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Arctic Ocean governance in light of an of an international legally binding instrument on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction☆

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A B S T R A C T

A global process is underway towards an international legally binding instrument (ILBI) under the Law of Sea Convention (LOSC) on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction This global instrument may influence the governance of the Arctic Ocean of which a large part is beyond national jurisdiction. The Ocean remains one of the last great oceanic wilderness areas of the planet while at the same time being highly vulnerable to climate change and the increased human activity that may follow from the retreating sea ice. The physical changes of the Arctic Ocean have led to growing international attention and perception of the Arctic Ocean as a global common with calls for its increased protection. Alongside with the process towards an ILBI, various initiatives have been taken and discussions conducted within the Arctic region on a mechanism for Arctic marine governance including on the role of the Arctic Council. The current legal framework for governance of the Arctic Ocean is fragmented and incomplete in terms of protecting biodiversity. The article discusses the relevance of a future global instrument for the protection of biodiversity in the Arctic Ocean and its relationship with regional initiatives and existing instruments governing the Ocean. It suggests that Arctic states should use the ongoing global negotiation process as an incentive to take responsibility and be proactive in creating a comprehensive protection regime for the Ocean rather than waiting for the global instrument to serve as the platform.

1. Introduction

A global process is currently underway towards an international legally binding instrument (ILBI) under the Law of Sea Convention (LOSC) on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (BBNJ). The Arctic Ocean is not a topic for these negotiations, nor are any other specific oceans or seas. However, a future ILBI may have implications for the governance and protection of the Arctic Ocean, central portions of which are located around the North Pole, beyond coastal-state jurisdiction. One of our planet's last great oceanic wilderness areas, it is also highly vulnerable to climate change and the increased human activity that may follow from retreating sea ice.

Alongside with the process towards an ILBI, various initiatives have been taken and discussions conducted within the Arctic region on governance of the Arctic Ocean and Arctic waters in general. Some legal instruments already cover the Arctic Ocean, fully or partly. According to the UN mandate for the BBNJ negotiations, such instruments shall not be 'undermined' by the new instrument.

This article offers reflections on the relevance of a future legal instrument for the protection of biodiversity in the Arctic Ocean, its relationship with relevant existing instruments, and possible types of action that the current process towards an instrument may lead Arctic states to undertake. After mapping out the BBNJ process and the current governance framework for the Arctic Ocean, it then discusses options for future Arctic Ocean governance in light of the BBNJ process – including whether a protection regime should await a global instrument for its overall framework, or whether the Arctic States should be proactive and move ahead of the global process.

The article builds on a review of literature (scientific and 'grey') relevant to the BBNJ process and to Arctic marine governance, official documents under the BBNJ process, the Arctic Council and other relevant forums, and on this author's observations from participation at four meetings 2017–2019 of the BBNJ process.

2. The BBNJ process

The obligations of LOSC Part XII on environmental protection are

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very broad. Their structure provides for – indeed depends upon – the dynamic evolution of rules adopted either under LOSC itself as implementing agreements, or in the form of other conventions and international agreements, to achieve environmental objectives.[1] This evolution has yet to take place, for example in the form of regulatory frameworks for ecosystem-based management, the designation of marine protected areas, and minimum standards for Environmental Impact Assessment (EIA). Moreover, the current regulatory framework of marine areas beyond national jurisdiction (ABNJ) is a patchy assembly of different agreements and institutions with limited formal cooperation and coherence between their management measures.[2]

Concerns on deficiencies in the regulatory and governance framework have been raised mainly in relation to biodiversity in ABNJ, along with growing knowledge that the high seas and deep ocean beneath them host far more marine life than previously acknowledged. For example, underwater seamounts and hydrothermal vents have been found to be unique biodiversity-rich ecosystems in ABNJ, cradling some of the oldest organisms on the planet. With the growing awareness of this biodiversity has also come recognition of the serious threats caused by recent decades' increasing demand for exploration and exploitation of ABNJ previously beyond the reach of human activities.[3]

These concerns have led to a process, underway for 14 years at the time of writing, towards achieving a legally binding instrument (ILBI) under LOSC on the conservation and sustainable use of biodiversity in BBNJ.[4] The most recent phase in this process was the convening by the UN General Assembly of an Intergovernmental Conference (IGC) to elaborate the text of an international legally binding instrument. The IGC has been scheduled to meet initially for four sessions: one in 2018, two in 2019 and one in 2020.

Since 2011, discussions in the consecutive UN forums on BBNJ have focused on a package of four topics: 1) marine genetic resources, including the issue of benefit-sharing; 2) measures such as area-based management tools, including marine protected areas; 3) environmental impact assessments; 4) capacity-building and the transfer of marine technology. The UNGA resolution specifies that the IGC negotiations shall deal with this package 'in particular, together and as a whole'.[5]

Further, the process and its result are *not* to 'undermine' existing relevant legal instruments and frameworks and relevant global, regional and sectoral bodies.[6] Uncertainty and diverging interpretations remain as to the scope and implications of this qualification, however. The strictest interpretation focuses on the clear delineation of potentially overlapping mandates; a softer one regards 'not undermining' as an element of ensuring a coherent framework that can complement existing instrument and bodies promoting collaboration, cooperation and mutual supportiveness.[7]

The Convention on Biological Diversity recognises the Ecosystem Approach as the overarching principle and approach to management.[8] This has so far not been the case for the BBNJ process, despite widespread support and no direct contestation for this also to be relevant for the implementing agreement.[9] Notably, however, in the draft text for an agreement prepared by the President for IGC3 in August 2019, the Ecosystem Approach is not mentioned. The Ecosystem Approach requires an integrated approach, and the BBNJ mandate requires that the four elements of the package be dealt with 'together and as a whole' – but, at this stage of the negotiation process, the elements have been addressed separately from each other.

