Drawing Lessons for Arctic Governance from the Antarctic Treaty System

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In Gudmundur Alfredsson, Timo Koivurova and Kamrul Hossain (eds.), The Yearbook of Polar Law, *Vol. 3*, Leiden: Brill Editions (2011), 683-713
ISSN 1876-8814, brill.nl/pola

1. Introduction

Given the impact of climate change on the natural conditions prevailing in the Arctic, the region is likely to undergo some of the most extreme examples of the consequences of climate change for human activities. Coastal states are hastening to put preparatory steps in place to ensure that they would be able to harvest in the coming years hydrocarbon resources lying under the Ocean. Actors in the fishing industry anticipate with high expectations the impact that warmer Arctic waters will have on regional fish stocks. Tourism operators compete to propose each year a more unique Arctic experience, broadening accessibility for tourists to locations previously considered unreachable. Every summer, more ships travel the Northern maritime routes through the Canadian archipelago and along the Russian coastline indicating that Arctic shipping might soon become a dynamic global industry. At the same time, local communities and indigenous peoples in particular are striving to preserve and adapt their livelihood and traditions. These converging trends indicate a potential sharp increase in economic activities in the Arctic, which will constitute a main challenge to effective governance of the region. Indeed, the development of new economic activities and the extension of their geographic range are likely to result in regulatory gaps and uncertainties regarding the environmental impacts and social consequences of said activities. Also, the emergence of new economic opportunities is already attracting the interest of more actors into region. States located outside of the Arctic Circle have expressed their intention to take part in the continued development of economic activities in the region.

This article aims to identify some of the lessons one can learn from the governance of another region facing similar challenges to the Arctic. The ***684** past experiences of different countries and governments with Antarctic governance will be studied in order to serve as a reference for developing instruments and approaches to address some of the challenges currently facing the Arctic. As the two Polar Regions differ in many respects, we do not claim that there can be a one-size-fits-all model for Polar governance. For example, while the Antarctic lacks any permanent settlement, the Arctic has a long history of human presence. Furthermore, a handful of coastal states can legitimately claim sovereignty over most of the resources in the Arctic on the basis of customary international law, whereas the international community does not universally recognize any sovereign claim to the Antarctic.[1] Despite myriad differences, the poles share some common characteristics. They have both been influenced by concerns related to the possibility of competition for rights to the exploitation of their respective economic opportunities, and by the risks inherent in

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[1] As is well-known, seven states have made sovereignty claims over the Antarctic continent, but have consented not to consolidate these into full sovereignty in the provisions of the Antarctic Treaty, 1959, 402 *UNTS* 71.

the pursuit of human activities in pristine areas. As these concerns have been around for a longer time regarding the Antarctic, states having an interest in that continent have cooperated to address most of these challenges. Thus Antarctic governance provides us with a useful case study of regional cooperation, beginning with the adoption of the Antarctic Treaty, followed by the subsequent sectoral agreements.[2] The entry into force of the Protocol on Environment Protection[3] concluded for the time being the development of this regime. Scholars, civil society actors and members of the international community have referred to the opportunity for building on this Antarctic experience as they begin to address governance issues emerging in the Arctic. The recent call by the European Parliament for a ban on heavy oil in Arctic waters illustrates this trend:

> [The European Parliament w]elcomes the ban on the use and carriage of heavy fuel oil on vessels operating in the Antarctic Area […]; stresses that a similar ban might be appropriate in Arctic waters to reduce risks to the environment in case of accidents;[4]

