PCRC WORKING PAPER SERIES

PCRC 2nd Symposium
"The Future Design of the Arctic Ocean Legal Order"
July 28-29, 2016

PCRC Working Paper No. 7 (May, 2017)

"Institutional Approaches to (Future) Governance of the Arctic Ocean"

Tore Henriksen

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Polar Cooperation Research Centre (PCRC)
Graduate School of International Cooperation Studies (GSICS)
Kobe University, Japan
http://www.research.kobe-u.ac.jp/gsics-pcrc/index.html

Institutional Approaches to (Future) Governance of the Arctic Ocean

Tore Henriksen

UiT Arctic University of Norway

Tore Henriksen is Professor of International Law and Director of K.G. Jebsen Centre for the Law of the Sea, UiT Arctic University of Norway. He was Visiting Professor at Graduate School of International Cooperation Studies (GSICS), Kobe University, Japan (July-September, 2016). His research interest is international law of the sea, international environmental law and international fisheries law. His recent publications include Tore Henriksen, "Protecting Polar Environments: Coherency in Regulating Arctic Shipping." In Rosemary Rayfuse (ed.), *Research Handbook on International Marine Environmental Law* (Edward Elgar Publishing, 2015), pp. 363-384; Tore Henriksen, "Conservation of marine biodiversity and the International Maritime Organization." In Christina Voigt (ed.), *Rule of Law for Nature: New Dimensions and Ideas in Environmental Law* (Cambridge University Press, 2013), pp.331-346.

1. Introduction

The title of my presentation is rather cryptic. To formulate it a bit simpler: The objective of the paper is to investigate possible alternatives for the regulation of human activities in the Arctic Ocean.

The basis for the investigation is international law and in particular the law of the sea, as reflected in the 1982 UN Convention on the law of the sea. No doubt, the law of the sea is applicable to the Arctic Ocean. In the 2008 Ilulissat Declaration, the five Arctic coastal States have described the law of the sea as an «extensive international legal framework» and therefore rejected ideas for a «new comprehensive legal regime to govern the Arctic».

The attention in recent years have been on how to develop governance system(s) for the Arctic Ocean within the framework of the law of the sea. The question if and how the law of the sea adequately addresses present-day challenges is not only relevant to the Arctic Ocean but to all oceans and sea. The focus on the Arctic is because in large parts of the Arctic Ocean human activities are inadequately regulated. This paper will concentrate on the more general question on the adequacy and adaptability of the law of the sea. However, the question of the feasibility of comprehensive environmental

treaty is particularly relevant for the Arctic Ocean. In contrast to other oceans, the absence of human activities and established interests may provide scope for more innovative approaches to oceans governance.

These questions will be addressed through sections 3 and 4 before some concluding remarks are made in Section 5. Section 2 provides some background to the discourse. The next Section 3 includes a presentation of the legal framework for regional cooperation on environmental protection, which is based on zonal and sectoral approaches. In this section, the adequacy of such structure in light of recent years' developments on holistic and integrated approaches is discussed. In Section 4, the emerging Arctic Ocean governance is addressed, based on the presentation in the preceding section.

2. Background: In search for the legal framework for protecting the Arctic Environment

The recognition of the Arctic as a marine region in which there exists or should exist certain international environmental norms have a long history. The only Arctic environmental protection treaty – on Polar Bears – was signed in 1973. However, the real developments occurred with the end of the cold war facilitating for cooperation between former enemies, through the Arctic Environmental Protection Strategy, which was succeeded by the Arctic Council. The realization of the impacts of climate change in Arctic attracted the interest of non-arctic states in the Arctic Ocean and its governance. This provides two perspectives on how to govern the marine environment of the Arctic Ocean:

- The perspective of the states of the region (the Arctic States and Arctic coastal States), and
- The perspective of non-Arctic States and the larger world community.

2.1 Perspective of the Arctic States: Protecting their environment within the law of the sea

The eight Arctic states came together through the Arctic Environment Strategy (AEPS) in the early 90s exactly due to the concern for the Arctic environment. One of the principle tasks of AEPS was to identify the international legal instruments relevant for

the protection of the Arctic environment. The second was to assess the state of the environment, which also has been an essential role of the Arctic Council.

