area and ensures a cross-sectoral, ecosystem-based, precautionary approach to management and use which embodies modern conservation and management principles. In other words, as I have suggested elsewhere, what is envisaged is an Arctic Ocean regional oceans management organisation (ROMO), having plenary jurisdiction over fisheries, scientific research, navigation, bioprospecting and all other high seas activities and uses, and acting as moderator between the interests of the Arctic coastal states and those of the international community.\footnote{Rosemary Rayfuse, "Protecting Marine Biodiversity in Polar Areas Beyond National Jurisdiction," 17:1 Review of European Community and International Environmental Law (2008): 3, 12–13.}

5. Conclusion

In the short term, the physical reality of conditions in the Arctic Ocean may appear to preclude the necessity of developing a new comprehensive international legal regime to govern the high seas of the central Arctic Ocean. However, at some stage in the possibly not too distant future – as the waters warm, ecological boundaries shift, species migrate and waters become increasingly ice-free – the Arctic coastal states will find themselves obliged to respond to the legitimate and lawful interests of other states in access to and use of the high seas of the central Arctic Ocean and its resources. Continuing to turn a cold shoulder now will only serve to alienate and irritate the international community and the jostling for position is not likely to cease.

Both precaution and history show that effective international agreements are easier to reach before vested interests become entrenched. Although it may seem a diversion from their current concerns with delimiting, entrenching and developing their own sovereign rights in the Arctic, the legitimacy of their assertion of the right to act as stewards of the Arctic for the international community and, ultimately, both their national and international security could be enhanced by the Arctic coastal states agreeing to explore the issue of a holistic, comprehensive legal framework for the high seas portion of the Arctic Ocean.

Do the Continental Shelf Developments Challenge the Polar Regimes?

Timo Koivurova*

Abstract

The article will provide a study of the continental shelf submissions that have been made in the polar regions and an evaluation as to whether these pose a challenge to the two polar regimes: the Arctic Council and the Antarctic Treaty System. This will be done by comparing these regimes, examining the development of the law of the sea as regards seabed rights and studying what sort of challenge the polar regimes face from the continental shelf activity in both polar regions and how serious that challenge is. Conclusions are finally drawn as to what types of effects may ensue for the polar regimes from the continental shelf submissions by various states.

The media have recently drawn extensive attention to the polar areas. Their interest has centred on the perceived competition between the Arctic states to determine which of them can claim the largest stake on the continental shelf in the region and thereby exploit the plentiful hydrocarbon resources under the seabed. A similar trend is apparent in the Antarctic, since, according to the media, the states with sovereignty claims on the continent are claiming vast areas of adjacent continental shelf in order to exploit the resources there. The story-line here is that with climate change opening up previously inaccessible regions to natural resource development – plentiful and valuable resources – the states are engaging in typical power politics to determine who will get to those resources first.

For anyone familiar with international law, in particular the law of the sea, it is clear that this is not, however, the case.\footnote{This is well argued by former undersecretary-general of the United Nations, Hans Corell, in an interview to the Globe and Mail, published in the Arctic Council website, at http://arctic-council.org/article/2008/4/the_north_is_not_the_wild_west (accessed June 11, 2008).} At least to date, the extended

* Research Professor/Director, Northern Institute for Environmental and Minority Law/Arctic Centre, University of Lapland. Email: timo.koivurova@ulaapland.fi.
continental shelf submissions in both polar areas have been made fully in accordance with the United Nations Convention on the Law of the Sea (UNCLOS). This process has just recently begun, the first submission to the Commission on the Limits of the Continental Shelf (CLCS, or the Commission) being made in 2001.

Nevertheless, the unfolding of this UNCLOS-controlled process challenges the governance systems in both polar regions. The aim of this article is to examine the sort of challenge the polar regimes face and how serious that challenge is. To this end, it first presents the polar regimes and the development of the law of the sea as regards seabed rights. It then moves on to examine the continental shelf submissions that have been made in the polar regions and to evaluate whether these indeed pose a challenge to the regimes.

1. Introduction to the Polar Regimes

Before studying the development of the polar regimes it will be useful to outline the different ways in which the polar areas can be defined. There is no agreement on the exact definition of the two regions. In the Antarctic, the northernmost boundary can be either that adopted in the Antarctic Treaty, i.e. 60 degrees south, or that opted for in the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), a natural boundary known as the Antarctic convergence, where the warm waters of the northern seas meet the cool and less salt waters of the Southern Ocean.

The question of definition is even more complex in the Arctic, where several different criteria can be presented for drawing the southernmost boundary of the region. Possible natural boundaries are the tree line, i.e. the northernmost boundary where trees grow, or the 10° C isotherm, i.e. the southernmost location where the mean temperature of the warmest month of the year is below 10° C. In Arctic-wide co-operation, the Arctic Circle has been used as a criterion for membership, with only states having territorial sovereignty above the Circle invited to participate.

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4 Iceland’s sovereignty extends above the Arctic Circle, as its territorial sea extends above the Circle.
5 The impetus for the development of the Antarctic Treaty System (ATS) was the International Geophysical Year (1957–1958). By the time the Geophysical Year began, seven states had made claims of territorial sovereignty on the Antarctic continent. The Cold War had also started, and the two superpowers – the Soviet Union and the United States – had established scientific stations in the region, although neither had made any sovereignty claims or recognised the claims of other states. The sovereignty situation was quite volatile and thus the states concerned – the United States, the Soviet Union, the seven claimant states and three others with scientific activities in the area – agreed to start negotiating on the prospects of resolving several problematic issues that had arisen regarding the governance of the Antarctic.