Among many unresolved matters, an important issue for the negotiations is the allocation of competence between the regional and global levels: whether the instrument should have a global top–down approach, a decentralised/regional bottom–up approach building on regional initiatives and existing governance frameworks, or a combination of the two approaches. Arctic Ocean coastal states appear to be among the strongest proponents of a decentralised, regional approach.[10]

3. Arctic Ocean biodiversity

The Arctic Ocean is a unique ocean in terms of marine biodiversity. Its shelves are the most extensive of all oceans, covering about half its area and comprising diverse ecosystems, including millennia-old ice shelves, multi-year sea ice, cold seeps and hot vents and associated life-forms.[11] It houses approximately 5000 animal species (marine mammals, birds, fish and other higher organisms), 2000 types of algae, and an unknown number of ecologically critical microbes.[12] This multitude of life-forms is well adapted to the extreme and seasonal conditions of the Arctic Ocean environment: it is on the one hand adaptable, but on

[1] Hubert, A.M. and Craik, N. Towards Normative Coherence in the International Law of the Sea for the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction, blog of the K.G. Jebsen Centre for the Law of the Sea. http://site.uit.no/jclos/files/2018/02/JCLOS-Coherence-Blog-Hubert-Craik-v-2.pdf.

[2] Ban, N.C. et al. (2014) Systematic Conservation Planning: A Better Recipe for Managing the High Seas for Biodiversity Conservation and Sustainable Use, Conservation Letters, Volume 7, Issue. 1. https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12010.

[3] Merrie, A. et al. (2014) An ocean of surprises – Trends in human use, unexpected dynamics and governance challenges in areas beyond national jurisdiction. Global Environmental Change. Volume 27, July 2014. McCauley, DJ et al. (2015) Marine defaunation: Animal loss in the global ocean. *Science* 16 Jan 2015: Vol. 347, Issue 6219. UN Regular Process (2015) World Ocean Assessment I. https://www.un.org/regularprocess/content/first-world-ocean-assessment.

[4] Wright,G. et al. (2018) The Long and Winding Road: negotiating a treaty for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (IDDRI).

[5] UNGA Resolution/72/249. International legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. https://undocs.org/en/a/res/72/249.

[6] Ibid.

[7] On differing conceptions on the understanding of 'not undermining', see: Friedman, A. (2019) Beyond 'not undermining' possibilities for global cooperation to improve environmental protection in areas beyond national jurisdiction, ICES Journal of Marine Science. Scanlon, Z. (2018) The art of 'not undermining': Possibilities within existing architecture to improve environmental protections in areas beyond national jurisdiction, ICES Journal of Marine Science. De Lucia, V. (2019 Reflecting on the meaning of "not undermining ahead of IGC-2. The blog of the K.G. Jebsen Centre for the Law of the Sea, March 21, 2019. http://site.uit.no/jclos/files/2019/03/JCLOS-Blog-21.3.2019-Reflecting-on-the-meaning-of-not-undermining-ahead-of-IGC-2-3.pdf.

[8] The CBD describes the Ecosystem Approach as 'a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.' (CBD website: https://www.cbd.int/ecosystem/description.shtml). An Ecosystem Approach is often also referred to as 'Ecosystem-based management'. In the BBNJ process this has been defined as '.. an integrated approach to management that considers the entire ecosystem, including all stakeholders and their activities, and resulting stressors and pressures with direct or indirect effects on the ecosystem under consideration. The goal of ecosystem-based management is to maintain or rebuild an ecosystem to a healthy, productive and resilient condition, through, inter alia, the development and implementation of cross-sectoral ecosystem-level management plans'. (Prepcom Chair's streamlined non-paper, 2017, para. 9 https://www.un.org/depts/los/biodiversity/prepcom_files/Chairs_streamlined_non-paper_to_delegations.pdf).

[9] V. De Lucia in this issue.

[10] K. Kraabel in this issue. This is also the observation of the author from participating in and following state interventions at two meetings under the prepcom and 2 meetings under the IGC.

[11] CAFF, 2013. Arctic Biodiversity Assessment. Status and trends in Arctic biodiversity, Akureyri. http://arcticlcc.org/assets/resources/ABA2013Science.pdf.

[12] Ibid.

the other hand also highly sensitive to changes in these conditions. The ice of the Arctic Ocean is crucial to the global environment, through its key role in shaping the world's climate system.[13] For decades, the dominant multi-year ice of the Arctic Ocean was a relatively stable ecological system with a consistent species composition of flora and fauna. In recent years, up to 40% of the Ocean has been ice-free during summer due to global warming; as warming continues, the Arctic Ocean could be largely free of sea ice already by the late 2030s. Sea-ice thickness in the Arctic Ocean has diminished by 65% over the period 1975–2012.[14] Moreover, Arctic marine ecosystems are vulnerable to ocean acidification.[15]

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

4. Arctic Ocean governance

4.1. The Ilulissat Declaration

The Arctic Ocean is encircled by the five coastal states (Norway, Denmark/Greenland,[16] Russia, Canada and the USA) with much of the Ocean under their national jurisdiction. A large central part, appr. 2.8 million square kilometres is high seas beyond national jurisdiction. As regards the other component of ABNJ, the Area, the picture is less clear for the Arctic Ocean.[17] This is because all adjacent coastal states have submitted claims for extended continental shelfs to the UN Commission on the Limits of the Continental Shelf (CLCS).[18] The claims cover most of the seabed below the high seas and are partly overlapping.

