Chapter 15
Gaps in International Regulatory Frameworks for the Arctic Ocean

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Abstract When an area is about to transform in a dramatic manner, we can expect that policy analysts and legal scholars aim to identify whether there are gaps in governance of the region. After all, the *status quo* does not seem anymore plausible solution for such a place. This is particularly the case in regards to the Arctic Ocean, which is changing due to economic globalisation and climate change with an accelerating speed. The article will first look at what types of normative "gaps" we might observe in the gradually emerging new Ocean and then how the Arctic policy actors have planned to respond to these. It was two unrelated events – the Russians planted their flag underneath the North Pole on the Lomonosov ridge in August 2007 and 1 month later satellite imagery confirmed that the extent of summer sea ice on the Arctic Ocean had decreased to a record low – that triggered a serious discussion on how to best to govern a region that was seen by many as inaccessible desert without any need for governance. Yet, gradually, the region's states and other actors have identified the "gaps" that need to be addressed, together with procedures for filling them in. The article will finally examine whether the current consensus between the region's actors can be seen as the best possible approach to governing the Arctic Ocean.

15.1 Introduction

Increasingly, states and other powerful policy entities have engaged in discussions of whether the current international legal rules and policy responses applicable to the Arctic are enough to counter the vast challenges facing the region. This is not a new

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phenomenon. During the first stage of Arctic-wide co-operation – the Arctic Environmental Protection Strategy [1], an action programme that ran from 1991 to 1997 – in which the eight Arctic states (the five Nordic states, the Russian Federation, the United States and Canada) identified six main pollution problems whose sources lay mainly in the mid latitudes: noise, oil pollution, acidification, heavy metals, persistent organic contaminants and radioactivity. Along with the Arctic Council that was established in 1996 [37], the eight states and indigenous peoples, as well as other parties to the AEPS, examined what legal gaps existed in the international regulatory framework for responding to these problems and came up with an action plan to try to address those gaps. Yet, when the Arctic Climate Impact Assessment [2, 3] sponsored by the Arctic Council showed that the region is about to transform dramatically in manifold ways – and twice as fast as the rest of the world – a more ambitious debate commenced regarding the collective responses that we are lacking.

It is important to understand that when policy actors – not only states – debate international regulatory gaps or collective response problems, they are engaged in an intensely political activity. This type of discussion, which may well precede any regulatory efforts, is very much centered on how we frame the main problem, because it is this problem definition that directs us to see what the relevant "gaps" are. A good example is how the problems affecting the Arctic Ocean were defined in 2007. Virtually the whole world seemed to view the planting of a Russian flag underneath the North Pole in August 2007 as a kick-off for a game of power politics between states to determine who would stake a claim to most of the plentiful hydrocarbon reserves in the Arctic Ocean sea bed [18]. Some analysts were of the opinion that the event might even lead to military conflicts between the Arctic Ocean coastal states, and called for the institution of confidence-building measures through an international treaty. This perspective spotlighted failures by the present international regulatory framework to implement confidence-building measures that might avert major military confrontation or at least a serious political rivalry between the coastal states. We could even argue that the lack of active peace-promoting policies in the region constituted a regulatory gap.

15.2 Different Types of International Normative Gaps

There are different schools of thought in international law as to what can be regarded as "gaps" in international regulatory frameworks or collective response mechanisms, terms that are used synonymously in this article.[1] Most scholars of international law

[1] "Regulatory gap" refers to a legal analysis of what is covered by international legal rules and instruments, an approach that is seen by the present author as too limiting. If we think of gaps in regulatory frameworks, this term encompasses a broader set of "gaps" in our responses to a certain collective problem. The very act of studying these collective response measures or international regulatory gaps entails a commitment to a view that norms and rules do have an effect on state behaviour, an assumption that is not shared by some schools of international relations. If a scholar thinks that norms have no independent role in steering the behaviour of states, there is no need to perform any gap analysis either.

would subscribe to the view that states observe their international treaty obligations. The reason for this is straightforward: If states have themselves negotiated, ratified and implemented these treaties, it is only reasonable to expect that they will also be conscientious about observing these sources of international law.

15.2.1 Normative Gaps

Although mainstream scholars of international law regard customary international law (CIL) as an important source of international law, essentially all scholars recognize the problems that relate to this source: it is difficult to say exactly when a norm has become a principle of CIL. Moreover, since CIL develops via state practice, it is very often difficult to say with precision what CIL requires, since the principle of CIL may be unwritten.[2] What is more, it is often the case that principles of CIL remain at a fairly high level of abstraction.[3] A good example of this is the no-harm principle.