In its founding document (AEPS), the Arctic States highlighted their particular interest and responsibilities as neighbouring countries in the Arctic. They emphasized the need to take preventive measures directly or through competent international organizations, consistent in particular with UNCLOS. They committed themselves to work on the further strengthening of the rules of international environmental law to protect the Arctic. The working group on the Protection of the Arctic Marine Environment (PAME) was mandated to undertake the review of relevant international legal instruments. The 1996 PAME review focused on pollution, from different sources including from land-based activities, dumping, shipping and from offshore oil and gas. It emphasized that the existing legal instruments should be effectively used and implemented. It proposed initiatives for regional action plans for addressing land based pollution and offshore oil and gas. The legal framework for shipping was considered adequate. The Arctic States later developed guidelines for land-based pollution and offshore oil and gas activities.

The Arctic Council and its Working Groups continued the work of AEPS on these issues. It was gradually developed and expanded on, not least due to the effects of climate change as reported in the ACIA report. Climate change effects may potentially open the Arctic Oceans to new and expanded human activities (with consequences for the marine environment). This raised new questions on the adequacy of international legal framework on the protection of marine environment of Arctic Ocean. This was the background for the Arctic Ocean Review (AOR) undertaken by PAME and adopted by the Ministerial Meeting of Arctic Council in 2013. As with the 1996 Review, the AOR at was conducted within the framework of the law of the sea, focusing on challenges to the Arctic States. The AOR confirmed the impression that the Arctic Council is a regional cooperation by and for the Arctic States.

2.2 Perspective of the world community: Between common concern and sovereign rights

The climate change and melting of the sea ice attracted international attention to the Arctic Ocean. Assessment of the adequacy and of gaps in the legal framework applicable to the Arctic Ocean, where undertaken by academics and environmental NGOs. There were also calls for new international environmental treaties to close the

alleged gaps. One example was the 2009 resolution by the European Parliament on Arctic Governance:

> …the Commission should be prepared to pursue the opening of international negotiations designed to lead to the adoption of an international treaty for the protection of the Arctic, having as its inspiration the Antarctic Treaty, as supplemented by the Madrid Protocol signed in 1991, but respecting the fundamental difference represented by the populated nature of the Arctic and the consequent rights and needs of the peoples and nations of the Arctic region; believes, however, that as a minimum starting-point such a treaty could at least cover the unpopulated and unclaimed area at the centre of the Arctic Ocean"**.**

The EU Parliament has more recently endorsed establishing marine protected areas in the high seas of the Central Arctic Ocean (European Parliament resolution of 12 March 2014 on the EU strategy for the Arctic, 2013/2595(RSP)) para 38). These initiatives clearly signals that non-Arctic States wants to be more than passive observers to the governance of the Arctic Ocean.

The legitimacy of their interests in participating in the governance of the Arctic Ocean are based on the rights they enjoy under the law of the sea on the high seas (e.g. navigation, fishing and marine scientific research) and rights in the maritime zones of the coastal States (e.g. freedom of navigation and right of innocent passage). The protection of the marine environment or more specifically the marine biodiversity is a *common concern of humankind* under the Convention on Biological Diversity. This implies that other States have legitimate interest in how States protect the marine biodiversity. Of course, this begs the question on how such community interests are to be accommodated in the governance of the Arctic Ocean and does not necessarily require its active participation.

The establishment of the group of 5 Arctic coastal States (outside the scope of Arctic Council) sent a strong signal that nearness to the ocean and as sovereign rights over approximately 80% of the Arctic Ocean provides them with "special interest" and legitimacy in its governance. They have described themselves as "stewards", suggesting that they act on behalf of a greater community. The purpose of the 2008 Ilulissat declaration was not only to establish that the law of the sea was applicable to the Arctic Ocean. By excluding three of the Arctic States, they also signalled that the broad responsibility for the region lies with the coastal States and that other states might be involved where their rights and obligations are affected. Consistently with

this approach, the two agreements entered into by the Arctic States through the Arctic Council have both geographical area of application covering more than the Arctic Ocean. This goes to suggest that there is small likelihood for an international inclusive instrument for the governance of the Arctic Ocean.

3. Law of the Sea and Ocean Governance

3.1 General

The law of the sea as reflected in the 1982 UN Convention on the Law of the Sea (UNCLOS) provides the legal framework for the governance of the Arctic Ocean. The main question of this paper on the adequacy and adaptability of UNCLOS will be addressed under this section.

The law of the sea is structured or organized along two main strains, what Professor Tanaka has described at the dual approaches: They include the zonal approach and the sectoral approach. This systematization provides for the basics for understanding the governance of oceans and its limitations.