The special location has led the coastal states to assume a special stewardship role for the Ocean. In the 2008 'Ilulissat Declaration', Canada, Denmark/Greenland, ~~N~~orway, Russia and the USA state that, by virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean, they are uniquely positioned to address its possibilities and challenges. Further, they declare that they see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean, as LOSC already provides 'a solid foundation for responsible management'.[19] However, they are willing to 'take steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection of and preservation of the fragile marine environment of the Arctic Ocean.' This Declaration has been viewed as an attempt by the coastal states to challenge the emerging idea that the Arctic Ocean should be 'internationalised'.[20]

Non-coastal states have been reluctant to accept this stewardship role of the 'Arctic Five', as demonstrated by the fact that the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (further described below) was signed in 2018 not only by the coastal states, but also by China, the EU, Iceland, Japan and South Korea. Moreover, the three remaining members of the Arctic Council – Finland, Sweden and Iceland – have criticised 'the Arctic Five' stewardship claim as undermining the Council.[21]

It could be argued that the Ilulissat Declaration has lost some of its validity especially with regard to the stewardship claimed by the coastal states and the claim that the existing legal regime is sufficient for management of the Ocean. The Declaration is more than a decade old; since then, as described below, agreements have been concluded with more parties that affect Arctic Ocean governance, However, there are also indications that the Ilulissat Declaration is still viewed as significant by the coastal states. In 2018, Denmark and Greenland co-hosted a high-level meeting in Ilulissat, Greenland, on the occasion of the 10-year anniversary of the Declaration 'to affirm the support of the Arctic States to the principles of the Declaration and to discuss the joint efforts for a peaceful and productive cooperation'.[22] Notably, unlike the signing of the Declaration in 2008, representatives from the remaining member-states of the Arctic Council, Finland, Iceland and Sweden, as well as Indigenous Peoples' representatives, were invited to the anniversary.

4.2. The Arctic Council

The concern over 'the Arctic Five' by the remaining three Arctic Council (AC) states may have been a contributing cause for the Council to strive at becoming a body for regional marine governance, as addressed further below.

Having the eight Arctic states as members, the AC has evolved into the pre-eminent international forum for addressing Arctic issues. Six organisations representing Arctic indigenous peoples have status as Permanent Participants, and several non-Arctic states and organisations have been granted Observer status. The AC is mandated to promote 'cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of

[13] Ibid.

[14] AMAP (2017). Snow, Water, Ice and Permafrost (SWIPA): Summary for Policy-makers. Arctic Monitoring and Assessment Programme (AMAP), Oslo. http://www.amap.no/swipa2017.

[15] AMAP (2013). *AMAP Assessment 2013: Arctic Ocean Acidification.* Arctic Monitoring and Assessment Programme (AMAP). Oslo. https://www.amap.no/documents/doc/amap-assessment-2013-arctic-ocean-acidification/881.

[16] Greenland is a part of the Kingdom of Denmark with an extensive degree of self-government. However, the Kingdom holds the competence for the international affairs of Greenland.

[17] The High Seas encompass the water column beyond the Exclusive Economic Zones of coastal States and are governed by the traditional freedoms of the sea which include navigation, overflight, fishing, scientific research, laying of submarine cables and pipelines, and construction of artificial islands and other installations permitted under international law (LOSC. Articles 86 and 87). The Area is defined 'as the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction' (LOSC, Article 1.) The Area and its mineral resources have a specific legal status as 'common heritage of mankind': this implies that states shall not claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, and that activities in the Area must be conducted for the benefit of mankind as a whole (LOSC, Articles 136, 137 and 140). An International Seabed Authority (ISA) is established as an intergovernmental body to regulate and control all mineral-related activities in the Area.

[18] Jensen, Ø (2015). The Seaward Limits of the Continental Shelf Beyond 200 Nautical Miles in the Arctic Ocean: Legal Framework and State Practice, in L.C. Jensen and G. Hønneland, eds, Handbook of the Politics of the Arctic. Cheltenham: Edward Elgar, pp. 227–246.

[19] The Ilulissat Declaration, Arctic Ocean Conference, Ilulissat, Greenland 27–29 May 2008. https://cil.nus.edu.sg/wp-content/uploads/2017/07/2008-Ilulissat-Declaration.pdf.

[20] Dodds, K (2014). Squaring the Circle: The Arctic States, 'Law of the Sea,' and the Arctic Ocean. Slavic Research Center, Hokkaido University, Japan.

[21] Molenaar, E.J. et al. (2013). Interactions between Global and Regional Regimes: Trends and Prospects, *in*: Molenaar, E.J., Oude Elferink, A.G. and Rothwell, D.R. eds, *The Law of the Sea and the Polar Regions: Interactions between Global and Regional Regimes*. Leiden: Martinus Nijhoff, pp. 389–417.

[22] Ministry of Foreign Affairs of Denmark (2018). High-level Meeting in Ilulissat, Greenland on the Occasion of the 10-year Anniversary of the Ilulissat Declaration. https://um.dk/en/news/newsdisplaypage/?newsid=c26bc6ee-f208-43da-a8b6-1923a3fd5824 See also Rahbek-Clemmensen, J. and Thomasen, G. (2018). Learning from the Ilulissat Initiative. State Power, Institutional Legitimacy, and Governance in the Arctic Ocean 2007–18. https://cms.polsci.ku.dk/publikationer/learning-from-the-ilulissat-iniative/download/CMS_Rapport_2018_1_-_Learning_from_the_Ilulissat_initiative.pdf. This paper makes a strong case for the retention of the 'Arctic 5' as an Arctic regional forum.

sustainable development and environmental protection in the Arctic'.[23] While its main focus has been on sustainable development and environmental protection, it has in recent years become the most important international forum for discussions on a wide range of Arctic issues, including geopolitics.[24]