The Antarctic Treaty was concluded on 1 December 1959 and entered into force on 23 June 1961. Perhaps most importantly, the Treaty resolved the sovereignty question through its now famous “agreement to disagree” in Article IV:

1. Nothing contained in the present Treaty shall be interpreted as: (a) a renunciation by any Contracting Party of previously asserted rights of or claims to territorial sovereignty in Antarctica; (b) a renunciation or diminution by any Contracting Party of any basis of claim to territorial sovereignty in Antarctica which may have whether as a result of its activities or those of its nationals in Antarctica, or otherwise; (c) prejudicing the position of any Contracting Party as regards its recognition or non-recognition of any other State’s rights of or claim or basis of claim to territorial sovereignty in Antarctica. 2. No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim, to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.

By “freezing” the sovereignty question for the duration of the Treaty, the states that negotiated it were able to focus on demilitarising the region and establishing it as a location for scientific research.

According to the Treaty, governance was to be implemented in Antarctic Treaty Consultative Meetings (ATCMs) by the original parties, known as Antarctic Treaty Consultative Parties (ATCPs). The Treaty was not intended

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6 Even before this, the International Council for Scientific Unions had established the Scientific Committee on Antarctic Research (SCAR), which plays an important role in the ATS.
7 These were Chile, Argentina, the United Kingdom, Australia, New Zealand, Norway and France. In one sector, the Antarctic Peninsula, the claims of Chile, Argentina and the United Kingdom overlap. One area of the Antarctic, that comprising Ellsworth Land and Marie Byrd Land, remains unclaimed by any state; it is the last area of unclaimed land on Earth.
8 Belgium, South Africa and Japan.
to be an exclusive club for its twelve original parties, however; it provided a possibility for other states to accede to it. If an ascending state wanted to become an ATCP with full rights under the Treaty, it was required to conduct "substantial research activity" in the Antarctic as described in Article IX (2); otherwise, the state could only participate in ATCMs as a non-Consultative Party.

Initially, the ATCPs conducted Antarctic policy through recommendations, as provided in the Treaty. These recommendations, which despite their name were perceived by many as legally binding, have served as an important means for the ATCPs to develop the regime in many policy areas.19

A second approach in the ATS has been to conclude international treaties in order to attract the participation of other than Consultative Parties, particularly in the management of the Southern Ocean. The rationale here is straightforward: with sovereignty claims frozen by the Treaty, there were no coastal states in the Antarctic that could establish maritime sovereignty and jurisdiction over the Southern Ocean, meaning that it could be regarded as part of the high seas in the law of the sea, although not in the usual sense.11 If, however, the whole Southern Ocean were deemed high seas, it would be open to economic exploitation by all the states in the world, including states that are not parties to the Treaty and whose behaviour the ATCPs thus could not control. Three international treaties were concluded to address this situation: the 1972 Convention for the Conservation of Antarctic Seals (CCAS),12 the 1980 CCAMLR and the 1988 Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA).13 Each of these conventions has an administering body of its own, and the commission of the CCAMLR in particular has been influential.14

A third method used to implement Antarctic policy has been to conclude an international treaty directly connected to the original Antarctic Treaty. This occurred when France and Australia abandoned the CRAMRA as a solution to the mining issue and the need arose to find a new approach.

The outcome was the Madrid Protocol on Environmental Protection to the Antarctic Treaty,15 which prohibited mining indefinitely. The Protocol, which was adopted in 1991 and entered into force in 1998, is open only to the contracting parties of the Antarctic Treaty and, according to its Article 4, is meant to supplement the Treaty, not modify or amend it. Importantly, the Protocol explicitly defines the ATS as "...the Antarctic Treaty, the measures in effect under that Treaty, its associated separate international instruments in force and the measures in effect under those instruments". The Protocol also established an organ to administer it, the Committee on Environmental Protection (CEP), which reports annually to the ATCM.16

The driving force of the ATS has been the ATCMs, which at first took place biennially but since 1995 have been organized annually. At the 27th ATCM, held in Cape Town, South Africa, at the beginning of June 2004, Ukraine was accepted as an ATCP and the most recent ATCM was held in that country from 2 to 13 June 2008.17 There are now 28 Consultative Parties to the Treaty with full voting rights and 18 non-Consultative Parties, making a total of 46 states in the ATS. A permanent secretariat to the ATS started its work in Buenos Aires, Argentina, at the beginning of September 2004.18 It is interesting to note that of the eight Arctic states, seven are parties to the ATS; five are Consultative Parties (Norway, Sweden, Finland, USA and the Russian Federation) and two non-Consultative (Denmark and Canada).

2. Arctic Co-operation

The initial idea of Arctic-wide co-operation was launched in 1987 in Murmansk by former Soviet Secretary-General Michail Gorbachev. The Soviet leader proposed that the Arctic states could initiate co-operation in various fields, one being protection of the Arctic environment.19 This idea was developed further in part when Finland convened a conference of the eight Arctic

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19 This is so because there were still coastal states that had only agreed not to consolidate their sovereignty claims for the duration of the Treaty. They have still adopted maritime zones for their Southern Ocean waters. For an analysis, see Patrizia Vigni, "Antarctic Maritime Claims: "Frozen Sovereignty" and the Law of the Sea", in The Law of the Sea and Polar Maritime Delimitation and Jurisdiction, ed. Alex G. Oude Elferink, and Donald Rothwell (Leiden: Kluwer Law International, 2001): 85–104.
14 See the Committee’s website at http://www.cep.aq/ (accessed June 11, 2008).
17 Gorbachev proposed that a nuclear-weapon-free zone be declared in northern Europe, naval activity be limited in the seas adjacent to northern Europe, peaceful co-operation be the basis for utilizing the resources of the Arctic, scientific study of the Arctic has great significance for all humankind, the countries of the North co-operate in matters of environmental protection, and the Northern Sea Route be opened by the Soviet Union to icebreaker-escorted passage.
states in Rovaniemi in 1989 to discuss the issue. After two additional preparatory meetings — in Yellowknife, Canada, and Kiruna, Sweden — the eight Arctic states, as well as other actors, met again in Rovaniemi in 1991 to sign the Rovaniemi Declaration, by which they adopted the Arctic Environmental Protection Strategy (AEPS).28