The no-harm principle requires all states to prevent likely significant environmental harm to other states' environment stemming from activities under its jurisdiction and control as well as to the environment of international areas. Even though there is not much state practice underpinning this principle, since 1996 the International Court of Justice [20–22] has confirmed that the principle is part of the corpus of international law relating to the environment. The most glaring problem is that there is hardly any state practice demonstrating that states assess in a regular fashion what the environmental consequences are for the areas beyond their national jurisdiction. This poses a problem for many international legal scholars. We can, and indeed must, say in the abstract that international law requires states to prevent significant environmental consequences for the high seas and obligates them to conduct EIA for any impacts on the high seas. Yet, most international lawyers would be hard pressed to say whether states will observe this rule in practice or not. We can thus assert that in formal legal terms there is no gap in preventing high seas pollution

[2] This is not such a big problem nowadays, given that many CIL rules have been codified as treaty rules. A good example of this is the United Nations Convention on the Law of the Sea [42]; most of its provisions codify CIL, and thus treaty and CIL rules co-exist. In the Arctic, the distinction between the two is an important one, since the United States as a non-party to the UNCLOS admits that it is legally bound by most of the LOS provisions as embodiments of CIL. Although treaty and CIL rules co-exist, there are many times important differences in terms of legal consequences. For instance, since the US is not a party to the UNCLOS, none of the dispute settlement procedures prescribed in Part XV of the UNCLOS can be invoked against it.

[3] These problems are even more pronounced in relation to the third primary source of international law, general principles of law, since there are multiple views on how it might evolve. For instance, the International Court of Justice [19] has never based a decision on it, probably for the simple reason that the Court is hesitant to relying on a source that is not a product of state consent, explicit (treaty) or implicit (CIL).

from state-controlled activity, but that there is certainly a shortcoming when it comes to responding effectively.

Another difficulty lies with what are known as soft-law rules and instruments. These are rules and instruments that states adopt but with the clear intention that these will not become legally binding on them. Examples include guidelines, programs of action and declarations. These are guidance that is not legally binding on states, but does signal that they are at least politically committed to a course of action. From the strictly legal point of view, international legal scholars would agree that if a soft-law instrument is the only instrument guiding the behavior of states in a certain realm of action, there is an international legal gap. Yet, they would also agree that there is at least some normative guidance, meaning that some sort of collective response has been envisaged. A good example is the *Arctic Offshore Oil and Gas Guidelines* from the Arctic Council [4], which were adopted in the 1997 AEPS ministerial meeting. Plans call for applying the guidelines in practice and they have been revised twice (most recently in the 2009 ministerial meeting of the Arctic Council). Even though these soft-law rules are fairly specific, they are not legally binding on Arctic states and there is no mechanism for monitoring whether they are observed or not.

Some scholars would argue that the level of specificity – how clearly the norms guide behavior – is an important component when evaluating where we have real gaps. The underlying assumption here is that the more legal guidance states are given, the more likely it is that they will observe these rules. From this perspective, it is not enough to have an international treaty covering a certain problem or human activity; rather, the relevant question is whether the instrument provides sufficiently detailed guidance on how to behave. Good examples are Articles 206 and 205 of the *United Nations Convention on the Law of the Sea* [42], both of which prescribe a very general-level impact assessment procedure. Article 206 (*Assessment of Potential Effects of Activities*) reads:

> When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205.[4]

There is no doubt that these two provisions are legally binding on the contracting states, but many international legal scholars would be concerned as to how many states actually observe such rules, which do not give clear guidance. The same applies to treaty provisions that are worded using many qualifiers, such provisions being plentiful in the *Convention on Biological Diversity* [10], for example. One, which has relevance in the Arctic, is Article 8j:

[4] Article 205 of the UNLCOS [42] reads: *"States shall publish reports of the results obtained pursuant to article 204 or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all States."*

> Each Contracting Party shall, as far as possible and as appropriate:...
> (j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices;

As can be seen, the actual legal guidance is qualified by the phrases "as far as possible", "as appropriate" and "subject to its national legislation", meaning that the contracting states have a great deal of leeway to interpret what the provision requires. Some have even suggested that these types of provisions are soft-law provisions, with no legally binding content; nevertheless, the mainstream would contend that even such provisions are legally binding, although they accord considerable discretion to states as to how to implement and apply them. On balance, most lawyers would not question whether these are legally binding and would thus take the view that there is no formal legal gap; then again, most would admit that there is a "gap" in that the rules lack an effective collective response mechanism.