A key accomplishment of the AC has been production of scientific assessments through its permanent working groups, e.g. on impacts of climate change, the state of biodiversity and the marine environment. In 2013 the Council adopted its 'Vision for the Arctic' expressing, among other things, a wish for the AC to expand its roles 'from policy-shaping into policy-making'.[25] In the last decade the AC has indeed moved beyond being a knowledge generator towards policymaking and norm-setting. However, this has occurred only to a limited extent in relation to biodiversity, as discussed below. In relation to marine governance, the Council has served as the forum for conclusion of two legally binding agreements, on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (2011), and on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic (2013). A third legally binding instrument, the 'Agreement on Enhancing International Arctic Scientific Cooperation', was concluded in 2017. The AC does not have the status of an intergovernmental organisation mandated to take legally binding decisions, and the agreements were therefore formally adopted between the 8 Arctic states.

Marine biodiversity is dealt with mainly by two of the six Arctic Council permanent working groups: on Conservation of Flora and Fauna (CAFF), and on Protection of the Arctic Marine Environment (PAME).

CAFF is mandated to serve as a 'distinct forum for scientists, indigenous peoples and conservation managers … to exchange data and information on issues such as shared species and habitats and to collaborate, as appropriate, for more effective research, sustainable utilization and conservation'.[26]

CAFF was originally conceived not only as a forum for knowledge building, but also for administrative and regulatory cooperation among the eight Arctic states.[27] An early CAFF priority was to create a pan-Arctic network of protected areas (Circumpolar Protected Areas Network, CPAN)[28] (CAFF,1996). However, this work was *de facto* terminated in 2004, as the AC states were apparently unwilling to engage in a 'political' issue involving transboundary and thereby sovereignty matters.[29]

From then on, CAFF became a forum for mainly scientific cooperation, generating extensive knowledge on Arctic biodiversity. Together with the working group for the Arctic Monitoring and Assessment Program (AMAP) and the Arctic Science Committee (IASC), CAFF was co-publisher of the 2005 Arctic Climate Impact Assessment (ACIA), which has formed an important basis for much of the Council's work.[30] ACIA was the first to identify climate change as the most serious threat to Arctic biodiversity.

The culmination of CAFF as a forum for scientific cooperation and knowledge generation was the release of the Arctic Biodiversity Assessment (ABA) in 2013.[31] ABA covers all life-forms in the Arctic – from microorganisms, plants and insects, to birds and mammals, at sea and on land. It provides a comprehensive description of the status and trends of Arctic biodiversity and noting the stressors, knowledge gaps and conservation and research priorities. ABA concludes that the problems facing Arctic biodiversity are interrelated, requiring holistic solutions and international cooperation. The report for policymakers offers 17 recommendations on various levels of concreteness and precision. The 2015 follow-up Action Plan for Arctic Biodiversity is directed mainly towards future AC scientific work, and only to a limited extent to actions by Arctic states in collaboration or individually.[32] The ABA framework of 17 recommendations and an accompanying action plan is the furthest CAFF has moved in the direction of policymaking and norm-setting.

PAME, with a mandate to promote the sustainable use of the Arctic marine areas and to protect the marine environment from onshore and ocean-based pollution sources, has moved somehow further in that direction. A particularly important task for PAME is to prepare proposals for specific preventive measures.[33] This is expressed through policy recommendations, guidelines and action programme, aimed at both the Arctic Council and its eight member countries. One example is the 2009 'Arctic Marine Shipping Assessment' (AMSA),[34] the first report to survey shipping in the North, its impact on the inhabitants of the region and the marine environment. The report includes 17 policy recommendations that are more action oriented and measurable than the recommendations of the Arctic Biodiversity Assessment referred to above.

Of direct relevance to Arctic marine biodiversity, PAME has been engaged in developing the concept of the Ecosystem Approach to management.[35] In 2019, a joint expert group of the three AC working groups, PAME, CAFF, AMAP and the Sustainable Development Working Group (SDWG) produced Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems.[36]

Another PAME contribution directly relevant to Arctic marine biodiversity is the report 'The 'Framework for a Pan-Arctic Network of Marine Protected Areas' from 2015.[37] Its purpose is to protect and restore marine biodiversity, ecosystem function and special natural features, and preserve cultural heritage and subsistence resources for

[23] Arctic Council (1996). Declaration on the Arctic Council, by the representatives of the Arctic states. http://www.international.gc.ca/arctic-arctique/ottdec-decott.aspx?lang=eng Arctic Council (2013). Ecosystem-Based Management in the Arctic. https://oaarchive.arctic-council.org/bitstream/handle/11374/122/MM08_EBM_report%20%281%29.pdf?sequence=1&isAllowed=y.

[24] Rottem, S.V. (2020). The Arctic Council: From Environmental Protection to Geopolitics. In: The Arctic Council. Palgrave Pivot, Singapore. https://doi.org/10.1007/978-981-13-9290-0_1.

[25] https://oaarchive.arctic-council.org/bitstream/handle/11374/287/MM08_Kiruna_Vision_for_the_Arctic_Final_formatted%20%281%29.pdf?sequence=1&isAllowed=y.

[26] CAFF website, https://www.caff.is/policy-home.

[27] Prip, C (2016). The Arctic Council and biodiversity: need for a stronger management framework? Nordisk Miljörättslig Tidskrift, *2*, 37–53. https://www.fni.no/publications/the-arctic-council-and-biodiversity-need-for-a-stronger-management-framework-article1076-290.html.

[28] CAFF (1996). CPAN Strategy and Action Plan, CAFF Habitat Conservation Report no. 6. http://nordiskmiljoratt.se/onewebmedia/NMT%202%202016,%20Prip%20Arctic%20Council.pdf.

