such a body with international legal personality and dedicated funding, policymakers would need to develop some kind of legally binding foundational document, separate from the Ottawa Declaration, which establishes the body and creates a formal organizational link to the Arctic Council. If established in this way, the body could potentially coordinate with other existing national and international scientific and technical entities whose work touches on the Arctic region, but would also need the capacity to integrate findings.

This approach raises a number of questions, the solutions to which would require careful consideration. For example, the creation of the operational links between the existing Arctic Council structure and the new marine science organization under a single umbrella could pose certain challenges, including the likely need to adjust the way in which the Council currently deals with marine science issues.

Another approach—at once more ambitious but possibly cleaner in concept—would be to create a new marine science body for the Arctic Ocean based on a new international agreement and existing outside the formal ambit of the Arctic Council. One could think of the new body as an ICES or PICES for the CAO.

A third possibility would be to transform another existing entity—possibly the International Arctic Science Committee (IASC)²⁶—into the sort of marine science body that the Arctic Ocean needs. IASC, currently configured as a non-governmental body, would have to undergo significant change in order to meet the requirements. Among other things, IASC would need a clear intergovernmental dimension (at least by being reconstituted pursuant to an intergovernmental agreement establishing a governing Board of Directors or similar oversight group) and an express mandate to provide scientific management advice to competent authorities, including but not limited to the Arctic Council. This approach would also require consideration of what to do with the work that IASC currently does on terrestrial issues unrelated to the marine environment. Despite these challenges, and acknowledging the risks that altering a successful entity such as IASC in these ways would entail, one advantage of this approach would be that the new marine science body built on the foundation

of IASC would have a broad membership.

Whether policymakers decided to establish such a new body within the framework of the Arctic Council or as a separate organization, they would need to resolve a set of questions about what the body would do and how it would operate. A short summary follows:

- **Mandate**

If the body were to perform functions similar to those currently performed by ICES and PICES for the North Atlantic and North Pacific Oceans, respectively, its mandate could draw inspiration from the mandates of those bodies, adapted to the circumstances of the CAO. Those functions could include the following:

- promoting and coordinating marine scientific research in order to advance scientific knowledge of the area concerned and of its living resources, including but not necessarily limited to research with respect to the ocean environment and its interactions with land and atmosphere, its role in and response to global weather and climate change, its flora, fauna and ecosystems, its uses and resources, and impacts upon it from human activities; and
- promoting the collection and exchange of information and data related to marine scientific research in the area concerned.

- **Geographic Scope**

No single definition of the Arctic Ocean applies in all situations. As noted above, to reduce overlaps with ICES and PICES, the focal region could be limited to the marine areas within and beyond national jurisdiction in the CAO, as shown in the map on page __. Scientific functions and other considerations could take into account marine areas adjacent to the CAO as well as land-based activities that affect the CAO.

- **Membership and Decision-Making**

The Members of ICES and PICES are all States in the North Atlantic and North Pacific regions, respectively. Those involved in creating a new marine science body for the CAO might feel the temptation to follow suit and limit membership in that body to States in the Arctic region. If policymakers decided to establish such a body under the umbrella of the Arctic Council, such a limitation might make sense, in that membership in the Council itself is limited to States in the Arctic region.

However, given that much of the waters of the CAO lie beyond national jurisdiction, and in light of the long-standing scientific interest and engagement of non-Arctic States in the Arctic Ocean, a strong argument exists to make certain other States (and potentially the European Union) eligible for membership in the new marine sci-

ence body. One idea might be to use a test for membership of non-Arctic States that borrows from the approach of the Antarctic Treaty System: non-Arctic States would be eligible for membership if they have demonstrated their interest in the CAO by conducting substantial scientific research relating to that area. If governments chose to transform IASC into the marine science body, presumably its member States would reflect the current nationalities that participate in IASC.

The inclusion of non-Arctic States might complicate decision-making within the new marine science body, however. If, for example, the body were to develop recommendations for management actions relating solely to areas within national jurisdiction, coastal States might well argue that only they are entitled to decide upon such recommendations.

- **Participation of Arctic Indigenous Peoples**

If policymakers decide to establish the new marine science body under the umbrella of the Arctic Council, one presumes that the rules and practices of the Council concerning the participation of Arctic indigenous peoples would apply. That might be one good reason to establish such a body in that way.