15.2.2 Governance Gaps

Even when specific treaty rules are in force, they may lack international institutional support; treaty rules without active institutional frameworks developing and overseeing their implementation and application do not adequately influence state behavior. This is why most Multilateral Environmental Agreements (MEAs) have become miniature inter-governmental organizations of sorts comprising various collective bodies to ensure that states in fact put the legal and soft-law rules into action [9].

One might also assert that a gap exists where collective response is concerned if there is no single institution responsible for a certain region even where there are various international treaty regimes in operation. The assumption here is that a consistent overarching regime – with internal co-ordination – is always better than a set of fragmented pieces of regulation, which may lead to institutional conflicts.

In conclusion, it can be said that for mainstream international lawyers the regulatory arrangements – or collective response mechanisms – that can most effectively close normative gaps are of the following kind. They are rules that need to be enshrined in international treaties that are legally binding on states; they need to be clear and precise enough to influence behavior; and they need to be supported by institutional machinery that continuously ensures that they are developed, supervised as to their observance, implemented via domestic legal acts and applied in practice. Finally, in the ideal case, sectoral regimes of the kind outlined above should find themselves embedded in an overarching treaty regime that enables co-ordination between sectoral regulations.

15.3 Gaps Become a Real Concern in the Arctic

Even though the United Nations Framework Convention on Climate Change [43] was concluded in 1992, and the Intergovernmental Panel on Climate Change [26] was established 4 years earlier, climate change had been discussed for a long time in terms of its future consequences. This is why the Arctic Climate Impact Assessment (ACIA), sponsored by the Arctic Council and released in 2004, is so significant: it showed that the climate in the Arctic had been changing for a long time, with very real consequences, and it projected a dramatic transformation of the region, change twice as intense as for the rest of the world.

This was a significant development where regulating the region is concerned. If the region is perceived as a type of polar desert – inhospitable and, more importantly, inaccessible –there is clearly no real need for the states to take strong regulatory efforts; after all, most of the pollution problems originate from outside the region. The ACIA showed that the region was undergoing an intense transformation, one that would open it up to various types of economic activities, especially in the marine areas where the sea ice is receding and thinning.

Yet, as is many times the case in international law and politics, the perceived realities are more important than what unfolds in reality. Two events happened to take place almost simultaneously. The Russians planted their flag underneath the North Pole, on the Lomonosov ridge, in August 2007, triggering very strong political reactions from other coastal states of the region. One month later satellite imagery confirmed that the extent of summer sea ice on the Arctic Ocean had decreased to a record low, indicating that sea ice was disappearing much faster than predicted by the ACIA. It was these two unrelated events that had the effect of sparking a serious policy debate between many of the region's states and the European Union on how the Arctic should be governed in the future.

15.3.1 Wild West

Initially, many in the media and academia took the view that what was taking place in the Arctic was a type of geopolitical struggle between nation-states over the Arctic Ocean sea bed and its projected hydrocarbon riches. The media and some commentators described the development as uncontrolled, a type of Wild West scramble in which states were trying to occupy as much of the emerging ocean's sea bed as possible for themselves and the companies operating in them. The storyline was that climate change was melting the sea ice, rendering accessible vast hydrocarbon reserves, which are safe and plentiful and very important for all the region's states.

This drama provoked swift political and legal action in 2007, first from the "foreign minister" of the European Union [15], who argued – in submitting a joint paper prepared by the High Representative and the Commission to the European Council

on climate change and international security – that geopolitical struggle unfolding in the region required international co-operation.[5] This approach was followed by the European Parliament [13], which in its resolution called upon the Commission to 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.

What is important to note here is that the European Union's High Representative and the European Parliament were in fact saying – together with the public media and very many international relations scholars – that there was almost no regulation in the Arctic, and that this situation called for an international treaty of some type, one focused on containing power politics and advancing sustainable development in the region.