[29] Prip (2016) Koivurova, T. (2009). Governance of protected areas in the Arctic. Utrecht Law Review, Vol 5, Issue 1. https://heinonline.org/HOL/LandingPage?handle=hein.journals/utrecht5&div=6&id=&page=.

[30] ACIA (2005). Arctic Climate Impact Assessment. ACIA Overview report. Cambridge University Press. https://www.amap.no/documents/doc/arctic-arctic-climate-impact-assessment/796.

[31] CAFF (2013). Arctic Biodiversity Assessment. Status and trends in Arctic biodiversity. Conservation of Arctic Flora and Fauna, Akureyri. https://www.arcticbiodiversity.is/.

[32] CAFF (2015). Actions for Arctic Biodiversity, 2013–2021: Implementing the recommendations of the Arctic Biodiversity Assessment. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. https://www.caff.is/actions-for-arctic-biodiversity-2013-2021.

[33] PAME (2001) PAME's contribution to the Arctic Council. https://oaarchive.arctic-council.org/bitstream/handle/11374/472/ACSAO-FI02_5_3_3_pame_wssd.pdf?sequence=1&isAllowed=y.

[34] https://www.pame.is/images/03_Projects/AMSA/AMSA_2009_report/AMSA_2009_Report_2nd_print.pdf.

[35] See PAME website: https://www.pame.is/index.php/projects/ecosystem-approach.

[36] Arctic council (2019). Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems. https://oaarchive.arctic-council.org/handle/11374/2390ns.

[37] https://www.pame.is/index.php/projects/marine-protected-areas/framework-for-a-pan-arctic-network-of-marine-protected-areas.

present and future generations. The report states upfront that it is meant to offer guidance, is not legally binding, and that each Arctic state pursues MPA development based on its own authorities, priorities and timelines. It does not indicate how to provide a mechanism for formally designating areas as protected, with associated legally binding restrictions on human activities. Lastly, it does not apply to ABNJ.

In 2015 the AC established an ad-hoc Task Force on Arctic Marine Cooperation (TFAMC) 'to assess future needs for a regional seas program or other mechanism, as appropriate, for increased cooperation in Arctic marine areas' and 'to make recommendations on the nature and scope of any such mechanisms'.[38] The Task Force in its 2017 report recommended the establishment of a new subsidiary body for marine cooperation, noting that 'Arctic marine cooperation should develop among the Arctic States and evolve within the Arctic Council, consolidating and strengthening the Council's marine work'.[39] The Arctic Council renewed the mandate of the Task Force to formulate with the terms of reference for the new body and recommendations for complementary enhancements to existing Arctic Council ministers in 2019.[40]

This *de facto* endorsement of a new subsidiary body for marine cooperation expressed the Council's wish to serve as the primary body for Arctic marine cooperation and governance. Further, it provided an important opportunity for extending the work of the Council from scientific and technical knowledge generation to policymaking, and for establishing an important link in the work of the Council between the two aspects. Governance of the Arctic Ocean, including its central portions beyond national jurisdiction, would seem a potential key area for such cooperation. However, it now appears doubtful whether such a body will ever be established. After two meetings following the renewal of its mandate, the Task Force was unable to deliver the requested terms of reference. Instead, at its 2019 meeting the AC adopted recommendations from the Task Force on 'complementary enhancements' to existing Council institutions and on establishing an unspecified mechanism to coordinate marine issues under the Senior Arctic Officials body of the AC.[41]

In conclusion, the AC has generated scientific knowledge on the state of marine biodiversity of invaluable importance for decision-making on Arctic Ocean governance. In some areas, the Council has facilitated the conclusion of legally binding agreements; it has also made decisions on 'soft law' norms, for example on shipping. In general, however, the AC has not served as a mechanism for Arctic marine governance that could include marine biodiversity concerns. A principal decision to establish such a mechanism has been made, but there is as yet no agreement on its terms of reference.

4.3. Existing legal instruments affecting Arctic Ocean governance

The following will provide a general non-exhaustive overview of the existing regulatory framework governing the Arctic Ocean. Most of the instruments do not cover marine biodiversity explicitly but are still relevant in this context.

The United Nations Convention on Law of the Sea (LOSC) is the overall legal framework for maritime governance, also for the Arctic Ocean. It implicitly addresses marine biodiversity by stipulating duties of states to protect and preserve the marine environment (Art. 192) – including conservation and management of the living resources of the high seas (Art. 116–119), preventing and controlling pollution (Artt. 194–196) and taking measures 'necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life' (Art. 194(5)). LOSC also stipulates duties of states to cooperate with other states at the regional and global levels (Art. 197). Particularly relevant to the Arctic Ocean is LOSC Art. 234, which provides coastal states with the right to take legal measures to prevent, reduce and control marine pollution from vessels in ice-covered areas.

Of the various agreements concluded under LOSC, the 1995 Fish Stocks Agreement is particular important in the context of biodiversity.[42]

The Convention on Biological Diversity (CBD), covering terrestrial as well as marine biodiversity, has adopted the 20 'Aichi Biodiversity Targets'.[43] According to target 6, all fish and invertebrate stocks and aquatic plants shall be managed and harvested sustainably by 2020; according to Target 11, 10% of marine and coastal areas shall be protected by 2020.