Zonal approach

The oceans are divided in maritime zones where state enjoy different types of rights. The coastal State has sovereignty or sovereign rights in areas under national jurisdiction. Other states (flag states) have specific rights (navigation, laying of submarine cables and scientific research) within these zones. The coastal State enjoys the most exclusive rights (sovereignty) near shore in internal waters and territorial sea, which is weakening and become more functional (sovereign rights) in the EEZ and on the Continental Shelf. In the maritime areas beyond national jurisdiction (ABNJ), no state enjoy exclusive rights. The ABNJ is subjected to the high seas freedoms of all states and to the common heritage of mankind.

Sectoral approach

The second characteristics of the law of the sea is that the rights and obligations of states are defined and developed in regard of specific natural resources and uses of the oceans. They are regulated through different institutions setting out separate rules and standards.

Examples of different sectoral regimes:

- *Marine living resources* are subjected to sovereign rights in the 200 miles EEZ, while they are subject to freedom of fishing on the high seas. The sovereign rights and freedom of fishing are subjected to similar duties of conservation and protection of the marine environment, (UNCLOS Parts V and VII and XII).
- *International shipping:* UNCLOS sets out rights of other states to navigate through maritime zones of coastal States and on the high seas. The navigational rights of flag States are subjected to duty to exercise effective jurisdiction and control in accordance with international accepted rules and standards as developed by the competent international organization (Articles 94 and 211).
- *Marine scientific research:* UNCLOS Part XIII
- The duty to *protect and preserve the marine environment* (UNCLOS Part XII) involves limitations on the exercise of sovereignty/sovereign rights and rights/freedoms enjoyed by states at sea and in their territories. Although a general obligation, the focus is on the prevention and control of six different sources of pollution originating from areas or activities under the jurisdiction of the state (source-specific approach).

3.2 Bridging the zonal approach through cooperation

Living marine resources and pollutants stemming from human activities seldom respect the man-made maritime boundaries. Fish stocks migrate through areas under jurisdiction of several coastal States. Marine pollution in the EEZ of a coastal State may originate from different sources and different jurisdiction. They also occur in areas beyond national jurisdiction where no state enjoy territorial sovereignty. In order to conserve the shared and transboundary living marine resources and prevent transboundary pollution, states necessarily have to cooperate, both within areas under national jurisdiction and in areas beyond.

Cooperation is necessary to bridge the zonal approach. The duty to cooperate is recognized as a fundamental principle in law of the sea and in international environmental law.

At what level may states cooperate? The theme of my presentation is governance of the Arctic Ocean, implying cooperation at regional level. This begs the question to what extent states are entitled or even obligated to cooperate at regional level. Will cooperation at regional level not undermine the global character of the law of the sea?

Cooperation at level may also exclude states from participation. Regional cooperation usually includes the coastal States of the region.

The UNCLOS provides for cooperation both at global and regional level. The central provision is Article 197. It includes an obligation of states to:

- Cooperate on developing norms: Which includes formulating and elaborating international rules, and recommended practices. States may opt both for hard law and soft law,
- Alternative modes of cooperation: On a global basis, as appropriate, on a regional basis or through competent organization
- Cooperation to be consistent with the Convention, i.e. to ensure that regional cooperation is conducted within the frames of the law of the sea

This raises two questions:

1. When is regional cooperation appropriate?

Article 197 seems to indicate that States have certain discretion to decide the mode/type/level of cooperation. Generally, as stated by Professor Alan Boyle, states tend to opt for a regional approach where it is the most effective way of addressing an environmental problem.

2. What makes a region?

The UNCLOS does not include any definition. It is a geographical area with some common characteristics (natural, functional and political unity). As formulated by Professor Alan Boyle "What is the most sensible geographical and political area within which to address the interrelated problems of marine and terrestrial environmental protection?"

Regional cooperation under UNCLOS

In this paper, four types of cooperation are used for discussion of when regional cooperation is preferable and permitted by UNCLOS. They are inspired by the models used by Professors Boyle and Tanaka. The types are defined based on which rights are involved, what is the problem/issue to be resolved and who are the nearest to do something about it.

Type 1: Global rights, which are to be regulated at regional level. This concerns the freedom of fishing on the high seas, which is a right for all states. States (fishing on the high seas and relevant coastal states) are required to cooperate at regional level through the so-called Regional Fisheries Management Organization (RFMOs) on the conservation of fish stocks occurring on the high seas. This obligation is strengthened through the 1995 UN Agreement on Straddling and Highly Migratory Fish Stocks (Article 8). Regional cooperation is considered the better option where the states in fact fishing for the fish stocks and the relevant coastal State cooperate on their management. Similarly, coastal States are required to cooperate at regional or sub-regional level on management of shared fish stocks.