While the negotiation of an Arctic Treaty shaped on the Antarctic Treaty System lacks feasibility, certain features of the Antarctic Treaty could provide relevant inspiration for the decision makers in the High North. This paper ***685*** will consider two features of the Antarctic Treaty System (ATS) that played a key role in ensuring the effectiveness of the regime. We will study their status at present in the Arctic context and propose opportunities to further their recognition and implementation. Despite references in the media to a confrontational "race to resources" largely exaggerating the geopolitical situation, at least for the time being, the prospect of increased economic development in the Arctic raises issues of the legitimacy of various actors interested in playing a role in the region. A similar discussion arose a few decades ago in relation to the anticipated resources of the Antarctic. The capacity for differing degrees of involvement of various groups of states could be considered one of the greatest achievements of the ATS; the first part of our research will focus on the inclusiveness evident in both models of polar governance. Indeed, the ATS constitutes a unique approach to third states, which has enabled the original signatory parties to maintain a prominent role while engendering confidence in the merits of the regime which they were designing within the wider international community. The current definition of the role of observers in the Arctic Council is a source of frustration and thus might benefit from updating inspired by the Antarctic Treaty. Secondly, the particular vulnerability of ecosystems located in both Polar Regions increases the importance of the adoption of a proactive approach to increase the effectiveness of the regional environmental regimes. Parties to the Antarctic Treaty have proven largely successful in regulating human activities before they constitute a real threat for the regional ecosystems. The adoption of a similar precautionary approach will constitute a key criterion to assess the stewardship of the Arctic states.

2. Inclusiveness of Polar Institutions

[2] Convention on the Conservation of Antarctic Seals, 1972, 11 *ILM* 251, Convention on the Conservation of Antarctic Marine Living Resource, 1980, 19 *ILM* 841, Convention on the Regulation of Antarctic Mineral Resources Activities, 1988, 27 *ILM* 868.
[3] Protocol on Environment Protection to the Antarctic Treaty, 1991, 30 *ILM* 1, 455, Article 7.
[4] Report on a sustainable EU policy for the High North (2009/2214(INI)), Committee on Foreign Affairs of the European Parliament, 16 December 2010, A7-0377/2010, para. 28.

In relation to the definition of sovereign claims, the situation in the Arctic differs relatively from the one which prevailed in the Antarctic half a century ago. In the latter region, a handful of states claimed for themselves major sections of the continent – sometimes competing over the same territories – while other states rejected these claims altogether. In the High North, territorial disputes tend to only involve small border areas between some of the coastal states. However, the thawing of the ice shelves has already begun to raise other jurisdiction issues, in particular in relation to the entitlement of coastal states and to the rights of non-Arctic states to engage in economic activities in the region. In this context, and given that the ATS has successfully won universal recognition of its legitimacy, a comparative study will likely provide concepts useful in shedding new light on negotiations over the role of various states in Arctic governance. ***686**

2.1 Governing the Antarctic: from a exclusive club to a more open platform

2.1.1. Conditions for the Participation to the Regime and the UN "Antarctic Question"

The question of State participation in the ATS has been a core issue since the negotiations of the Treaty of Washington. Indeed, treaty originally aimed to reconcile the interests of two distinct groups of countries to promote international cooperation and peaceful use of the Antarctic continent. On one side, seven States (Argentina, Australia, Chile, France, Norway, New Zealand and the United Kingdom) made territorial claims covering most of the continent and sometimes overlapping, thus creating a potentially explosive situation. On the other side, the two leading states of the Cold War clearly indicated that they considered themselves as having a direct interest in Antarctic issues and rejected the abovementioned claims. These two groups of states perceived a mutually beneficial interest in developing among themselves a regime of governance over the continent. However, another category of states became highly uneasy with this project.

The first dispute over the status of Antarctica arose in the United Nations in 1956 with the Indian proposal to discuss in this forum the status of the continent, in an effort to negate the validity of the existing territorial claims.[5] In the context of the decolonization period of the fifties, newly independent India sought to oppose what it considered continuing elements of colonialism, with a view to establishing a UN trusteeship over the continent of Antarctic.[6] The diversity of claimant states, however, facilitated the formation of a politically unusual coalition of states strongly opposed to India's proposal. India decided to withdraw its proposal for the time being, while affirming that it did not intend to abandon it entirely.[7] The risks of the use of

[5] See: UN doc. A/3118, 21 Fev. 1956. India raised the issue two years later, UN doc. A/3852, 15 July 1958.

[6] See also: for an account of the earlier discussions taking place among the claimant states and other interested parties on the opportunity for an international trusteeship regime for Antarctica: John Hanessian, "The Antarctic Treaty 1959", 9 *The International and Comparative Law Quarterly* 3 (1960): 436-480.