CBD jurisdictional authority over ABNJ is not quite clear. The CBD lays down that as regards components of biological diversity, its authority is restricted to areas within the limits of the national jurisdiction of its parties; by contrast, in the case of 'processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control' it extends to ABNJ.[44] It also includes an obligation for parties to cooperate in respect of areas beyond national jurisdiction.[45] In practice, states have viewed LOSC as the lead legal instrument for biodiversity in ABNJ also on international cooperation, as manifested by LOSC hosting the ongoing negotiations towards an international legally binding instrument on biodiversity in ABNJ. The CBD role in relation to ABNJ has mainly been the identification of Ecologically or Biologically Significant Marine Areas (EBSAs) in areas within and beyond national jurisdiction, including the central part of the Arctic Ocean.[46] Moreover, the CBD has adopted guidelines for impact assessments applying also to ABNJ.[47]

Another cluster of regulations includes the International Maritime Organization (IMO), which has adopted the International Code for Ships Operating in Polar Waters (Polar Code)[48] under and with amendments to both the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of

[38] Arctic Council (2015). Iqualuit Declaration. paragraph 43 https://oaarchive.arctic-council.org/bitstream/handle/11374/662/EDOCS-2547-v1-ACMMCA09_Iqaluit_2015_Iqaluit_Declaration_formatted_brochure_low-res.PDF?sequence=6&isAllowed=y.

[39] Arctic Council Task Force on Arctic Marine Cooperation (2017). Report to Ministers of the Task Force on Arctic Marine Cooperation. Arctic Council Task Force on Arctic Marine Cooperation (TFAMC). https://oaarchive.arctic-council.org/handle/11374/1923.

[40] Arctic Council (2017). Fairbanks Declaration. Paragraph 12. https://oaarchive.arctic-council.org/bitstream/handle/11374/1910/EDOCS-4072-v5-ACMMUS10_FAIRBANKS_2017_Fairbanks_Declaration-2017.pdf?sequence=9&isAllowed=y.

[41] Arctic Council (2019). Recommendations by the Task Force on Arctic Marine Cooperation II for complementary enhancements of the Arctic Council institutions including the SAO based mechanism to coordinate marine issues in the Arctic Council. https://oaarchive.arctic-council.org/bitstream/handle/11374/2345/SAOFI204_2019_RUKA_08-02_TFAMC-II-Recommendations.pdf?sequence=1&isAllowed=y Statement by the Finnish Chair on the occasion of the Eleventh Ministerial meeting of the Arctic Council Rovaniemi 6–7 May 2019. https://arctic-council.org/images/PDF_attachments/Rovaniemi-Statement-from-the-chair_FINAL_840AM-7MAY.pdf.

[42] United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (in force as from 11 December 2001).

[43] CBD website. https://www.cbd.int/sp/targets/default.shtml.

[44] CBD, Article 4(a) and (b).

[45] CBD, Article 5.

[46] EBSA website. https://www.cbd.int/ebsa/.

[47] CBD/COP/DEC/XI/18, Marine and coastal biodiversity: sustainable fisheries and addressing adverse impacts of human activities, voluntary guidelines for environmental assessment. https://www.cbd.int/doc/decisions/cop-11/cop-11-dec-18-en.pdf.

[48] MEPC 68/21/Add.1 Annex 10. The International Code for Ships Operating in Polar Waters (Polar Code) www.imo.org/en/MediaCentre/HotTopics/polar/Documents/POLAR%20CODE%20TEXT%20AS%20ADOPTED.pdf.

Pollution from Ships (MARPOL). The Polar Code entered into force in January 2017 and covers the full range of design, construction, equipment, operational, search-and-rescue and environmental protection matters relevant to ships operating in the inhospitable waters surrounding the two poles. Also relevant in the context of shipping are the regional agreements concluded among the Arctic states on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic and on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, referred to above.

At the regional level, the 1992 treaty-based commission for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) covers eastern parts of the Arctic Ocean.[49] As one of few Regional Seas Programmes to include ABNJ, it has established the first network of protected areas in ABNJ.[50] The North-East Atlantic Fisheries Commissions (NEAFC) covers largely the same area as OSPAR; in 2014, the two legal entities agreed on a specific cooperative mechanism, 'the Collective arrangement between competent international organisations on cooperation and coordination regarding selected areas in areas beyond national jurisdiction.'[51]

The only regime with limits fully within the Arctic Ocean is the recently concluded Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean, a clear expression of the precautionary approach to fisheries conservation and management. There is as yet no commercial fishing; the Agreement bans unregulated fishing for an initial period of 16 years after entry into force. This period can be extended every five years until scientists confirm that such fishing can be conducted sustainably and until the parties agree on mechanisms to ensure the sustainability of fish stocks.[52]

4.4. Outside perceptive of Arctic Ocean governance

Climatic and environmental changes of the Arctic region, with retreating sea ice, have led to growing international attention and perception of the Arctic Ocean as a global common, with calls for greater protection from human activity. This has become even more topical after the protection of another polar common: the declaration in 2016 of the world's largest marine protected area in the Ross Sea, Antarctica.[53] These concerns are often expressed in the context of broader discussions on Arctic governance and the role of the Arctic Council.[54] Scholars and NGOs, as well as the European Parliament, Finland, and the Conference and Standing Committee of Parliamentarians of the Arctic Region, have offered proposals for replacing the 'lightweight' non-regulatory statutes of the Arctic Council with an overarching Arctic treaty regime, in some cases referring to the Antarctic Treaty System as the inspiration[55]; others, however, have held that the Arctic and Antarctic regions are not comparable in terms of governance.[56] In a 2010 report commissioned by the WWF, Molenaar and Koivurova presented a proposal for a comprehensive legally binding instrument on the marine Arctic.[57]

In particular, scholars have advocated for a regional treaty to protect the Arctic Ocean from human activity,[58] and Greenpeace has called for its designation as an Arctic Sanctuary.[59] Others have defended the approach taken by the Arctic coastal states in the 'Ilulissat Declaration': that the Arctic Ocean is sufficiently covered by the existing legal framework.[60] Oran Young has argued for an Arctic Ocean regime complex that would be something between fully fragmented and integrated arrangements, encompassing various distinct yet interrelated elements.[61]