Type 2: Rights or environmental problems, which are not effectively addressed at regional level. States are required to cooperate on regulating international shipping for safety and marine environmental protection purposes through the competent international organization, which in practice is the International Maritime Organization. Since the navigational rights are global in character, they need to be regulated through globally agreed instruments. A regional instrument on regulating shipping would risk not including all flag States with vessels operating in the region. This does not exclude adoption of regulations that are applicable to a specific region through IMO instruments. Such regulations include special areas (regulating operational discharges and emissions), routeing measures (regulating navigation) and PSSA (combining different IMO regulations). A region is neither appropriate forum to tackle environmental problems originating outside the region or spreading over different regions such as emissions of CO2 and long-range transboundary air pollution. They are better addressed through global instruments or instruments covering a larger region.

Type 3: Environmental problems that are usually addressed at regional level. This includes cooperation on prevention of pollution from land-based sources and from the seabed under national jurisdiction. Although the UNCLOS (Articles 207 and 208) envisages cooperation at global level on these two sectors, there is relative limited cooperation, only some general guidelines. States opt for regional cooperation on these issues because:

- It is challenging to design global applicable rules to a diversity of sources, of ecological and geographical situations;
- the widely differing socio-economic priorities of states,

- easier to obtain agreement where states share common interests/challenges/norms
- states are reluctant to enter into international legal obligations that may restrict their national policies on natural resources. It is easier when states have common interests (e.g. the coastal States of a region)

States normally through regional seas programs. In total 18 marine and coastal regions programs have been established worldwide. Some of them are based on a legal framework convention supplemented by operational annexes and protocols while others involve non-binding plans of actions. Fourteen of the programs are connected to the UN Environmental Program (UNEP) whereas four are established independently. The latter includes the OSPAR Convention (Convention for the Protection of the Marine Environment of the Northeast Atlantic). The geographical area of application of OSPAR covers part of the Central Arctic Ocean. UNEP seems to have recognized PAME, one of the working groups of the Arctic Council as a regional seas program.[1] The regional seas programs also include supporting issues such as assessment and monitoring. In recent years, several of the programs have extended their mandate to include conservation of marine biodiversity, regional approaches to the Convention on Biological Diversity.

Type 4 concerns issues where the coastal States of the region are the nearest to provide for necessary infrastructure to international shipping. First, Coastal States are required under UNCLOS Article 94(2) to promote the establishment and maintenance of search and rescue service at sea. They are further required to cooperate with neighbouring states for this purpose. This obligation is specified both in the SOLAS 74/78 and the 1979 International Convention on Search and Rescue adopted through IMO. Second, coastal States are required under Article 199 to cooperate on eliminating effects of accidental pollution and on preventing or minimizing the damage. They are to develop joint contingency plans for responding to accidental pollution. These obligations have been further developed through the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC) adopted through IMO. Both conventions requires states to cooperate at regional level.

[1] See the overview at www.unep.org/regionalseas/programmes/independent/arctic/default.asp

3.3 Bridging the sectoral and zonal approaches: Need for integrated and holistic approaches

The cooperation described so far has aimed to address challenges within a sector (fisheries, navigation and different sources of pollution) which that traverses the manmade jurisdictions or occurs in areas beyond national jurisdiction.

However, in recent two-three decades it has been recognized that there is also a need for interaction between the different sectors, for more integrated and holistic approaches. The oceans have been subjected to increased and more intensified uses. This has both led to conflicts between users over the same ocean space. Further, there are concerns over the cumulative effects of the different activities and that these are not and cannot adequately be addressed within the individual sectoral regimes. Therefore, there is a need for integration, cooperation and coordination. This has been recognised and developed through different international instruments, hard law as well as soft law.

First and importantly by chapter 17 on oceans in the Agenda 21, resulting from the 1992 UN Conference on Environment and Development, which called for new approaches to ocean governance, that were both integrated and precautionary. Ten years later, in Johannesburg, the Earth Summit called for the strengthening of "regional cooperation and coordination between the relevant regional organizations and programmes, the regional seas programmes of the United Nations Environment Programme, regional fisheries management organization.

One of the objectives of the 1992 Convention on Biodiversity is the conservation and sustainable use of marine biodiversity. The objective has operationalized through obligations on *in situ* conservation and of sustainable use of biological resources coupled with procedural obligations. Further, the objective has been elaborated on through decisions of the Conference of the Parties on Ecosystem Approach. The ecosystem approach, described as a "…strategy for the integrated management of land, water and living resources…" has been broadly recognised as an important element in oceans governance. The 1995 UN Fish Stocks Agreement includes protection of marine biological diversity among its general principles implying a requirement of ecosystem approach to fisheries management. As mentioned, several regional seas agreements (including OSPAR) have included protection of marine biodiversity in their mandate, requiring them to apply integrated approaches to the protection of the marine environment.