A marine science organization established outside the Arctic Council could, however, adopt many of the same rules and practices concerning Arctic indigenous peoples. Indeed, certain Arctic States might not join such an organization unless it allowed for participation by Arctic indigenous peoples in some reasonable fashion. Those Arctic States would also likely seek a commitment to incorporate indigenous and local knowledge into the work and activities of the new organization. That said, some novel questions concerning the participation of States and representatives of Arctic indigenous peoples in a formal international organization would require resolution.²⁷

- **Relationship with Other International Bodies and Instruments**

If the marine science body existed under the Arctic Council



umbrella, it could interact easily with the SAOs, Arctic Council working groups, and other subsidiary bodies. It might also receive administrative support from the Arctic Council Secretariat (or it could have its own secretariat). The body would also need the authority to enter into working arrangements, reflected in memoranda of understanding or similar instruments, with other relevant entities, including but not limited to ICES and PICES.

If policymakers created the marine science body outside the Arctic Council, the body would, in addition, need to develop strong working relationships with the Arctic Council and its subsidiary bodies.

In either case, though, the most vital relationship for the new marine science body would be with a new marine management body, discussed in more detail in Section 2 below.

2. Create a marine management body for the Central Arctic Ocean



As noted above, increasing human activity in the Arctic Ocean, particularly the CAO, will necessitate a new piece of governance architecture, a marine management body capable of receiving scientific advice and recommendations and of acting decisively on such advice by adopting management measures. In the short-to-medium term, the Arctic Council might move toward this model if it creates a robust “SAO based mechanism,” as envisioned in the Chair’s Statement from the Rovaniemi Ministerial Meeting. In the longer term, however, a new entity with a clear mandate and dedicated funding would perform these functions more reliably and effectively.

Once again, it might be possible to establish a new management body under the umbrella of the Arctic Council or outside the Arctic Council. Each approach has its benefits and problems.

The primary advantages of building a marine management body under the umbrella of the Arctic Council—or of giving the Arctic Council itself the authority to perform the functions of a marine management body—would be that the Council is a known entity with an established membership and modes of practice. Since its inception, the Council has evolved in some impressive ways to take on new functions, including by serving as the venue for the negotiation of three binding agreements.

As currently constituted, however, the Arctic Council does not serve the functions of a marine management body—and arguably cannot do so based on the mandate provided in the non-binding Ottawa Declaration. Policymakers would need to find some way to provide the Council (or a new management entity created within the Council framework) with the authority to adopt decisions that would be legally binding on its Members. This would entail, at a minimum, reconstituting the Arctic Council pursuant to a binding international agreement and imbuing it with the requisite authority.

The other approach would be to establish, outside the Arctic Council framework, a “regional seas program” or similar marine management body for the CAO that has the ability to take certain decisions on its own and to interact with other management bodies, such as the IMO, in such a way as to allow other decisions to become effective.

One of the models in this respect is the OSPAR Commission, which focuses on the North-East Atlantic region and which includes among its Members a number of Arctic States.²⁸ The basic obligation of a Contracting Party to the OSPAR Convention is to take steps to prevent and eliminate marine pollution and to protect the OSPAR area against the adverse effects of human activities. The OSPAR Commission serves as the venue through which the Contracting Parties adopt programs and measures to prevent and eliminate pollution and to control activities that may adversely affect the area. The Commission has the authority to adopt legally binding decisions, as well as recommendations and other non-binding decisions. Contracting Parties may “opt out” of legally binding decisions, though this rarely happens. The Commission also issues numerous publications about the state of the marine environment, many of which result from evaluations or assessments based on reports of its Contracting Parties.

The OSPAR Commission engages very actively with other international bodies, including the IMO and ISA, often through memoranda of understanding or cooperative agreements. The ocean area within the purview of the OSPAR Commission is essentially the same as the Convention Area of the North-East Atlantic Fisheries Commission. The two organizations collaborate closely. The OSPAR Commission also regularly interacts with ICES, other regional seas programs that cover adjacent ocean areas, and the Arctic Council, to name just a few.

The OSPAR Commission maintains a Secretariat in London. OSPAR Commission Members share the costs of the Commission and its Secretariat through a formula set forth in the OSPAR Financial Regulations, which takes account of the Members’

GNP and other factors. The current annual budget for the OSPAR Commission is approximately 2 million USD.

Drawing on the OSPAR Commission model,²⁹ policymakers could create a similar entity tailored to the circumstances and the needs of the CAO. To do so successfully would mean resolving some of the same issues discussed above concerning the establishment of a new marine science body (e.g., mandate, geographic scope, membership and decision-making, etc.).