4.5. Summary of Arctic Ocean governance in terms of biodiversity

There is no regime in place for the Arctic Ocean to protect biodiversity *per se.* Several global and regional regimes are relevant for the management of biodiversity, but they provide a patchy framework in terms of geographical coverage, content and which countries are parties. Moreover, the existing framework leave gaps as regards applying the ecosystem approach to which both the BBNJ process and the Arctic Council subscribe. For example, there is no regime that covers the extractive industry nor authorises the designation of marine protected areas and the invocation of environmental impact assessment. These shortcomings of ocean governance mirror those of other marine regions around the world, thereby justifying the key rationales behind a global instrument on BBNJ: to fill gaps, to provide a global mechanism to coordinate existing bodies and treaties across geographic areas and sectors, and to provide for common environmental standards without obstructing more ambitious ones.

5. Waiting for an international instrument to provide a platform or showing arctic proactiveness?

The changing Arctic represents a test case for the precautionary

[49] OSPAR website https://www.ospar.org. NEAFC website https://www.neafc.org/.

[50] G. Wright, G. and. J Rochette, J. (2018). Regional Ocean Governance of Areas Beyond National Jurisdiction: Lessons Learnt and Ways Forward', STRONG High Seas Project. https://www.iddri.org/sites/default/files/PDF/Publications/Hors%20catalogue%20Iddri/strong%20high%20seas%20-%20regional%20governance%20ABNJ_1.pdf |

[51] Ibid.

[52] Balton, D. in this issue.

[53] Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) website. https://www.ccamlr.org/en/science/marine-protected-areas-mpas.

[54] See: E.J. Molenaar (2016). The Evolution of the Arctic Council and the Arctic Council System, *The Circle*, 2016 (2): 19–20.T. Koivurova, T. and Graczyk, P. (2014). 'The Future of the Arctic Council: Navigating between Sovereignty and Security', *in*: Robert W. Murray and Anita Dey Nuttall (eds), *International Relations and the Arctic: Understanding Policy and Governance*. Amherst, NY: Cambria Press, pp. 441–481, ISBN 978-1-60497-876-6. Koivurova, T. (2010). 'Limits and possibilities of the Arctic Council in a rapidly changing scene of Arctic governance', *Polar Record* 46 (237): 146–156. Young, O.R. (2012). Building an international regime complex for the Arctic: current status and next steps. *Polar Journal* 2(2):391–407. Stokke, O.S. (2015). Institutional complexity in Arctic governance: curse or blessing? *In* L.C. Jensen and G. Hønneland (eds), *Handbook of the Politics of the Arctic*. Cheltenham: Edward Elgar, pp. 328–351.

[55] Molenaar, E.J. (2017). The Arctic, the Arctic Council, and the Law of the Sea, in Beckman, R.C., Henriksen, T., Kraabel, K.D., Molenaar, E.J., Roach, J.A. (eds) *Governance of Arctic Shipping. Balancing Rights and Interests of Arctic States and User States*. Leiden: Brill/Nijhoff, pp. 24–67. European Parliament, Resolution of 9 October 2008 on Arctic governance. Nowlan, L. (2001). Arctic Legal Regime for Environmental Protection, *IUCN Environmental Policy and Law Paper* 44.

[56] Koivurova, T. (2008). 'Alternatives for an Arctic Treaty – Evaluation and a New Proposal', *European Community & International Environmental Law, RECIEL 17* (1) Special International Polar Year Issue,14–26.

[57] Molenaar, E.J. & Koivurova, T. (2010). International Governance and Regulation of the Marine Arctic. A Proposal for a Legally Binding Instrument..

[58] See Huebert, R. (2009). The Need for an Arctic Treaty: Growing from the United Nations Convention on the Law of the Sea, *Ocean Yearbook Online,* 23 (1): 27–37.R. Rayfuse, R. (2008). 'Protecting Marine Biodiversity in Polar Areas Beyond National Jurisdiction', *RECIEL* 17 (1):3–13 Hossain, K and Morris, K. (2017). *Protecting Arctic Ocean Marine Biodiversity in the Area Beyond National Jurisdiction. Plausible Legal Frameworks for Protecting High Arctic Waters*. Springer. https://link.springer.com/content/pdf/10.1007%2F978-3-319-51274-7_6.pdf.

[59] Greenpeace International (2014). Arctic Sanctuary – Global commons, environmental protection& future proofing. http://www.greenpeace.org/international/en/publications/Campaignreports/Oceans-Reports/arctic-sanctuary/.

[60] Hoel, A.H. (2009). Do We Need a New Legal Regime for the Arctic Ocean? *The International Journal of Marine and Coastal Law*, 24 (2): 443–456.

[61] Young, O.R. (2011). If an Arctic Ocean treaty is not the solution, what is the alternative? *Polar Record* 47 (243): 327–334.

management of marine resources where exploitation is still in the preliminary stages. While many may see this as an inviting opportunity to develop a new regional regime for protection, this is not the case for Koivurova and Caddell.[62] They argue 'that that the present legal and institutional framework for the Arctic need not be revisited at this juncture, as it provides a strong regime through which to implement the core objectives of the ILBI'. Hence, Koivurova and Caddell regard the emergence of an ILBI with expected global standardised methodologies, objectives and procedure as particularly timely for the Arctic- They see the coming ILBI as a global platform for enhanced protection of Arctic Ocean biodiversity within the existing legal and institutional framework for the Ocean. A special institutional role is envisaged for the Arctic Council, which has already undertaken much groundwork for ecosystem-based management, and with a possible new subsidiary body for marine cooperation underway.[63]

However, this approach can be questioned on several grounds.