[7] For a full account of the episode, see: Adrian Howkins, "Defending polar Empire: opposition to India's proposal to raise the "Antactic Question" at the United Nations in 1956", 44 *Polar Record* (228): 35-44.

Antarctic for non-peaceful purposes, or for the purpose of nuclear testing were among the main concerns aired by the Indian government. These concerns were addressed in 1959 with the adoption of the Antarctic Treaty. Consequently, the issue of Antarctic governance was not submitted to the UN General Assembly (UNGA) for more than two decades. Howkins notes however that ***687*** India's initial attempt provided a precedent for the reopening of the discussions on Antarctic governance in 1983.[8]

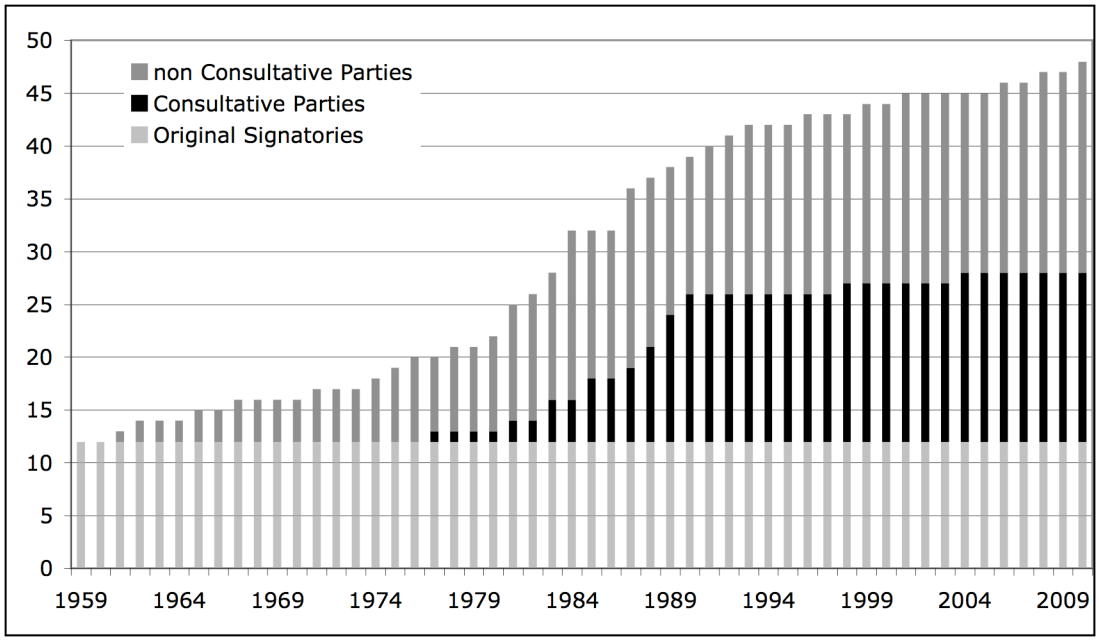
The 1959 Treaty of Washington provides a two-tiered approach to participation to the regime. While on the one hand, it is open to accession by any member states of the UN – and by other states upon unanimous invitation by the consultative parties – effective participation in the decision-making process is limited to a more exclusive group of states referred to as Consultative Parties. The twelve original signatory states automatically become consultative parties, while acceding states might become so, based on the requirement of the realization of scientific activity:

> Each Contracting Party which has become a party to the present Treaty by accession under Article XIII shall be entitled to appoint representatives to participate in the meetings referred to in paragraph 1 of the present Article, during such time as the Contracting Party demonstrates its interest in Antarctica by conducting substantial scientific research activity there, such as the establishment of a scientific station or the dispatch of a scientific expedition.[9]

Sixteen states currently participate as members to the ATS on the basis of this provision. The differentiation between Consultative States (ATCP) and non-Consultative States was proposed by Chile during the negotiations leading to the adoption of the Treaty. This differentiation marked an attempt to ensure that only those states really active on the continent could take full responsibility under the treaty.[10] The justification of this particular regime of *experience and responsible participation*[11] was originally undermined by the fact that the consultative parties adopted a rather conservative understanding of the requirement of engagement in scientific activities, equating the notion of *substantial scientific research* with the possession of a research station on the continent. This requirement was considered as a *high entry fee.*[12] While states acceded to the treaty with regular frequency, none of these new member states secured the status of consultative party for more than ***688*** a decade. Among Consultative Parties, the number of non-claimant states exceeded the number of claimant states in 1983, when the former status was afforded to India. The interpretation of the scientific activity requirement was finally eased in 1990, with the bestowing of consultative status on the Netherlands, despite the fact that the country