Like the North-East Atlantic, the CAO contains areas within national jurisdiction and an area beyond national jurisdiction.³⁰ This suggests that a marine management body should either

- (1) include as Members non-coastal States that have some clearly identifiable interest in the area to participate in managing human activities, or at least those activities that are not within the exclusive purview of the coastal States; or
- (2) limit membership to the coastal States but seek to work with sectoral organizations such as the IMO to make measures legally binding on all States concerned.

Either approach has its advantages and disadvantages. Most significantly, perhaps, the former approach would complicate decision-making within the management body but might ultimately produce outcomes that legally bind all relevant States directly in ways that the latter approach would not.

In any event, whether established inside or outside the Arctic Council framework, the new marine management organization should operate with transparency, allowing for engagement by stakeholders, including representatives of Arctic indigenous peoples, and participation by observers. The organization should establish procedures for regular monitoring and reporting on the actions taken by its Members in response to its decisions, including the state of, and trends regarding, the marine environment of the CAO.



CONCLUSION

The suggestions outlined above would, we believe, go a long way toward achieving long-standing ambitions to realize EBM in the Arctic Ocean, particularly the CAO. As human activities increase in that Ocean in coming years, implementation of these ideas would provide Arctic States with a stronger regime through which to implement effective marine management. Not incidentally, development of this improved architecture would also provide a common project for the States concerned, pursuit of which might actually reduce the geopolitical tensions that have recently arisen in respect of the Arctic.

ENDNOTES

- 1 Statement by the Chair, Minister of Foreign Affairs of Finland, Timo Soini. https://arctic-council.org/images/PDF_attachments/Rovaniemi-Statement-from-the-chair_FINAL_840AM-7MAY.pdf
- 2 See, e.g., International Panel on Climate Change, “Special Report on the Ocean and Cryosphere in a Changing Climate” (2019). <https://www.ipcc.ch/srocc/>
- 3 SAO Report to Ministers, May 2011.
- 4 Report submitted to the Senior Arctic Officials by the Expert Group on Ecosystem-Based Management, May 2013. The Report notes that, while there are many definitions of EMB, “in simple terms, it refers to an integrated, science-based approach to environmental management that aims to sustain the health, resilience and diversity of ecosystems while supporting sustainable and equitable use by humans of the services they provide.”
- 5 <https://oaarchive.arctic-council.org/handle/11374/1264>.
- 6 Iqaluit Declaration, adopted at the Ninth Ministerial Meeting of the Arctic Council. April 24, 2015. Iqaluit, Yukon, Canada.
- 7 Report to Ministers of the Task Force on Arctic Marine Cooperation (2017). <https://oaarchive.arctic-council.org/bitstream/handle/11374/1923/2017-04-30-Edocs-4079-v3-TFAMC-report-to-ministers-with-cover-and-colophon.pdf?sequence=1&isAllowed=y>. The list of the nine functional needs that the TFAMC identified appears on pages 4-6 of the Report.
- 8 In considering the suggestions set forth in Sections III.A and B of this article, this set of criteria that the TFAMC identified for creating cooperation “throughout the entire cycle of marine stewardship” serves as a vital touchstone.
- 9 Fairbanks Declaration, adopted at the Tenth Ministerial Meeting of the Arctic Council. May 11, 2017. Fairbanks, Alaska, United States.
- 10 Supreme Audit Institutions of Denmark, Norway, the Russian Federation, Sweden and the United States of America, “The Arctic Council: Perspectives on a Changing Arctic, The Council’s Work, and Key Challenges. A Joint Memorandum of a Multilateral Audit on the Arctic States’ national authorities’ work with the Arctic Council,” Arctic Council Secretariat, May 5, 2015, Tromsø; Norway, available at <https://oaarchive.arctic-council.org/bitstream/handle/11374/1527/EDOCS-2698-v1-ACSAOUS201_Anchorage_2015_10-1-1_Multilateral_Audit_Report.pdf?sequence=1&isAllowed=y>. See also D. Balton and F. Ulmer, “A Strategic Plan for the Arctic Council: Recommendations for Moving Forward,” <https://www.wilsoncenter.org/publication/strategic-plan-for-the-arctic-council-recommendations-for-moving-forward>; Malgorzata Smieszek and Timo Koivurova, “The Arctic Council: Between Continuity and Change,” *One Arctic*, 2017, pp 1-26, available at <<http://carc.org/wp-content/uploads/2017/11/One-Arctic-2017.pdf>>.
- 11 Transforming Our World: The 2030 Agenda for Sustainable Development. UNGA Resolution A/RES/70/1 of 25 September 2015. Goal 14 sets a target to conserve, by 2020, “at least 10 percent of coastal and marine areas consistent with national and international law and based on the best available scientific information.” As of December 2018, over 24 million km² (17.2 percent) of waters under national jurisdiction (0–200 nautical miles from a national border) were covered by protected areas, a significant increase from 12 per cent in 2015 and more than double the extent covered in 2010. The global mean percentage of each marine key biodiversity area covered by protected areas increased from 31.2 per cent in 2000 to 44.7 per cent in 2015 and to 45.7 per cent in 2018. Report of the Secretary-General, Special edition: progress towards the Sustainable Development Goals, 8 May 2019, p. 19.