Measures to ensure integrated and holistic approaches

The protection of marine ecosystem call for measures that are areas-based. Further, these measures are usually aimed at regulating the various human activities affecting the ecosystems. Area-based measures include the marine protected areas where human activities are regulated, either prohibited or stricter regulated than otherwise. Spatial planning or zoning is another area-based measure that may preventing conflicts over uses of ocean space but also ensure that the pressure on the marine environment is not harmful. The different sectoral regimes may also ensure integration by taking ecosystem considerations into account when taking decisions. One example is the requirement under the 1995 Fish Stocks Agreement that states in managing target fish stocks are required where necessary to adopt measures directed at conserving species belonging to the same ecosystem or which in other ways are associated with the target fish stocks (Article 5.e). A third type of measure is the use of environmental quality standards, which e.g. be values specifying the maximum permissible concentration of a potentially hazardous chemical, which may require action if exceeded. The EU Marine Strategy Framework Directive has introduced "Good Environmental Status" as a quality standard, which is operationalized through a set of targets and indicators.

The application of integrated/holistic approaches within the framework of UNCLOS

Is it possible, knowing the sectoral and zonal approaches of UNCLOS to apply integrated approaches to ocean management. Describing this as fragmentation, Oran Young[2] argues that the principal concern of Arctic Ocean governance "…centres on the consequences of jurisdictional and sectoral fragmentation with regard to the governance of human activities taking place today in the Arctic Ocean and, perhaps more important, likely to become more prominent during the foreseeable future."

It is recognized in the preamble of UNCLOS that the problems at sea are interrelated and that there is need for integration and holistic approaches. Further, the obligation under Article 192 to protect and to preserve the marine environment implies that states in protecting the marine environment shall apply integrated approaches addressing the different threats. This reading of the obligation has been confirmed and developed through recent years' case law. In the 1999 Order on Provisional Measures in the Southern Bluefin Tuna case, ITLOS established that protection and preservation of the

[2] Oran Young, «Governing the Arctic Ocean», Marine Policy on line May 2016, http://dx.doi.org/10.1016/j.marpol.2016.04.038.

marine environment do not only include prevention of pollution but also the conservation of living marine resources (paragraph 70). This reading has been confirmed by the 2015 advisory opinion of ITLOS in the Sub-regional Fisheries Commission (SRFC) case (paragraph 192) and by the Tribunal in the Chagos Marine Protected Area Arbitration (paragraph 320). In the most recent South China Sea Arbitration the Tribunal went even further and established that physical damages to the seabed caused by harvesting was included in the obligation to protect and preserve the marine environment (paragraphs 945, 958 and 959). The obligation to protect and preserve the marine environment, including positive as well as negative duties, applicable equally to areas within and beyond national jurisdiction thus involves a holistic approach.

A second important input from this case law is the recognition of the necessity of interaction between UNCLOS and the more specialized international treaties. Within the field of marine environmental protection, under UNCLOS (Article 237) there is a wider scope for States to enter into treaties than normal. They are required to be consistent with the "general principles" of UNCLOS. Importantly, the South China Sea Arbitration did not only say that such international environmental treaties might function within the framework of UNCLOS. It went further and stipulated that they may also "inform" the reading of the UNCLOS (paragraphs 941 and 956). A duty to apply the ecosystem approach, requiring integration between sectors may be part of the duty to protect and preserve the marine environment. The question is how far that brings us.

3.4 Alternatives to regional ocean governance

The obligation to protect and preserve the marine environment as developed in recent years implies a requirement of integration of the different sectors in regulating human activities. The question is how are we to comply with this obligation within the existing sectoral and zonal structure of the law of the sea?

There are several and different alternatives for organizing the regional governance of oceans to accommodate for the needs of integration across sectors and maritime boundaries. In this paper, two alternatives will be described: The radical and the realistic alternatives.