[8] *ibid.,* at 35. See also the denunciation of the Antarctic Treaty as a *neo-colonial document* by the Malaysian Prime Minister at the General Assembly, 1984, quoted in Gillian D., Triggs "The United Nations in Antarctic? A Watching Brief", in Gillian D Triggs. (ed.), *The Antarctic Treaty Regime: Law, Environment and Resources,* Cambridge: Cambridge University Press (1989), 229.
[9] Antarctic Treaty, Article IX.
[10] See: the rather supportive analysis of the justification of this model participation system in F. Orrego Vicuna, "The Antarctic Treaty System: viable alternative for the regulation of resource-oriented activities", in Gillian D. Triggs (ed.), *The Antarctic Treaty Regime: Law, Environment and Resources*, Cambridge: Cambridge University Press (1989), 68 ff.
[11] *Ibid.*, at 68.
[12] Report of the UN Secretary General, A/39/583 Part I, para. 107.

had no station in Antarctic.[13] As illustrated in the following graph, the interest among states to participate to the Antarctic regime has steadily increased since the adoption of the Washington Treaty.



Histogram 1: Status of Participation to the Antarctic Treaty[14]

The Convention for the Conservation of Antarctic Seals (CCAS) has very strict conditions for the accession of states not party to the original process – as such accession would require unanimous consent of the parties to the Convention.[15] The conditions for the participation in the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) are less exclusive than in the case of the Antarctic Treaty: ***689***

> This Convention shall be open for accession by any State interested in research or harvesting activities in relation to the marine living resources to which this Convention applies.[16]

States not party to the Antarctic Treaty might become party to the CCAMLR, provided that they recognize the significance of the ATS and observe some of its tenets.[17] This willingness to develop a more inclusive regime might be attributable to the risk of states not party to the Convention free–riding, thus undermining the effective implementation of the agreement. This assumption is confirmed by the fact

[13] Bruce W. Davis, "The Legitimacy of the CCAMLR", in Olav Schram Stokke and Davor Vidas (eds.), *Governing the Antarctic: The effectiveness and legitimacy of the Antarctic Treaty System*, Cambridge: Cambridge University Press (1996), 235.
[14] Based on the data available on the site of the secretariat of the Antarctic Treaty System, http://www.ats.aq/devAS/ats_parties.aspx?lang=e (accessed 1 March 2011).
[15] CCAS, Art 12.
[16] CCAMLR, Art XXIX. (1).
[17] CCAMLR, art. III, IV and V.

that the Convention actually regulates the case of vessels falling under the jurisdiction of other states and adopting behaviour undermining the objective of the CCAMLR.[18]

The possibility of a universal regime of Antarctic governance reappeared in 1983 with a request made by Antigua and Barbuda, and Malaysia to discuss "the question of Antarctica" at the UNGA.[19] The resurfacing of this issue on the agenda of the General Assembly can be partly explained by the adoption of the United Nations Convention on the Law of the Sea (UNCLOS)[20] and the implementation of the regime established to regulate exploitation of the deep seabed, which both raised new issues in relation to the governance of Antarctica.[21] Another element of the controversy arose regarding the participation of South Africa to the regime as a consultative party, despite the universal denunciation of its apartheid regime.[22] The General Assembly adopted annually from 1985 and until the end of the apartheid a resolution specifically *urg[ing] the ATCP to exclude the racist apartheid regime of South Africa from participation in the meetings of the Consultative Parties at the earliest possible date.*[23] The UNGA also adopted more substantial resolutions on an annual basis, noting the improvements accomplished in terms of transparency and inclusiveness, as well as making some concrete recommendations for how the Consultative Parties could make additional progress.[24] Taking ****690*** the stance that the regime established under the ATS was adequate and that additional discussions in the UNGA were unnecessary, the parties to the Antarctic Treaty refused until 1993 to vote on these resolutions.