The AEPS identified six priority environmental problems facing the Arctic: persistent organic contaminants, radioactivity, heavy metals, noise, acidification and oil pollution. It also outlined the international environmental protection treaties that apply in the region and, finally, specified actions to counter the environmental threats. The eight Arctic states established four environmental protection working groups: Conservation of Arctic Flora and Fauna (CAFF), Protection of the Arctic Marine Environment (PAME), Emergency Prevention, Preparedness and Response (EPPR) and the Arctic Monitoring and Assessment Programme (AMAP). Three ministerial meetings (after the signing of the Rovaniemi Declaration and the AEPS) were held in this first phase of Arctic co-operation, generally referred to as the AEPS process. The meetings were held in 1993 (Nuuk, Greenland), 1996 (Inuvik, Canada) and 1997 (Alta, Norway). Between the ministerial meetings, cooperation was guided by Senior Arctic Officials, typically officials from the foreign ministries of the eight Arctic states. The last AEPS ministerial was held after the establishment of the Arctic Council and focused on integrating the AEPS into the structure of the Council.

The Arctic Council was established in September 1996 in Ottawa, Canada, with the Arctic states signing the Declaration Establishing the Arctic Council and issuing a joint communiqué to explain the newly created body.29 With the founding of the Council came changes in the forms of Arctic co-operation that had been based on the AEPS document, changes that extended the terms of reference beyond the previous focus on environmental protection. The Council was empowered to deal with “common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic.”30 This yielded a very broad mandate, since “common issues” can include almost any international policy issue; however, the Declaration provides in a footnote that “the Arctic Council should not deal with matters related to military security.”31 Environmental co-operation is now included as a principal focus within the mandate of the Council,32 with the four environmental protection working groups that started as part of AEPS co-operation continuing under the umbrella of the Council.33 The second ‘pillar’ of the Council’s mandate is co-operation on sustainable development,34 whose terms of reference were adopted in the second ministerial meeting of the Council, held in 2000 in Barrow, Alaska, and which is managed by the Arctic Council Sustainable Development Working Group (SDWG).35

The Declaration amends and elaborates the rules on participation set out in the AEPS. It provides for three categories of participants: members, permanent participants and observers. The eight Arctic states are members; the three organisations representing the indigenous peoples of the Arctic are permanent participants.36 The Declaration also lays down the criteria for acquiring the status of observer37 and permanent participant, as well as the decision-making procedure for determining those statuses.38

The decision-making procedure of the Arctic Council, which had developed in AEPS co-operation, is made more explicit in the Declaration. Article 7 provides: “Decisions of the Arctic Council are to be by consensus of the Members”. In Article 2, “member” is defined as including only the eight Arctic states. Decision-making by consensus is to be undertaken only after “full

30 Ibid., Article 1 (a) of the Declaration.
31 Ibid., footnote at p. 3.
32 Ibid., Article 1 (b).
33 Ibid., Article 1 (b) reads: “The Arctic Council is established as a high level forum to . . . oversee and coordinate the programs established under the AEPS on the Arctic Monitoring and Assessment Program (AMAP); Conservation of Arctic Flora and Fauna (CAFF); Protection of the Arctic Marine Environment (PAME); and Emergency Prevention, Preparedness and Response (EPPR).”
34 Ibid., Article 1 (c) reads: “The Arctic Council is established as a high level forum to . . . adopt terms of reference for, and oversee and coordinate a sustainable development program.”
35 The home page of the SDWG is at http://portal.sdwg.org/
36 Article 2 of the Declaration enumerates the following as permanent participants: “The Inuit Circumpolar Conference, the Saami Council and the Association of Indigenous Minorities of the North, Siberia and the Far East of the Russian Federation”. Three organisations have since been accepted as permanent participants: the Aleut International Association, the Gwich’in Council International and the Arctic Athabascan Council.
37 Ibid., Article 3 of the Declaration reads: “Observer status in the Arctic Council is open to: a) non-Arctic states; b) inter-governmental and inter-parliamentary organisations, global and regional; and c) non-governmental organisations that the Council determines can contribute to its work.”
38 Ibid., Article 2 (2) reads: “Permanent participation is equally open to other Arctic organisations of indigenous peoples with majority Arctic indigenous constituency, representing: a) a single indigenous people resident in more than one Arctic State; or b) more than one Arctic indigenous people resident in a single Arctic state”. Decisions by the Arctic states on whether this criterion is fulfilled must be unanimous. Article 2 also states: “the number of Permanent Participants should at any time be less than the number of members.”
consultation\textsuperscript{31} with the permanent participants, i.e. the organisations of the Arctic indigenous peoples. Although the permanent participants do not have formal decision-making power, they are clearly in a position to exert much influence in practice on the decision-making of the Council.\textsuperscript{32}

The work of the Arctic Council is much dictated by its chair states. The first was Canada (1996–1998), followed by the United States (1998–2000), Finland (2000–2002), Iceland (2002–2004) and Russia (2004–2006); the current chair is Norway. Since the Council has no permanent secretariat, the Chair state has a great deal of freedom to choose its priorities during its tenure, which hinders the formation of long-term policies (although the three Scandinavian states have created a semi-permanent secretariat, to function in Tromsø Norway until 2012).\textsuperscript{33} The Arctic Council has also created certain programs of its own, such as the Arctic Council Action Plan to Eliminate Pollution in the Arctic (ACAP), which recently became the sixth working group, and the Arctic Climate Impact Assessment (ACIA). The Council has carried out many ambitious scientific assessments in addition to the ACIA, the most recent being the oil and gas assessment released in 2008, and has two other important ones underway, the Arctic Marine Shipping Assessment and Circumpolar Biodiversity Assessment. Both the AIPS and the Arctic Council have been established by declarations and thus Arctic-wide cooperation has been based on soft law from its very inception.