The *radical alternative* is similar to some of the proposals put forward for the Arctic Ocean. It would entail the development of a treaty (or a framework treaty with

protocols) that is applicable to the human activities (shipping, oil and gas, fishing etc.) occurring within the region. This would provide for regulation across sectors, and governance that could address the cumulative effects threats. Under Article 123 of UNCLOS, the coastal States of an enclosed or semi-enclosed sea are to cooperate on protection of the marine environment across sectors, directly or through appropriate international organization. The cooperation does not envisage states to adopt or agree on legally binding decisions. They are rather to coordinate between the different sectors. Third states are to be involved where their interests may be affected. This provision clearly signals that establishing a legal governance institution competent to regulate human activities within a region, within and beyond national jurisdiction is not very realistic both of legal and political reasons. First, it is not very likely that regulating international shipping through regional treaty will be effective. It would require all flag states to be a party to the treaty, which is not very likely. It may also be in conflict with the UNCLOS, under which rules and standards shall be globally applicable. Effective regulation of shipping within a region is more likely to be done through IMO instruments.

Secondly, by including areas both within and beyond national jurisdiction, states with quite different and even conflicting interests and priorities are involved. It is not very likely that coastal States will accept governance institutions where other states are involved in decision-making on the exploration and exploitation of the natural resources in their 200 miles zones or on the continental shelf or in areas under their sovereignty.

One may safely conclude that such ideal way of organizing the regional ocean governance is not very likely to happen.

The *realistic alternatives* include some type of cooperation and coordination between the different sectoral institutions at regional and/or global level, also as indicated in Article 123 referred to above. They include Regional Seas Programs, Regional Fisheries Management Organizations (RFMOs), IMO, International Seabed Authority (ISA) and other relevant treaties competent to regulate human activities at sea or to provide scientific information and advice (e.g. International Whaling Commission, Convention on Migratory Species and the International Council for the Exploration of Seas, ICES).

The cooperation and coordination could involve the establishment of the measures mentioned-above: area-based measures (marine protected areas and/or zoning) which

are applicable within the different sectors, common environmental quality standards, exchange of data and other information to enable taking ecosystem based considerations within the different sectors and to assess the state of the relevant environment. It would also be natural that the sectoral institutions cooperate on conducting joint environmental impact assessments where planned activities may have impacts across the sectors.

This sounds simple and logical. However, how does on achieve it in practice? Within the 200 miles Zone, the coastal State would be competent and probably required to take such initiatives, either individually or through the relevant regional seas program where several coastal States are involved. More challenging would be in the ABNJ as no international body or state enjoys exclusivity here. Which would take initiative, and which measures? Who would provide the necessary scientific data to substantiate the need for measures and to develop the measures? Which sectoral bodies would be involved? Who would be competent to enforce the compliance with the measures? Questions about third state could also be raised. These and other questions may be dealt with at the ongoing negotiations on a possible third UNCLOS implementation agreement on conservation and sustainable use of biodiversity in ABNJ.

One of the options would be a regional approach where the coastal States with their closeness to the ABNJ are responsible for taking initiative through the regional seas programs. Some of them, like the OSPAR Convention is competent to operate in ABNJ. The practice so far is scarce, almost non-existing. There is some practice in the North-east Atlantic where the OSPAR Convention together with North East Atlantic Fisheries Commission (NEAFC) has entered into a Collective Arrangement intended to include other institutions competent to regulate activities in ABNJ (e.g. IMO, ISA, ICCAT, and IWC).[3] The Arrangement provides for:

- Exchange of scientific information and data from environmental assessment and monitoring
- Notification on human activities within specific areas
- Cooperation on environmental impact assessments
- Consult on objectives and measures for particular areas

[3] The text is available at http://www.neafc.org/system/files/Collective_Arrangement.pdf

Regarding the last bullet point, NEAFC and OSPAR has annexed maps and information on area-based measures adopted by them for partly overlapping areas. NEAFC has adopted regulations to protect vulnerable marine ecosystems (VME) which includes ban on use of bottom trawling and similar gear in specific areas and stringent procedures for opening areas for new and exploratory fishing in deep-sea waters. OSPAR has established seven MPAs in ABNJ.

3.5 Summing up

UNCLOS is based on a zonal and sectoral approach. The zonal approach is a consequence of states being the subjects of international law. Rights and duties defined based on territory. Transboundary challenges are addressed by cooperation between the states involved, at regional or global level, depending on what problems and rights are involved. Cooperation is conducted within the different sectors, so far considered the most effective way of addressing problems. The recognition that problems within the different sectors are interrelated and should be dealt with in a more integrated and holistic manner, challenges the structure of the law of the sea. Since all insist on the law of the sea as the relevant legal framework, solutions have to be found within. The law of the sea is adaptable to necessary changes. However, the institutional arrangements, particular for ABNJ, do not provide clear answers to the call for more cooperation and coordination across sectors. The newly started talks under the UN on a legally binding instrument for biodiversity in ABNJ may provide some answers.