Considering that the ATS parties had satisfactorily addresssed the issues that it had raised, the UNGA moved the "Question of Antarctica" from an annual to a biannual agenda item of the UNGA in 1994,[25] and two years later to a triennial agenda item.[26] In 1995, Francioni noted that the *discussions surrounding the early denunciation of the ATS as a closed club have subsided.*[27] The "Question for Antarctica" was considered by the UNGA for the last time in 2005 as the resolution adopted on this issue simply mentions that the UNGA decided to *remain seized of the*

[18] *Ibid.*, Article X.
[19] UN Doc. A/38/193 of 9 August 1983.
[20] United Nations Convention on the Law of the Sea, 1982, 21 *ILM* 1261.
[21] Luigi Migliorino, "The New Law of the Sea and the Deep Seabed of the Antarctic Region", in Francesco Francioni and Tullio Scovazzi (eds.), *International Law for Antarctica*, The Hague: Kluwer Law International (1995), 395-396.
[22] Jonathan I Charney, "The Antarctic System and Customary International Law", in Francesco Francioni and Tullio Scovazzi (eds.), *International Law for Antarctica*, The Hague: Kluwer Law International (1995), 74-75.
[23] See: the first resolution to addressing this issue A/RES/40/156/C, para. 2.
[24] See: for instance the very concrete suggestion to invite the Executive Director of the UNEP to the ATCM, A/RES/49/80, para. 4.
[25] A/RES/49/80, para. 10.
[26] A/RES/51/56, para. 5.
[27] See: Francioni justifying the removal from the second edition of International Law for Antarctica of the chapters which, in the first edition, addressed the discussions taking place at the UN on Antarctic governance. Francesco Francioni, "Introduction: A Decade of Development of Antarctic International Law", in Francesco Francioni and Tullio Scovazzi (eds.), *International Law for Antarctica*, The Hague: Kluwer Law International (1995), 2.

matters, without expecting references to the report or further discussion at a later session from the Secretary General.[28]

2.1.2. Participation of non-governmental organizations

The participation in Antarctic governance of representatives from the civil society sector increased during the past three decades, contributing to transparency and accountability of the regime. NGOs participation in the ATS progressed in three successive steps.[29] Firstly, in the years following the adoption of the Antarctic Treaty, the Special Committee on Antarctic Research (SCAR)[30] was the only non-governmental actor playing a role in the implementation and development of the regime as a scientific organization. This advisory role was however far from negligible, as the promotion of scientific cooperation constitutes one of the key objectives of the establishment of the ****691*** ATS.[31] A second period of interest began in the seventies, when grassroots and advocacy organizations with a more defined political agenda became involved with issues surrounding Antarctic governance. In 1978, several NGOs joined forces and created the Antarctic and Southern Ocean Coalition (ASOC) in order to advocate for a stronger regime of environmental protection on the continent and to facilitate the participation of civil society in this process.[32] Given that most of the intergovernmental meetings were closed to observers, NGOs in the seventies and in the eighties relied mainly on informal mechanisms of participation, such as the inclusion of their representative in governmental delegations or through the organizing of parallel events also attended by governmental representatives.[33] Significantly, the abandonment of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) and the successful negotiations on a stringer regime leading to the adoption of the Environmental Protocol resulted from this critical approach to the ATS.[34]

From the late 1980s onwards, transparency of the meetings organized within the frame of the ATS increased. ASOC received an invitation to take part in a meeting of the CCAMLR Commission in 1987, and gained the status of *invited experts* to the