3. The Development of Seabed Law

Before moving on to examine how the present law of the sea regulates the ownership and use of the seabed and its resources, it will be useful to clarify the differences between the terms used in geophysics and international law for the various portions of the seabed and to provide a short account of how the law relating to the seabed has evolved. Since geophysics tries to examine the reality of the seabed, it has much more nuanced concepts to define it: the continental shelf proper adjacent to the coast extends to an average depth of 180 metres, at which point it gives way to a steep slope dropping to a depth of as much as 2500 metres and a less steep continental rise, which then becomes the ocean floor. Geophysics views the continental shelf, continental slope and continental rise as forming the continental margin. The present law of the sea, as codified for the most part in the UNCLOS, grants a coastal state sovereign rights to the resources of the legal continental shelf, which in most cases can be equated with the continental margin (not the geophysical continental shelf).

Before World War II, the coastal states enjoyed sovereignty only over a narrow territorial sea three to four nautical miles in extent. This changed dramatically after the war with the 1945 Truman Proclamation, whereby "...the Government of the United States regards the natural resources of the subsoil and seabed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control." This started the era of creeping coastal state jurisdiction, especially in regard to the seabed, the outer limit of which was defined in Article 1 of the 1958 Continental Shelf Convention\textsuperscript{35} as follows:

For the purpose of these articles, the term "continental shelf" is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.\textsuperscript{36}

The problem with this definition is that with the development of technology it effectively permitted coastal states to expand their seabed "presence" to the extent that even ocean floors could be divided between them. A counter-force to this trend came from Maltese ambassador Arvid Pardo, who in 1967 proposed in the UN General Assembly that the ocean floor should be designated as part of the common heritage of mankind and governed by an international governance mechanism that would share the economic benefits of the ocean floor's riches equitably between developing and developed states. Pardo's proposal also acted as a major impetus for convening the United Nations Conference on the Law of the Sea III, which sought to produce a comprehensive "constitution" of the oceans and became the UNCLOS.\textsuperscript{37}

The UNCLOS was negotiated over an extended period – 1974 to 1982 – as a package deal in that it permitted no reservations and contained an elaborate dispute settlement mechanism in its Part XV. It succeeded in achieving a compromise between various groupings of states with differing interests related to the seabed. For instance, states having a broad continental margin

\textsuperscript{31} Ibid., Article 2.
\textsuperscript{37} The first attempt produced four law of the sea conventions in 1958; the second was a failure (1969).
had rules accepted that allowed the resources of the whole continental margin to be subjected to the sovereign rights of coastal states; geologically disadvantaged states (those whose continental margin was minimal) managed to push for a rule that entitled all states to a continental shelf of a minimum of 200 nautical miles, meaning that these states, too, effectively exercise powers over limited portions of the ocean floor. The UNCLOS was also successful in defining more clearly the outer limit of the continental shelf than its 1958 predecessor and in designating the ocean floor as part of the common heritage of mankind and having it governed by the International Sea-Bed Authority (ISBA).38

Even though states with broad continental margins were able to extend the outer limit of their continental shelves to cover the whole geophysical continental margin (and in some exceptional cases areas beyond it) during the negotiations, they had to make compromises as well. For example, they had to submit to rules requiring them to transfer some of the revenues from offshore hydrocarbon exploitation on their extended continental shelf to developing states via the ISBA39 and, more importantly, had to prove scientifically the extent of their outer continental shelf to the 21-member Commission on the Limits of the Continental Shelf (CLCS).40 The related submission to the Commission must be made by a coastal state within ten years of its becoming a party to the UNCLOS if it considers that its continental margin exceeds 200 nautical miles.41 The Commission can only make recommendations but these are legally influential, because the coastal states' outer limits become final and binding only when they are based on the recommendations.42 The deadline for the submissions is fairly tight given that states need to provide

the Commission with a vast amount of scientific and technical data. Why the urgency? It was considered necessary to define the outer limits of continental shelves as quickly as possible, because it is only after establishing these limits that the boundary between states' continental shelves and the Area under the jurisdiction of the ISBA can be defined.33

4. Continental Shelf Entitlements and their Threat to the Polar Regimes

Russia was the first country to make the required submission to the CLCS (in 2001) and also the first to which the Commission issued interim recommendations, which required it to revise its submission with regard to the Central Arctic Ocean Basin.45 Whatever symbolic importance it had domestically when Russian submarines planted a titanium flag beneath the North Pole on the Lomonosov Ridge, Russia has not argued that the event has any legal effect46 and it has informed the Commission that it will soon make the revised submission. Norway made a submission in 2006 regarding three separate areas on its North East Atlantic and Arctic continental shelves. This prompted some reactions from other states as to the status of the seabed around the Svalbard Islands,46 but, as explained by the Norwegian foreign