4. Arctic Ocean Governance

4.1 Arctic – a marine region?

In order for a regional cooperation on environmental governance to develop, the states to be involved necessary have to be in an agreement that their territories and maritime spaces constitute «a sensible geographical and political area within which to address the interrelated problems of marine and terrestrial environmental protection".[4]

The cooperation between the eight Arctic States established in the early 1990s first through AEPS and later the Arctic Council documents that the Arctic is a region, not least for political purposes. The role of the Arctic Council in providing knowledge on

[4] Alan Boyle, «Globalism and Regionalism in the Protection of the Marine Environment» in Davor Vidas (ed) *Protecting the Polar Marine Environment. Law and Policy for Pollution Prevention*, Cambridge, 2000, p .19-33 (p.27).

the status of the Arctic environment suggests that the Arctic is a region in an environmental context. The common environmental characteristics of the Arctic has brought the Arctic States together. However, the Arctic remains a flexible region, as there is no precise delineation of its geographical scope. In some contexts it includes the Arctic Ocean (e.g. on fisheries) and in other context a wider area, including Iceland and northern parts of Sweden and Finland. The Arctic region is neither homogenous environmentally as when the North Atlantic and North Pacific are included it is composed by 18 Large Marine Ecosystems (LME). The LMEs may require different governance approaches. Lastly, the diverse levels of economic development and priorities within and between the different Arctic States may complicate the work towards common regulations of human activities. This may be the reason why the Russian Federation has yet to become a contracting Party to the OSPAR Convention and why the Arctic Council issues recommendations and guidelines rather than legally binding decisions.

4.2 An Arctic Ocean Governance in development

As referred to under section 2, the objectives of the cooperation between the eight Arctic States have included the assessment of the state of the Arctic environment and of the adequacy of relevant law. In the first years, the focus was on ensuring the effective implementation of the wide range of relevant legal instruments, global as well as regional. In recent years with the widening of the challenges to the Arctic environment following the findings of ACIA, the focus has shifted towards identifications of gaps in and assessments of the adequacy of the existing instruments. In order to locate the direction in which Arctic Ocean Governance is heading, to documents adopted by the Arctic Council will be investigated:

1. Arctic Ocean Review (AOR), 2013.[5] The Ministerial Meeting of AC approved its recommendations, which aims at providing guidance on possible ways to strengthen governance.
2. Arctic Marine Strategy Plan 2015-25 (AMSP 2015).[6] The plan sets out the overall objectives, strategic goals, principles and actions to be undertaken by the Arctic States.

[5] The Arctic Ocean Review is available at http://www.pame.is/index.php/projects/the-arctic-ocean-review-aor
[6] The AMSP 2015 is available at http://www.pame.is/index.php/projects/arctic-marine-strategic-plan

Both the AOR and the AMSP 2015 refer to the Law of the Sea as the international legal framework for the governance of the Arctic Ocean.

The 2013 Kiruna Vision for the Arctic suggests that the Arctic Council may take a more proactive role in the future, by strengthen its work on addressing the environmental challenges, committed to managing the region with an ecosystem-based approach, balancing conservation and use. The Arctic Council is "…to expand its roles from policy-shaping into policy-making."

PAME was responsible for the Arctic Ocean Review. The AOR report established that there is no lack of international and regional instruments applicable to the Arctic Ocean. However, there is a lack of coordination between them. The priority of AOR seems to be on the implementation and strengthening of these instruments, as access to, and use of, Arctic marine areas increases. Only a few of them are specifically designed to the Arctic environment.

The AOR is undertaken sector by sector (e.g. shipping, living marine resources, offshore oil and gas and marine pollution) but also deals with the cross-sectoral ecosystem based management. Further, the recommendations of the AOR includes four types of broad cooperation: Coordination across sectors, cooperation on knowledge, amending existing or developing new instruments and improving implementation and compliance,

Even if the Arctic Council does not deal with fishing, the AOR includes recommendations on fisheries management for the high seas of the Central Arctic Ocean. The recommendations are very general, stressing that the governance of living marine resources of the high seas should be undertaken in accordance with the law of the sea through separate institutions. As presented in the paper of Professor Morishita there is an ongoing process involving the five Arctic coastal States and four other states (Iceland, Korea, Japan and China) and the EU on measures to prevent unregulated fishing in the high seas of the region. It could end with the establishment of one or more regional fisheries management organizations. The AOR recommendations are more detailed on other living marine resources such as seabirds and marine mammals which conservation that requires cooperation beyond the region.