As discussed above, it is disputable whether the existing legal framework is adequate to serve as a legal basis for protecting Arctic Ocean biodiversity, given its fragmented character and the fact that essential regulatory elements are missing for areas beyond national jurisdiction – such as regulation of marine extraction, requirements for impact assessment and designation and management of marine protected areas.

Also, it could be argued that the protection of Arctic Ocean biodiversity is a matter of too great urgency to await the development of an ILBI as the basis. At the time of this writing, negotiation of the instrument is still at an early stage, and there is a high probability that the negotiation process will be extended beyond the last scheduled meeting in 2020. Then many years will elapse before the instrument will enter into force. In the meantime, the rapid retreat of the Arctic Ocean ice cover will continue, entailing ecological changes with possible increased human activity in the Ocean.[64] The greater exploitation which may follow from increased accessibility is only just beginning, leaving the opportunity to apply a precautionary approach before it is too late. This was the thinking that led to the adoption of the Central Arctic Ocean Fisheries Agreement, and is an argument for applying a similar precautionary approach to other stressors to biodiversity than fisheries in the Arctic Ocean.

Moreover, it is by no means certain that all Arctic states favour being led by a global instrument in governing the Arctic Ocean. As noted, the Arctic coastal states seem to be among the strongest proponents of the decentralised, regional ILBI approach, in contrast to a centralised top–down approach. Thus far, they have only stated general reasons for this position, but the Arctic Ocean could well be the elephant in the room. In line with the Ilulissat Declaration, the Arctic coastal states are against an ILBI approach that could 'impose' globally stipulated protective measures on the Ocean.

Where, then, does that leave the Arctic states when it comes to the governance and protection of Arctic Ocean biodiversity?

One possibility would be to let the ongoing global negotiation process serve as an incentive for Arctic states to take responsibility and be proactive, creating a comprehensive protection regime for the Ocean that could fill the gaps in the current governance framework regarding biodiversity protection. That process can be considered already started with the adoption of the Central Arctic Ocean Fisheries Agreement and its strong precautionary approach.

Another argument for Arctic proactiveness is more in the self-interest of the coastal states: They would actually exercise their longstanding claim to being stewards of the Ocean, confirming the willingness expressed in the Ilulissat Declaration 'to ensure the protection of and preservation of the fragile marine environment of the Arctic Ocean'. Despite disagreement on the level of a top–down vs. a bottom–up approach, the ILBI will not undermine regional mechanisms – indeed, it would probably encourage their development as an important means for implementation.[65] A proactive Arctic approach could inspire other regions to be at the forefront of global development by taking measures to ensure maximum regional influence on the future governance framework. A Regional Seas Programme partly covering the Arctic Ocean, OSPAR, could be said to already be in the vanguard in this regard.

A final question: who should then be viewed as 'Arctic states' in this context? Several constellations have appeared in relation to Arctic marine governance, including 'the Arctic Five' (coastal states), 'Arctic 5 + 5' (the states concluding the Fisheries Agreement) and 'the Arctic Eight (the AC member-states). The Arctic Council, which has become the preeminent international forum for addressing Arctic issues, holds that Arctic marine cooperation should develop among the Arctic States and evolve within the Arctic Council. It would therefore seem feasible to give the AC the task of preparing such a regime through an envisaged new subsidiary body for Arctic marine cooperation. However, as noted, the AC has apparently not managed to agree on the terms of reference for such a body. This lack of political will to assume the much-needed role as forum for Arctic marine governance give rise to the question of whether a governance mechanism should be established *outside* the framework of the AC. Despite the overall interest in avoiding further proliferation of Arctic governance forums, the importance of strengthening Arctic marine governance may overrule this concern.[66] The mechanism could take the form of a regional seas programme, drawing inspiration from similar mechanisms elsewhere, the large majority of which have adopted legally binding regional seas conventions.

6. Concluding remarks

As of this writing, there is only one more negotiating session scheduled under the Intergovernmental Conference on an international legally binding instrument under the UN Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. However, the process is far from complete. Many key issues are still unresolved, and it seems likely that the process will be prolonged. What is not up for discussion is whether the Central Arctic Ocean will fall under the scope of the coming instrument. This Ocean is unique in terms of biodiversity: its fragile ecosystems are threatened by global warming and by increasing access for human activity in once-inaccessible areas. The Arctic Ocean is thus highly relevant in relation to the objectives of the new instrument. It is also undisputed that the instrument is not to undermine existing regional instruments, and that it will even encourage their further development as means for implementation of the instrument. To a large extent, the Arctic region is well equipped to support implementation of such an instrument. High-quality scientific work has been generated under the Arctic Council, documenting clearly that action is needed to reduce the loss of Arctic biodiversity. The Arctic Council has developed the concept of the Ecosystem Approach to the conditions of the Arctic Ocean and has laid the scientific foundations for an Arctic network of marine protected areas. The time is now ripe to create a cooperative mechanism that can translate these scientific findings into coordinated regional action – whether within or outside the Arctic Council.

[62] Koivurova, T., & Caddell, R. (2018). Managing Biodiversity Beyond National Jurisdiction in the Changing Arctic. *AJIL Unbound, 112*, 134–138. https://doi.org/10.1017/aju.2018.44.

[63] Ibid.

[64] CAFF (2013).

[65] Wright and Rochette (2019).

[66] Balton, D. (2018). Will the Task Force on Arctic Marine Cooperation deliver? Article in the Circle: Arctic biodiversity in the spotlight. https://arctic.wwf.org/newsroom/the-circle/arctic-biodiversity/will-the-task-force-on-arctic-marine-cooperation-deliver/.

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Appendix A. Supplementary data

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