38 As stated on the ISBA homepage, the ISBA is "an autonomous international organization established under the 1982 United Nations Convention on the Law of the Sea and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea. The Authority is the organization through which States Parties to the Convention shall, in accordance with the regime for the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction (the Area) established in Part XI and the Agreement, organise and control activities in the Area, particularly with a view to administering the resources of the Area and subsoil thereof beyond the limits of national jurisdiction (the Area) established in Part XI and the Agreement, organise and control activities in the Area, particularly with a view to administering the resources of the Area". See at http://www.isa.org.jm/en/about (accessed June 11, 2008).
39 Article 82.
40 Article 76.
41 This date was postponed by the parties to the Convention for those states that had become parties before May 1999, thus extending their submission deadline to May 2009. See Annex II to the Convention, Article 4.
42 Article 76 (6).
43 Yet, a recent 2008 decision by the states parties to the Law of the Sea Convention (SPLOS) will mitigate this deadline. In Decision SPLOS/183 regarding the workload of the Commission on the Limits of the Continental Shelf and the ability of states, particularly developing states, to fulfill the requirements of Article 4 of annex II to UNCLOS, as well as the decision contained in SPLOS/72, paragraph (a), it was provided: [The Meeting of States Parties] "[The Meeting of States Parties] [4]describes that: (a) It is understood that the time period referred to in [Article 4 of annex II to the Convention and the decision contained in SPLOS/72, paragraph (a), may be satisfied by submitting to the Secretary-General preliminary information indicative of the outer limits of the continental shelf beyond 200 nautical miles and a description of the status of preparation and intended date of making a submission in accordance with the requirements of Article 76 of the Convention and with the Rules of Procedure 2 and the Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf". See at http://www.un.org/Depts/los/meeting_states_parties/eighteenthmeetingstateparties.htm (accessed September 30, 2008).
44 See the short summary of these recommendations, at http://accessions.un.org/doc/UNDOC/GEN/N02/629/28/PDF/N0262928.pdf?OpenElement (accessed June 12, 2008). According to paragraph 41: "As regards the Central Arctic Ocean, the Commission recommended that the Russian Federation make a revised submission in respect of its extended continental shelf in that area based on the findings contained in the recommendations".
45 Article 77 (3) of the Convention.
ministry, the issue is unrelated to the outer limits of the continental shelf. The submission deadlines for Denmark (Greenland) and Canada are 2014 and 2013, respectively, and both states are desperately trying to collect the required information in time. According to newspaper sources, the US has also started to map out the outer limits of its continental shelf, even though it is not a party to the UNCLOS. Recently, the Bush Administration has declared its aim of having the United States become a party to the Convention.

The attention paid to the Arctic regions has increased by the day with the continental shelf activity, and especially with the heightened interest shown by the media. The planting of a Russian flag on the Arctic seabed raised serious concerns about the future of the region, with some even predicting possible military conflicts. In a recent issue of Foreign Affairs, Scott G. Borgerson, International Affairs Fellow at the Council on Foreign Relations and a former lieutenant commander in the US Coast Guard, argues that:

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.

BBC News provided the following account of the event:

Russian explorers have planted their country’s flag on the seabed 4,200m (14,000ft) below the North Pole to further Moscow’s claims to the Arctic. The rust-proof titanium metal flag was brought by explorers travelling in two mini-submarines, in what is believed to be the first expedition of its kind. Both vessels have now rejoined the expedition’s ships, completing their risky return journey to the surface. Canada, which also claims territory in the Arctic, has criticised the mission. “This isn’t the 15th Century,” Canadian Foreign Minister Peter MacKay told the CTV channel. “You can’t go around the world and just plant flags and say ‘we’re claiming this territory’,” he said. Melting polar ice has led to competing claims over access to Arctic resources. Russia’s claim to a vast swathe of territory in the Arctic, thought to contain oil, gas and mineral reserves, has been challenged by several other powers, including the US.

These concerns have made themselves felt in the Arctic Council, given that the five Arctic Ocean coastal states have started to convene meetings of their own. The first was convened by Norway in October 2007 at the level of senior officials and the second by Denmark (together with Greenland) in Ilulissat, Greenland, in May 2008, an Arctic Ocean conference at which the political representatives of the countries attending even issued a conference declaration (the Ilulissat Declaration). Even though the coastal states explicitly rejected any new Arctic treaty, they outlined an agenda for mutual co-operation which over time could even be seen as challenging the Arctic Council as the most important forum for inter-governmental co-operation in the region. Interestingly, one task the coastal states identified as an important

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55 The countries outlined work in the Ilulissat Declaration in various international forums, organisations and existing treaties to, among other things, improve shipping safety and prevent and reduce ship-based pollution in the Arctic Ocean, protect marine environment, strengthen search and rescue capabilities, and improve accident response mechanisms in general.
56 The EU has also energized its Arctic policy. In connection with its climate policy work, the EU proposed that the governance framework applicable to the Arctic marine areas also needs to be revisited Climate Change and International Security: Paper from the High Representative and the European Commission to the European Council (11/03/08, 14 March 2008); see at http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/reports/99387.pdf, accessed June 11, 2008). The Climate Change and International Security paper identified
area of future co-operation was collecting scientific data on the continental shelf.