15.3.2 The Sheriff Arrives

Yet, the "Sheriff" arrived fairly quickly. The Arctic Ocean coastal states convened a preparatory meeting as early as the end of 2007 and organized a political level meeting in Greenland in May 2008, where they issued what is known as the *Ilulissat Declaration* [23]. In the Declaration, they made it clear that there is already a comprehensive legal regime in place in the Arctic, the law of the sea.[6] In other words, there is no reckless vying for power over the Arctic Ocean sea bed but an orderly development that proceeds on the basis of the law of the sea. The chair of the Arctic Council at the time,

[5] Even the journal *Foreign Affairs* published an article [7] arguing: *"The situation is especially dangerous because there are currently no overarching political or legal structures that can provide for the orderly development of the region or mediate political disagreements over Arctic resources or sea-lanes. The Arctic has always been frozen; as ice turns to water, it is not clear which rules should apply. The rapid melt is also rekindling numerous interstate rivalries and attracting energy hungry newcomers, such as China, to the region. The Arctic powers are fast approaching diplomatic gridlock, and that could eventually lead to the sort of armed brinkmanship that plagues other territories, such as the desolate but resource-rich Spratly Islands, where multiple states claim sovereignty but no clear picture of ownership exists."*

[6] The *Ilulissat Declaration* [23] states: *"In this regard, we recall that an extensive international legal framework applies to the Arctic Ocean as discussed between our representatives at the meeting in Oslo on 15 and 16 October 2007 at the level of senior officials. Notably, the law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims."*

Norway, even went to the European Parliament to explain that there are no gaps in the international legal regime, but that the law of the sea and other treaties in force in the region, together with the Arctic Council, make it a well-managed region [40]. This was complemented by revised Arctic policy documents [8], and, importantly, by the European Commission and the Council of Ministers endorsing the view that there is no scramble for resources underway in the region [11, 12, 14].

The change in perspectives could not have been more extreme. In 2007, the prevailing conception was that there were almost no rules in force in the Arctic, whereas in 2008–2009 the Arctic Ocean coastal and the Arctic Council member states affirmed that there are in fact many rules, perhaps even too many, applicable in the region. The states further emphasized there was a comprehensive legal regime, the law of the sea, which regulates all the main ocean uses. Suddenly, the melting polar desert that was depicted as a type of Wild West, in which states vied for control over the sea bed, was described as a rule-governed place.

15.3.3 Manager Rules

After these extreme interpretations of what was (or was not) regulated in the region – a period from August 2007 to approximately the end of 2008 – the stances on whether there are gaps in the international regulations or shortcomings in the collective responses available started to become more nuanced. The coastal state meeting in Ilulissat, even though it caused some consternation over whether there was an inner circle co-operation emerging in the region, made it clear that the coastal states did not take the view that everything was already rule-governed in the region. In fact, those states pointed to ship-based pollution, maritime safety and other issues as possible fields of future precautionary/proactive regulation. A proactive approach would require that certain measures be taken before human activities in the region could commence or expand subject to the extent of scientific uncertainty, the risk of certain consequences and the seriousness and irreversibility of such consequences. Nevertheless, the states rejected a single comprehensive Arctic legal regime as a solution for the Arctic, given that they considered the law of the sea to be such a framework.[7]

[7] As provided in the *Ilulissat Declaration* [23]: *"In this regard, we recall that an extensive international legal framework applies to the Arctic Ocean as discussed between our representatives at the meeting in Oslo on 15 and 16 October 2007 at the level of senior officials. Notably, the law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims. This framework provides a solid foundation for responsible management by the five coastal States and other users of this Ocean through national implementation and application of relevant provisions. We therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean. We will keep abreast of the developments in the Arctic Ocean and continue to implement appropriate measures."*

Even though the European Parliament [13] had suggested to the European Commission that international treaty negotiations be initiated, the European Commission [11] declined to do so.[8] Yet it did express its concern over the nature of regulatory framework applicable in the region:

> The main problems relating to Arctic governance include the fragmentation of the legal framework, the lack of effective instruments, the absence of an overall policy-setting process and gaps in participation, implementation and geographic scope... The EU should promote broad dialogue and negotiated solutions and not support arrangements which exclude any of the Arctic EU Member States or Arctic EEA EFTA countries.

More importantly, the Council of Ministers representing the Member States of the European Union followed suit and considered the pragmatic approach of the Commission to be more viable than the treaty approach propounded by the Parliament.[9]

15.3.4 Some Gaps, Some Regulation, Not Much Unified Governance

Gradually, the problems started to be framed in the manner that has dominated the Arctic policy discussion (as they had been from the beginning of co-operation in the AEPS), namely, as environmental and human safety problems, not as traditional security threats. This led to a more realistic view of what the problems were, in particular where they related to the decreasing sea ice and opening possibilities for new economic activities, which seem to require regulation sooner or later, one way or the other.