- 12 The envisioned BBNJ Agreement has a mandate to address the following issues: the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, in particular, together and as a whole, marine genetic resources, including questions on the sharing of benefits, measures such as area-based management tools, including marine protected areas, environmental impact assessments and capacity-building, and the transfer of marine technology. UNGA Resolution A/RES/72/249 of 24 December 2017.
- 13 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (Ilulissat, 3 October 2018, not yet in force). For the text of the CAO Fisheries Agreement, see <https://www.dfo-mpo.gc.ca/international/agreement-accord-eng.htm>. See also D. Balton, "The Arctic Fisheries Agreement: Looking to 2030 and Beyond," in *The Arctic in World Affairs*, Corell et al., eds. (2018).
- 14 International Panel on Climate Change, footnote 2.
- 15 See D. Balton and F. Ulmer, "A Strategic Plan for the Arctic Council: Recommendations for Moving Forward," <https://www.wilsoncenter.org/publication/strategic-plan-for-the-arctic-council-recommendations-for-moving-forward>.
- 16 One idea, long championed by Finland, which could strengthen the political commitments that the SAO based mechanism (and other Arctic Council bodies) might produce would be to convene periodic "Arctic Summit" meetings that could endorse those commitments. Of course, this would require the political conditions favorable to these types of Summit meetings.
- 17 <https://oaarchive.arctic-council.org/handle/11374/1471>.
- 18 The WGICA is a joint exercise undertaken by the Arctic Council's Working Group on Protection of the Marine Environment (PAME), the International Council for the Exploration of the Sea (ICES), and the North Pacific Marine Science Organization (PICES).
- 19 ICES CM 2018/IEASG:11.
- 20 Article 4 of the CAO Fisheries Agreement provides for a "Joint Program of Scientific Research and Monitoring." The nine States and the European Union that signed the Agreement in 2018 will need to decide how to implement the Joint Program and how it will interact with other entities involved in Arctic marine science. In the long term, it may be possible to consider embedding the Joint Program within a new marine science body for the Arctic suggested in Section III.B of this article. Any proposal to do so would need to address serious questions that would inevitably arise, for example if the membership of the marine science body included States that were not party to the CAO Fisheries Agreement.
- 21 Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (2011). For the text of the Agreement, see http://library.arcticportal.org/1474/1/Arctic_SAR_Agreement_EN_FINAL_for_signature_21-Apr-2011.pdf. Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (2013). For the text of the Agreement, see <https://oaarchive.arctic-council.org/handle/11374/529>. The Arctic Coast Guard Forum, created in 2015, is another vehicle through which Arctic States can work together in addressing such incidents. <https://www.arcticcoastguardforum.com/>.
- 22 International Panel on Climate Change, footnote 2.
- 23 See, e.g., H. Exner-Pirot et al., *Form and Function: The Future of the Arctic Council* (Arctic Institute, 2019) <https://www.thearcticinstitute.org/form-function-future-arctic-council/>; P. Kankaanpää and O. Young, *The Effectiveness of the Arctic Council* (2012) <https://www.tandfonline.com/doi/full/10.3402/polar.v31i0.17176>.
- 24 Assuming that negotiations toward a BBNJ Agreement end successfully, and that a BBNJ Agreement becomes a reality, the Arctic Council may need to consider what role, if any, it might play in the implementation of that Agreement in the Arctic region.