It is also the case that even though the continental shelf process has thus far functioned within the frame of the UNCLOS, it is by no means certain that it will continue to be as orderly. Apparently three states (Canada, Denmark (Greenland) and Russia) view portions of the Lomonosov Ridge as belonging to their continental shelf, which may prompt difficult disputes between them as the CLCS has no powers to determine the boundaries of overlapping continental shelf claims. Another concern is Russia's vast claim. The Commission urged Russia to make a revised submission for the Central Arctic one policy option to "Develop an EU Arctic policy based on the evolving geo-strategy of the Arctic region, taking into account information access to resources and the opening of new trade routes" (Ibid., 11). See also p. 6, where it is stated: "The Arctic: The rapid melting of the polar ice caps, in particular, the Arctic, is opening up new waterways and international trade routes. In addition, the increased accessibility of the enormous hydrocarbon resources in the Arctic region is changing the geo-strategic dynamics of the region with potential consequences for international stability and European security interests. The resulting new strategic interests are illustrated by the recent planting of the Russian flag under the North Pole. There is an increasing need to address the growing debate over territorial claims and access to new trade routes by different countries which challenge Europe's ability to effectively secure its trade and resource interests in the region and may put pressure on its relations with key partners". Norway's foreign minister, whose country currently chairs the Arctic Council, responded to this that there is no need for an Arctic treaty, given that the UNCLOS and other conventions already cover the Arctic marine area: "The Norwegian foreign minister says to newspaper Aftenposten that it is "new and significant that the EU makes such a document". At the same time he stresses that he is critical towards the EU's apparent interest in a review of international law in the area following ice melting. There is [sic] no legal loopholes in this. We have the United Nations Convention on the Law of the Sea, which regulates these issues." This news story can be found on the Arctic Council website, at http://arctic-council.org/article/2008/03/no_consequences_for_international_law (accessed June 11, 2008). The EU is also developing its Arctic policy as part of its newly adopted integrated maritime policy wherein the Commission (DG Mare) promises to produce a report "on strategic issues relating to the Arctic Ocean" within the year 2008. The adopted integrated maritime policy provides in section 4.4. that "[a]ttention will also be given to the geopolitical implications of climate change. In this context, the Commission will present in 2008 a report on strategic issues relating to the Arctic Ocean". See at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0575:FIN:EN:PDF (accessed June 11, 2008). In addition, there is a recent initiative within the EU to integrate these various Arctic processes in the Commission, and produce an integrated communication on the Arctic within the year 2008 (e-mail correspondence with the official in charge in the Commission, DG Relex, June 30, 2008. Copy on file with author).

Ocean, signalling that the Commission and Russia may indeed have conflicting interpretations as to what areas are part of the Russian Arctic continental shelf. Should the Commission continue to disagree with Russia's interpretation of the extent of its continental shelf, it cannot be excluded that Russia will proceed to define outer limits for its continental shelf that deviate from the ones recommended by the Commission. Several scenarios come to mind here. At the very least, if this were to happen, Russia's outer limits would not become final and binding, and it would need to make a revised submission to the Commission.

Australia made its continental shelf submission, including the Antarctic portion, in 2004, but it specifically asked the CLCS not to take any action for the time being with respect to the information that it had produced on the continental shelf appurtenant to its Antarctic Territory. Eight states commended Australia for acting in the spirit of the Antarctic Treaty System. Norway is also developing its continental shelf submission, as mentioned above, but, according to the country's foreign ministry, "If Norway should decide to submit data on Antarctica to the CLCS, it would request that the Commission not consider the data for the time being." In October 2007, the media reported the UK's plans to "claim" the continental shelf off its Antarctic territory. The Guardian reported:

The United Kingdom is planning to claim sovereignty rights over a vast area of the remote seabed off Antarctica, the Guardian has learned. The submission to the United Nations covers more than 1 million square kilometers (386,000 square miles) of seabed, and is likely to signal a quickening of the race for territory around the south

the Commission shall not prejudice matters relating to delimitation of boundaries between States with opposite or adjacent coasts".

55 See the short summary of these recommendations, at http://docs.csd.un.org/doc/UNDOC/GC/GEN/N02/629/28/PDF/N0262928.pdf (open element (accessed June 12, 2008). According to paragraph 41: "At regards the Central Arctic Ocean, the Commission recommended that theRussian Federation make a revised submission in respect of its extended continental shelf in that area based on the findings contained in the recommendations".

56 According to Article 8 of Annex II of the UNCLOS: "In the case of disagreement by the coastal State with the recommendations of the Commission, the coastal State shall, within a reasonable time, make a revised or new submission to the Commission".


59 The UK on 9 May 2008 issued an official note (in connection with its partial submission) that it may at a later stage make a submission in regard to the continental shelf appurtenant to the portion of Antartica it has claimed; see at http://www.un.org/Depts/los/clcs_new/submissions_files/a04/Enforcement_of_Article_76_10/attachment.pdf (accessed June 12, 2008).
pole in the world’s least explored continent. The claim would be in defiance of the spirit of the 1959 Antarctic treaty, to which the UK is a signatory. It specifically states that no new claims shall be asserted on the continent. The treaty was drawn up to prevent territorial disputes... International interest in exploiting the new frontier on the oceans’ floors comes as global warming is opening up previously frozen seas at the icecaps and the world’s major economies are competing for fresh energy sources. During the summer Russia was subject to criticism for making claims beneath the Arctic Ocean, while France registered a claim to thousands of square miles around New Caledonia, in the Pacific. The UK claim on Antarctica will be its most controversial because it depends on proximity to the British Antarctic Territory which overlaps rival land claims by Chile and Argentina.56

Academic commentators followed suit. Dr. Michael Bravo of the Scott Polar Institute broached the issue in the following terms:

Why is this happening now? The answer, in a word, is energy. The world’s largest economies, including the UK, are seeking new supplies of energy away from the instability of the Middle East, without wanting to depend on the whim of Russia. The ocean seabed is a resource frontier with immense mineral wealth... The UK’s decision is a calculated response to the recent Russian declaration of sovereignty over the North Pole basin. Russia sent out a submarine to plant a flag at the North Pole on the ocean floor in the vicinity of the Lomonosov Ridge that connects the Arctic shelves of Russia and Canada. National approaches differ. Many thought the Russian flag-placing unnecessarily theatrical, echoing an overtly imperialist Soviet tradition. By contrast, the British Foreign Office, anticipating that other Antarctic signatories may soon make similar claims, will hope that the UK is given credit for abiding by international law and following the formal procedures...56

It was no wonder that the media soon received word from both Argentina and Chile that they too were studying the extent of their Antarctic continental shelves.57 Of the original claimant states, France has not yet given any indication whether it will pursue the inclusion of continental shelf off of its Antarctic territory and New Zealand stated in its 2006 submission that it is a partial one and does not include areas of continental shelf appurtenant to Antarctica.58

Do these continental shelf developments pose any threat to the ATS? If one evaluates the situation from within the rules of the ATS, there seems to be no major threat to the functioning of the system. The original claimant states have indicated that they do want to preserve their right to claim territorial sovereignty in Antarctica, a right that they are in fact entitled to preserve on the basis of Article IV(1a) of the Antarctic Treaty. Since there is no guarantee that the ATS will remain in operation forever, the states are only ensuring that others remember their claim to territorial sovereignty in Antarctica (and its natural prolongation, the continental shelf). Hence, a good argument can be made that the states are observing their UNCLOS duties in the Arctic and their UNCLOS and ATS duties in the Antarctic. However, the Antarctic Treaty Secretariat in Buenos Aires has expressed a slight concern over these developments. Johannes Huber, head of the Secretariat, said to the media: "Under the Antarctic Treaty you cannot increase your claim, you cannot make new claims... There are quite a few prohibitions, so anything that makes it seem like they are increasing their territory could lead to trouble".59

A spokesperson for Greenpeace described the UK’s move to “claim” the continental shelf off its Antarctic portion as “colossally irresponsible” and accused the British government of putting more effort into securing future oil rights than battling climate change. The spokesperson continued: “When the UK is supposed to be leading the global charge on reducing carbon emissions, they are in fact leading the charge halfway around the world for a new oil rush”.60

Against this background, one could ask whether the continental shelf activity might open up the Antarctic Treaty’s “agreement to disagree”, which has ensured that Antarctica has no territorial sovereigns. The argument that some advance is that the ATS has not faced any real challenge thus far, as the challenges to date have involved comparatively tame issues such as overharvesting of krill and fish. According to this line of reasoning, the ATS system is only now really being put to the test with oil and gas interests entering the area. Could a state resist the temptation to permit the exploitation of a huge oil deposit under its Antarctic continental shelf?

5. Evaluation

As discussed above, even though states have conducted continental shelf activity within the letter of both the UNCLOS and the ATS, these developments pose challenges to the polar regimes. They change the political-legal setting in the Arctic simply by extending the presence of Arctic states further onto the Arctic Ocean seabed. Moreover, an argument can be made that, given the high interest in finding new oil and gas deposits in safe regions, mining activities in the Southern Ocean may well unleash territorial disputes over Antarctica.

The political-legal setting in the Arctic will change when all the current continental shelf submissions are processed by the Commission and the Arctic coastal states have agreed (or not) on the boundaries of any overlapping entitlements. It is difficult to predict one way or the other whether and what kind of disputes, even conflicts, might arise in the Arctic. Yet, given that the continental shelf activities in the region have thus far been pursued in conformity with the UNCLOS, it is safe to at least presume that the process will be orderly both during the CLCS process and when states delimit their overlapping continental shelves. This view seems to be backed up by the coastal states agreeing at the Greenland meeting to co-operate in collecting scientific data on the continental shelf and especially by their stated commitment to the orderly settlement of any overlapping continental shelf entitlements. 73

Yet, the gradual penetration of the five littoral states further into the Arctic Ocean with their continental shelf submissions may be part of an overall challenge to the Arctic Council as the main inter-governmental forum managing the Arctic issues. Over time the coastal states may find it more reasonable to conclude multilateral treaties focusing on the Arctic Ocean rather than the entire Arctic, which has been the traditional focus of the Arctic Council. Moreover, the states may find it important to confront the difficult management problems caused by the melting sea ice (such as increased navigation and offshore hydrocarbon exploitation) in a more focused Arctic Ocean cooperation than via a soft-cooperation platform such as the Arctic Council. Such a development would leave Finland, Sweden and Iceland — members of the Arctic Council — out of the core of the co-operation, which has already caused some friction.

It can also be argued that this continental shelf activity poses a challenge to the ATS. One might ask why the Antarctic states would not simply rely on the legal nature of continental shelf. A state does not have to claim its continental shelf, since it is a natural prolongation of its land territory into the sea. 74 If the ATS system collapsed, the states would retain their claim to territorial sovereignty, which would naturally include rights to the adjacent maritime zones, including the continental shelf. On the other hand, the states' practice of including the Antarctic continental shelf as part of their submissions to the Commission can be seen as in line with the ATS: the states merely want to remind the international community that their claim to territorial sovereignty is still there even in the unlikely event that the ATS system collapses.