And, gradually, this also led to a more realistic assessment concluding that there indeed are gaps in international regulatory frameworks in the region. This applies in particular to fisheries, of which only one small segment is potentially covered by a regional fisheries management organization (RFMO), the North East Atlantic Fisheries

[8] European Commission [11] noted: *"An extensive international legal framework is already in place that also applies to the Arctic. The provisions of the UN Convention on the Law of the Sea (UNCLOS) provide the basis for the settlement of disputes including delimitation...The European Parliament has recently highlighted the importance of Arctic governance and called for a stand-alone EU Arctic policy urging the Commission to take a proactive role in the Arctic. The parliamentary dimension of Arctic cooperation is crucial to raise awareness and to strengthen policy input. The European Parliament has been playing a valuable role in this respect."*

[9] As noted by the European Council [12]: *"The Council recognises the Arctic Council as the primary competent body for circumpolar regional cooperation and expresses its continued support for the applications by Italy and the Commission to become permanent observers in that body. The Council encourages Member States, and the Commission together with the EEA to continue to contribute to the work of relevant Arctic Council working groups....The Council believes that the EU should actively seek consensus approaches to relevant Arctic issues through cooperation also with Arctic states and/or territories outside the EU, Canada, Greenland, Iceland, Norway, the Russian Federation and the United States, as well as with other relevant actors with Arctic interests."*

Commission [35]. Since all eight Arctic states are parties to the Straddling Stocks Agreement [41] there is at least a basis for creating an RFMO for the Arctic Ocean if future needs so dictate; in fact, the idea that has already been proposed by the United States Congress [44]. There are no legally binding rules specifically tailored for Arctic shipping, but since 2002 there have been a set of *Guidelines for Ships Operating in Arctic Ice Covered Waters* [24], which were recently revised to apply to both polar regions [25]. There are also the non-legally binding *Offshore Oil and Gas Guidelines* of the Arctic Council [4], which seek to control how these activities are carried out in Arctic waters. Hence, if one takes the view that soft-law instruments – which many times are not monitored as to whether they are being observed – are influential policy instruments, it can be argued that there already exist fairly robust collective response mechanisms for future challenges in the Arctic Ocean. And if one considers the number of marine and other environmental treaties protecting the Arctic, among other areas, the total amount of applicable regulation becomes impressive. In view of progress to develop binding agreements for the Arctic Ocean, the search-and-rescue agreement that was adopted by representatives from all Arctic states at the ministerial meeting of the Arctic Council [5] is a significant step.

High seas and areas of ocean floor beyond national jurisdiction (whose boundaries will take a long time to determine) are still firmly under the ice in the Arctic Ocean but are in principle governed by the same rules as all other high seas and ocean floors in all the world's oceans and seas. The legal gaps where these are concerned are currently being debated in two parallel processes under the auspices of the United Nations General Assembly and biodiversity regime, respectively.[10]

The clearest gap with regard to collective response in the Arctic Ocean is that there is no single regime to administer the region, unlike the regimes in place for the: Baltic [16]; Mediterranean [6, 29–34]; or the North-East Atlantic [36]. Even if it is possible to describe the law of the sea as an extensive legal framework that applies in the Arctic Ocean, as the coastal states did in the *Ilulissat Declaration*, overall the UNCLOS is of such general character it requires more specific rules for its implementation. The UNCLOS, as well as the roughly identical customary law of the sea, contains types of constitutional rules – competencies for states in their responsibilities as flag, port or coastal states – and gives very general legal guidance as to how major ocean uses should be managed. What is important to note is that various parts of the UNCLOS favour regional implementation by the Convention, in contrast to unilateral state implementation.[11] And it is the lack

[10] The main processes are the United Nations Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction and the thematic Marine and Coastal Biodiversity programme under the Convention on Biological Diversity [10].

[11] This appears in many parts of the UNCLOS [42], for example Article 197: *"States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features"*.

of regional governance that is the single clearest gap in the Arctic Ocean, given that the Arctic Council has limited capability to contribute to collective responses to future challenges in the region.