- 25 Although both ICES and PICES, individually and jointly, have done some work concerning the Arctic Ocean as a whole, the foundational documents of those organizations make clear that their primary areas of responsibility lie outside the Arctic. Article 2 of the 1964 ICES Convention provides that it “shall be concerned with the Atlantic Ocean and its adjacent seas and primarily concerned with the North Atlantic.” (Convention for the International Council for the Exploration of the Sea, Sept. 12, 1964, 652 U.N.T.S. 237). Article II of the 1990 PICES Convention specifies that its geographic mandate is the “temperate and sub-Arctic region of the North Pacific Ocean and its adjacent seas, especially northward from 30 degrees North Latitude.” (Convention for a North Pacific Marine Science Organization, Dec. 12, 1990. S. Treaty Doc. No. 102-9).
- 26 <https://iasc.info/>
- 27 Negotiators could consider certain precedents for inspiration in this connection. The International Labor Organization, for example, provides for the participation of States (governments), business entities, and labor groups in an unusual tripartite structure. The CAO Fisheries Agreement may also provide a useful precedent. Article 4(4) of that Agreement commits the Parties to take into account “indigenous and local knowledge” in implementing the Joint Program of Scientific Research and Monitoring that the Agreement will create. Article 5(2) of that Agreement provides for the participation of “representatives of Arctic communities, including Arctic indigenous peoples” in committees or similar bodies established to promote implementation of the Agreement.
- 28 Established by the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (in force 25 March 1998), (1992) 32 ILM 1069 (“OSPAR Convention”), as amended. The OSPAR Commission owes its name to the fact that its founding agreement represented a merging of two agreements from the 1970s, the Oslo Convention for the Prevention of Marine Pollution by Dumping for Ships and Aircrafts, and the Paris Convention for the Prevention of Marine Pollution from Land-Based Sources. The Contracting Parties to the OSPAR Convention are Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom, as well as the European Union.
- 29 Another possible model to consider is one offered by the relationship between the Council of the Baltic Sea (CBSS) and the Baltic Marine Environment Commission (generally known as HELCOM). The CBSS operates in some ways like the Arctic Council and has a working relationship with the treaty-based HELCOM that does the actual marine management. Of course, the Baltic Sea and the Central Arctic Ocean present significantly different situations, due in part to the fact that areas within national jurisdiction cover the entirety of the former, while the latter has a significant area beyond national jurisdiction.
- 30 The amount of seafloor in the Arctic that is beyond national jurisdiction still remains to be determined, but is likely to be a relatively small percentage of the overall Arctic seafloor.

ABOUT THE AUTHORS








David Balton is Senior Fellow, Polar Institute, Woodrow Wilson International Center of Scholars and previously served as the Deputy Secretary of State and Deputy Assistant Secretary for Oceans and Fisheries in the Department of State, attaining the rank of Ambassador in 2006. He coordinated U.S. foreign policy concerning oceans and fisheries, as well as issues relating to the Arctic and Antarctica, and oversaw U.S. participation in international organizations dealing with these issues. Ambassador Balton functioned as the lead U.S. negotiator on a wide range of agreements and chaired numerous international meetings. During the U.S. Chairmanship of the Arctic Council (2015-2017), he served as Chair of the Senior Arctic Officials. He also co-chaired Arctic Council Task Forces that produced the 2011 Arctic Search and Rescue Agreement and the 2013 Arctic Oil Pollution Agreement. He separately chaired negotiations to produce an Arctic fisheries agreement. Ambassador Balton received an A.B. from Harvard College and a J.D. from Georgetown University. He appeared with the National Symphony Orchestra (juggling oranges).



Dr. Andrei Zagorski is the Head of the Department for Disarmament and Conflict Resolution Studies at the Primakov National Research Institute of World Economy and International Relations (IMEMO), Russian Academy of Sciences. He is member of the Russian International Affairs Council (RIAC), and Professor of International Relations at the Moscow State Institute of International Relations (MGIMO-University). Dr Zagorski has worked intensively on various issues, including Arms Control, European Security and Post-Soviet Studies. Over the past ten years, Dr. Zagorski intensively engaged in the studies of Arctic politics on governance and security. In particular, he has co-authored with Andrei Todorov a study on the Integrated Marine Management in the Arctic (RIAC Report No. 42/2018).










 www.wilsoncenter.org
 wwics@wilsoncenter.org
 facebook.com/woodrowwilsoncenter
 [@thewilsoncenter](https://twitter.com/thewilsoncenter)
 202.691.4000

One Woodrow Wilson Plaza
1300 Pennsylvania Avenue, N.W.
Washington, DC 20004-3027



**Polar
Institute**

 wilsoncenter.org/program/polar-institute
 polar@wilsoncenter.org
 facebook.com/ThePolarInstitute
 [@PolarInstitute](https://twitter.com/PolarInstitute)
 202.691.4320