It is also pertinent to ask whether it is in fact the case that the ATS system has not faced any real challenges to date. As the argument goes, 'real' challenges are those posed by high-stakes interests seeking to exploit hydrocarbon deposits in the Southern Ocean, but it is difficult to predict whether this would really challenge the ATS. Much depends on how one perceives the

74 At a recent conference of Arctic parliamentarians, the so-called "shadow Arctic Council", the Conference Statement manifests this friction very clearly: "Furtermore the Conference…”. Note the information from the Danish delegation concerning the Ilulissat Declaration, and the concerns of the Icelandic delegation regarding full participation of all states of the Arctic Council". Eight Conference of Parliamentarians of the Arctic Region, Fairbanks, the United States of America, 12–14 August 2008, see the Statement at http://www.arcticpar.org/_res/site/fin/lh%20Conferencestatement.pdf (accessed September 10, 2008). Similar discussion took place in a SAO meeting before the Greenland coastalt state meeting, see chapter 18.1 of the Narvik SAO report (28–29.11.2007), where it is provided that "Iceland expressed concerns that separate meetings of the five Arctic states, Denmark, Norway, US, Russia and Canada, on Arctic issues without the participation of the members of the Arctic Council, Sweden, Finland and Iceland, could create a new process that competes with the objectives of the Arctic Council. If issues of broad concern to all of the Arctic Council Member States, including the effect of climate change, shipping in the Arctic, etc. are to be discussed, Iceland requested that Denmark invite the other Arctic Council states to participate in the ministerial meeting. Permanent participants also requested to participate in the meeting. Denmark responded that the capacity of the venue may be an issue". See at http://arctic-council.org/filearchive/Narvik%20-%20FIAL%20-%20Report%20-%20A%20%202008.doc (accessed September 10, 2008).
75 This is, in fact, what the UK points out in its official note (in connection with its partial submission), at http://www.un.org/Depts/los/clcs_new/services_submissions_files/GBR%20_9May%202008.pdf (accessed June 12, 2008).
ultimate motives for state behaviour; international lawyers characteristically rely on rules as important checks on state behaviour, whereas international relations scholars tend to argue that form follows function.

The argument that the ATS has yet to be challenged can itself be questioned. If the states were able to contain – in the midst of the Cold War – both the territorial disputes over Antarctica and the arms race in the region, it seems fair to presume that they will be able to reject mining as well – at least for the time being and in accordance with the rules of the Madrid Protocol, which are very difficult to amend.\textsuperscript{79} It would seem fairly risky for any one state to permit hydrocarbon exploitation on its Antarctic continental shelf, given that this would not only go against a small club of states, but a regime which now has 46 parties – 28 Consultative and 18 Non-Consultative. Increasingly, the ATS is perceived as a \textit{sui generis} commons area, one that should enjoy further legitimacy in the eyes of the entire international community. A good testimony to this is that the challenge against the ATS within the United Nations during the 1980s by a group of developing states led by Malaysia was recently removed from the UN General Assembly agenda; Malaysia is now participating in ATCMs as a special invitee.\textsuperscript{76}

A reasonable assessment at this writing is that the UNCLOS and the ATS system are able to contain the challenges posed by continental shelf activity at both poles. In the Arctic, the challenge is clearly more tangible, as some of the submissions will in all likelihood overlap and Russia's vast submission may face challenges in the Commission procedure. Yet, given that the Arctic Ocean coastal states are already preparing for the eventual delimitation of the boundaries of their continental shelves, and that at least so far Russia has abided by the CLCS procedures, it can be presumed that the submissions will not prompt any serious conflicts in the Arctic. This does not mean that the process will progress in an orderly fashion to its conclusion; it only means that the development so far has been orderly and fully in line with international law, whereby there is no reason to presume that the process naturally engenders conflict. In the Antarctic, it seems fairly clear the ATS can manage the challenges posed by possible finds of hydrocarbons on the seabed of the Southern Ocean.

The media – and even some researchers – try to claim that with the melting brought on by climate change previously inaccessible polar regions have become targets for power politics and that the race is on between states to be the first to grab the resources, possibly provoking even military conflicts. However, it is clear that this story-line is more of a story than an account of the realities in the regions. One reason for this misconception may be that it has taken such a long time for the UNCLOS continental shelf process to unfurl. The UNCLOS was negotiated for a long period of time – 1974 to 1982 – and it did not enter into force until 1994. The first deadline for a state party to the UNCLOS to make a submission concerning an extended continental shelf to the CLCS was 2004, and thus the process has started to operate very recently. It is exactly now that the submissions for extended continental shelves need to be made, and increasingly are being made.

It is probably difficult for a non-lawyer to imagine that a process that started in 1974 is the main cause of the present continental shelf activity, but this is in fact the case. Yet, as shown above, this activity in the Arctic has clear politico-legal consequences (less so in the Antarctic) although it seems reasonable to surmise that no conflicts will arise from these. Overall, the reality of continental shelf activity in both polar regions testifies to the power of rules, rather than political considerations, in guiding state behaviour – at least thus far.

\textsuperscript{79} According to Article 7 of the Madrid Protocol, mining (including offshore hydrocarbon exploitation) is prohibited but after 50 years it will be possible to revisit the prohibition, although it is very difficult to amend, as shown by Article 25: "...2 If, after the expiration of 50 years from the date of entry into force of this Protocol, any of the Antarctic Treaty Consultative Parties so requests by a communication addressed to the Depositary, a conference shall be held as soon as practicable to review the operation of this Protocol. 3 A modification or amendment proposed at any Review Conference called pursuant to paragraph 2 above shall be adopted by a majority of the Parties, including three-quarters of the States which are Antarctic Treaty Consultative Parties at the time of adoption of this Protocol. 4 A modification or amendment adopted pursuant to paragraph 3 above shall enter into force upon ratification, acceptance, approval or accession by three-quarters of the Antarctic Treaty Consultative Parties, including ratification, acceptance, approval or accession by all States which are Antarctic Treaty Consultative Parties at the time of adoption of this Protocol.".