The AOR recommendations do not include any regional regime for regulating international shipping. It is referred to the work within IMO on the Polar Code. However, it is recommended that the Arctic states or Arctic Council take initiatives

within IMO to propose measures for the Arctic Ocean. These could include the regulation of black carbon emissions and the conservation of ecological significant areas, by use of Particularly Sensitive Sea Area (PSSA). The reference to the PSSA an area-based tool for regulating shipping is perhaps the most concrete example of ecosystem-based management (EBM) in EBM. The EBM, specifically recognised by the Arctic Council, as an important principle for the governance of the Arctic environment. Still, the AOR recommendations are not very specific. Probably, as envisaged by AOR the need is first to operationalize it, by identifying the ecosystems, agreeing on ecological objectives, their assessment and valuation, promote common understanding. On the offshore gas and oil and land-based marine pollution issues, the AOR recommendations seem to propose status quo, through the existing guidelines and cooperation with OSPAR. There is a need for more cooperation and coordination between the different sectors. The AOR did not recommend establish up a regional seas program similar to the OSPAR or HELCOM. Perhaps the Task Force on Arctic Marine Cooperation which work is presented in a paper by Brian Israel, may come up with proposal for a regional seas program.

The AMSP 2015 sets out how the challenges to the Arctic marine environment are to be met by the Arctic Council and its member States, through relevant regional and global institutions. The Ecosystem Based Management (EBM) – also part of AOR - is one of the main principles to be applied through the plan. EBM signals that purely sectoral approaches are inadequate in the governance of the Arctic Ocean. It "… aims to understand and address the cumulative impacts of multiple human activities (rather than individual sectors, species or ecosystem components)." The AMSP 2015 stops short of detailing how to implement the EBM in a cross-sectoral manner and the implications for the governance of the Arctic Ocean. Some of the strategic actions are similar to those recommended by the AOR, e.g. use of area-based measures to protect sensitive ecosystems.

There is no clear picture of the direction taken by the Arctic Ocean regional governance. It is not likely to result in a comprehensive treaty for the whole ocean covering all activities. A first observation of this paper documents that the governance is based on the sectoral and zonal approach of the law of the sea. A second observation is that the governance is gradually developed according to what the Arctic States see as the main challenges. One example is the recommendations related to international shipping.

What would be the role of the Arctic Council in Arctic Ocean governance? In AMSP 2015, the Arctic Council has described its role as promoting and facilitating for science and knowledge, which in turn will provide for consensus on state of the environment and challenges. However, will and can the Arctic Council become something more? Ted McDorman[7] describes the Arctic Council as a "…catalyst for agreements" but he is sceptical to its further development. He does not see any evidence "…on a clear path forward to the Eden of a comprehensive and institutional Arctic Ocean regional governance." On the other end, Oran Young[8] neither seems to think that the Arctic Council will have an expanded role. He favours some type of comprehensive governance structure that include different sectors and areas both within and beyond national jurisdiction. Then, it is not unexpected that the AC does not provide the "most promising forum".

In spite of these critical comments, one could argue that the Arctic Council with its working groups already has gained more than a catalyst role. It does not only facilitate consensus on status of the environment but also initiate measures in areas within and beyond national jurisdiction to address the concerns. It is similar to the OSPAR, only at a much earlier stage of development.

5. Concluding remarks

This paper set out to investigate alternatives for regulating human activities in the Arctic Ocean. The investigation was undertaken based on a review of the LOS Convention, which provides the legal framework for any ocean governance. The LOS Convention is based on a zonal approach and sectoral approach: Rights and obligations of States are defined according to geographical conditions within specific subject matter areas. Questions may be raised on the adequacy of such structure to meet some of the current challenges to the oceans' ecosystems: Conflicts over uses of oceans space and the combined pressure on the environment by different human activities and natural conditions. The law of the sea has developed to include these challenges but the institutional framework is more uncertain. In future the law of the sea will still be organised along zonal and sectoral lines. However, there will be more extensive

[7] Ted L. McDorman, 'A Note on Arctic Ocean Regional Governance', M. Nordquist et al (eds) *Challenges of the Changing Arctic Continental Shelf, Navigation, and Fisheries,* Brill, 2016, 400-403 (403).
[8] Oran Young**,** *supra note* 2, 4.

cooperation and coordination between the different institutions established and competent under the law of the sea. The paper documents that the developing governance of the Arctic Oceans follows this pattern. However, the institutions are less developed here than in other oceans, e.g. on fisheries and protection of the marine environment. The Arctic Council could and should develop to be one of the institutions responsible for the integrated and holistic environmental governance of the Arctic Ocean.