There is currently consensus – seen in the *Ilulissat Declaration*, the revised policy documents of the Arctic states [8] and the EU's evolving Arctic policy – on two things. First, it is the existing frameworks of governance that will best serve as platforms for responding to the challenges facing the Arctic. Much of the Arctic is under the sovereignty and sovereign maritime rights of the Arctic states, whereby it is these states that have the primary responsibility to close the gaps, in particular in their own jurisdiction. From the international perspective, the Arctic Council remains the predominant international high-level forum in the Arctic, even though the coastal states need to develop their policy on certain issues with a more limited participation. The LOS Convention and the law of the sea in general are immensely important in regulating in a general fashion many of the ocean uses in the Arctic Ocean and there are plenty of multilateral environmental agreements and other treaties that will cover one or another geographical region of the Arctic Ocean.

Secondly, all the relevant Arctic policy actors acknowledge that there are gaps in some international legal frameworks, and that the Arctic states need to think hard about closing these gaps before they become real concerns. The way to do this is not to try to negotiate an international comprehensive treaty regime but to proceed using a science-driven approach and adopting soft-law (and to some extent hard-law) instruments that operate on a sectoral basis; and this is to be done mainly by Arctic Ocean coastal states, Arctic marine states (including Iceland) and in the Arctic Council. Many efforts to these ends are underway to: develop a binding polar code for shipping [24, 25]; negotiate an RFMO for Arctic fisheries at some point in time; and incorporate the soft-law provisions of the Arctic Council's [4] Arctic *Offshore Oil and Gas Guidelines* into the national laws of the Arctic states.

15.4 Challenges

It is important to realize that the consensus discussed above on how to proceed with Arctic governance is premised on what the ideal ways are of responding to the gaps in international regulatory frameworks in a region that is undergoing a vast transformation. For instance, in Ilulissat, the coastal states argued that their aim is not only to do merely what is politically possible, but, in fact, what is the best for the Arctic Ocean; they described themselves as "responsible stewards" of a region undergoing vast transformation and, accordingly, expressed readiness for sectoral proactive regulation.[12]

[12] In the words of the *Ilulissat Declaration* [23]: *"The Arctic Ocean is a unique ecosystem, which the five coastal states have a stewardship role in protecting. Experience has shown how shipping disasters and subsequent pollution of the marine environment may cause irreversible disturbance of the ecological balance and major harm to the livelihoods of local inhabitants and indigenous communities. We will take steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection and preservation of the fragile marine environment of the Arctic Ocean."*

This is important because the states are not debating what the politically most viable ways of closing the gaps are but what are the best ways of addressing them, a discourse that invites also scholars to debate what indeed are the ideal ways of closing the gaps in the regulation regarding the Arctic Ocean.

It seems fairly obvious that the current consensus among the major policy actors in the Arctic is a responsible one. They are – at least on a verbal level – adequately admitting the challenges ahead and trying to respond to these proactively rather than reactively. Still, there are challenges or outright problems in the approach they have adopted – a science-driven soft-law (and even hard-law) approach that incrementally regulates the region on a sectoral basis – which are studied at this concluding section.

There is much reliance on science, which is, of course, accepted on a general level by all concerned. But we have to be careful when we speak of a science-driven approach, asking what exactly it means. A good example is the joint project by two of the Arctic Council's working groups (Sustainable Development and Protection of the Arctic Marine Environment) titled *"Best Practices in Ecosystem-Based Oceans Management in the Arctic (BePOMAr)"* that was concluded in 2009 [17].

The approach adopted by the BePOMAr study – identifying best practices from currently implemented policies – offers the advantage of being a pragmatic course of action rather than an abstract exercise. The pragmatic focus can be seen in the study being confined to the Arctic region, whereby it identifies only practices that have already proven their value in the very particular conditions prevailing there and identifies six principles for stronger Arctic marine and, particularly, ocean management. Moreover, and given the coastal states' express reluctance to accept an overarching regime to govern the region, a principled approach to further international cooperation might constitute a more viable step forward than the immediate development of a formal legal instrument.

Yet, the shortcoming of this approach is that by focusing solely on the past and present experiences of the Arctic States in ocean management, the report fails to propose forward-looking solutions. Given that the regional impacts of climate change render the Arctic Ocean one of the fastest evolving marine environments in history, exclusive reliance on traditional and tested principles and solutions will fail to provide an adequate solution to the challenges facing the regional environment. Indeed, most of the economic activities anticipated for the Arctic in the future have either not materialized as yet or occur on a much smaller scale today. The conclusions of the report thus endorse the application of principles applied at present to what will be a different economic and environmental situation. This lack of ambition when it comes to providing innovative solutions contrasts with the apparent readiness of the Arctic States to adopt a proactive approach to cooperation and governance in the face of a changing climate. Overall, one cannot avoid thinking that if a science-driven approach does not incorporate elements of precautionary approach, the response to the vast changes in store will be a fairly limited one. Is that approach enough to counter the changes that are likely to be irreversible, severe and very comprehensive, which seem to call for more comprehensive governance solutions guided by the precautionary approach?[13]

There is quite some reliance on soft-law in the approach of the current consensus between major Arctic policy actors as well as in the sectoral approach. It is important to note that it is very difficult to pursue ambitious governance with soft-law instruments. These are normally used to test whether consensus among states is strong enough to proceed with a legally binding instrument. It is also worth considering that many times it is difficult, not impossible, to create monitoring mechanisms for soft-law instruments. The sectoral approach has problems of its own. Given that the governance arrangements in the Arctic Ocean are already very fragmented, it is important to ask whether the best way forward is to create even more sectoral regulation. The sectoral approach may preclude the creation of an overarching governance body for the region that could internally co-ordinate the component regimes in the region under a single umbrella – an approach that has been used in many semi-enclosed types of sea-areas. Now this role is performed to a very limited extent by the Arctic Council, which is only a soft-law forum, with limited funding and institutional machinery.

There is also much reliance on Arctic Ocean coastal states' acting as responsible stewards of the Arctic region. This approach, too, has its problems. The Ilulissat meeting and Declaration triggered a fierce response from the Inuit Circumpolar Council and Inuit leaders in the region. They argued that the Declaration reminded them of old ways of perceiving what sovereignty is and pointed out that today indigenous peoples have been guaranteed self-determination under international law, which also grants them rights in international policy-making [27]. This is especially obvious in the Arctic, since the indigenous peoples' organizations have long been permanent participants in the Arctic Council, and have established themselves as international policy-makers in the Arctic, whether the states like it or not. It is also important to remember that the European Union (EU) and non-Arctic states have rights, interests and responsibilities in the region, in particular when the sea ice recedes: most of the Arctic marine area is subject to freedom of navigation, thus guaranteeing access rights on the basis of the law of the sea and LOS Convention for all states and their commercial fleets. In any case, it is the EU and non-Arctic states such as China that drive the development of the Arctic with their industrial, energy, climate change and other policies, given that in terms of the markets the Arctic is still a provider of raw materials. The difficult question is how to include those states in Arctic governance in light of their current status as ad hoc observers in a soft-law body, the Arctic Council.

[13] One early but authoritative articulation of this approach is in Rio Declaration [39], principle 15: *"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".*

15.5 Conclusion

Overall, we have to ask whether there is a possibility to address all these concerns without one unifying legal foundation, merely building on an incremental, science-driven, soft-law (and to some extent hard-law) sectoral approach to respond to dramatic changes that are taking place in the Arctic Ocean. The current author – together with Professor Erik Molenaar – concluded that the more viable approach is to direct our efforts to a unifying, legally binding instrument for the region that establishes a regional governance body acting as a voice for the region. We came to this conclusion after an extensive study: we conducted an overview and gap analysis, compared the alternatives available for remedying the identified shortcomings in the legal regime and, finally, outlined elements that might be included in a legally binding instrument for the Arctic marine area [28].

As discussed above, even if the current approach of the Arctic states is a responsible one, we can certainly question whether it is the best one available. It is encouraging that the Arctic Council recently commenced the Arctic Ocean Review, conducted by the Protection of the Arctic Marine Environment [38] working group. The first phase will be to study regulatory gaps, with possible follow-up on how to best remedy these as well as shortcoming in collective response mechanisms. The review may well lead to reconsideration of whether the sectoral, proactive soft-law approach is really the best one for what is a dynamically changing region. What we can be sure of is that if a governance institution is willing to engage in a gap analysis such as the Arctic Ocean Review, it is receptive to change: it is ready to acknowledge that there are gaps in international regulatory frameworks that need to be addressed in one way or the other. It will be interesting to see whether this "gap" analysis results in stronger Arctic governance, since this is clearly what we need with the vast challenges facing the region.

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