[28] A/RES/60/47, para. 5, see: for a further analysis of the evolution of the UNGA consideration of the Question of Antarctica Peter J. Beck, "The United Nations and Antarctica, 2005: the end of the "Question of Antarctica"?", 42 *Polar Record* (222): 217-227.
[29] See generally: Richard Heer for a description of the evolving role of the NGOs in the ATS. Richard A. Heer, "The changing role of non-governmental organizations in the Antarctic Treaty System", in Stokke Olav Schram and Vidas Davor (ed.) *Governing the Antarctic: The effectiveness and legitimacy of the Antarctic Treaty System*, Cambridge: Cambridge University Press (1996).
[30] SCAR will later become the Scientific Committee on Antarctic Research. SCAR was established by the International Council of Scientific Unions as an entities focused to this only issue. See: the homepage of the organization at: http://www.scar.org/ (accessed 26 January 2011).
[31] Article 2 of the treaty providing: "Freedom of scientific investigation in Antarctica and cooperation toward that end, as applied during the International Geophysical Year, shall continue, subject to the provisions of the present Treaty". Article 3 further describes actions agreed upon by the Consultative Parties to foster scientific cooperation.
[32] See: ASOC webpage: http://asoc.nonprofitsoapbox.com/about/history (accessed 26 January 2011).
[33] J N. Barnes, "Environmental protection and the future of the Antarctic: new approaches and perspectives are necessary", in Gillian D. Triggs (ed.), *The Antarctic Treaty Regime: Law, Environment and Resources*, Cambridge: Cambridge University Press (1989), 153-154.
[34] J. M. Spectar, "Saving the ice princess: NGOs, Antarctica and International Law in the new Millenium", *Suffolk Transnational Law Review* 23 (1999): 81ff.

meeting of the consultative parties in 1991.[35] However, no role is foreseen for non-governmental organizations in the enforcement aspects of the regime since it is mainly based on on-site inspections organized by the States parties.[36] The Environmental Protocol is the first agreement within the ATS that explicitly refers to the role of non-governmental organizations. It provides for the possibility of *relevant scientific, environmental and technical organisations which can contribute to [the work of the Committee for Environmental Protection (CEP)] to participate as observers at* ****692*** *the [CEP] sessions.*[37] This opportunity remains subject to the decision of the CEP, with approval by the Antarctic Treaty Consultative Meeting (ATCM). The period following the adoption of the Environmental Protocol is also marked by the increasing role of the private sector. This element is exemplified by the successful postponing of the discussions on the regulation of Antarctic tourism by the tourism industry; this is based on the argument that the industry has already launched satisfactory self-regulatory initiatives.[38] These developments have created opportunities for civil society to play an increasingly important role and to contribute to Antarctic governance, both in supporting the Consultative Parties on substantive discussions, as well as in affirming the legitimacy of the whole regime.[39]

2.2. The selective inclusiveness of Arctic Governance

The creation of the Arctic Council in 1996 had to address the particular issue of the inclusiveness of the forum in relation to four different groups of potential participants: non-Arctic States, Northern territorial and regional governments, Indigenous People's organizations, and non-governmental organizations with a particular interest in the protection of the Arctic environment.[40] The outcome of the negotiations process among the eight Arctic States led to the adoption of a unique structure in international governance, described as a structure *with two tiers of participants and a growing gallery of [...] observers.*[41] This structure is unprecedented among international institutions as it ascribes a higher status to non-governmental actors than to non-Arctic States.

2.2.1. An inclusive and innovative Forum for Northern Actors

[35] ASOC was invited for the first time to a meeting of the consultative parties during the XVI ATCM held in Bonn, October 1991.
[36] See: for a criticism of this approach John Vogler, *The global commons: environmental and technological governance*, San Francisco: J. Wiley & Sons (2000), 89.
[37] Protocol on Environment Protection to the Antarctic Treaty, Article 11.4. The protocol also provides that the report of each session shall be circulated to the observers attending this particular session. Protocol, art. 11.5.
[38] See: Kees Bastmeijer and Ricardo Roura, "Regulating Antarctic tourism and the precautionary principle", *American Journal of International Law* (2004): 774-775.
[39] Herr (1996), *supra* note 30, 108.
[40] See: Donald R. Rothwell, *The Polar Regions and the Development of International Law*, Cambridge: Cambridge University Press (1996), 245-246.
[41] Griffiths Franklyn, "Towards a Canadian Arctic Strategy", in Georg Witschel, et al. (eds.) *New Chances and New Responsibilities in the Arctic Region*, Berlin: Bwv Berliner-Wissenschaft (2010), 116.

The evolution of Arctic governance is characterized by its lack of a core legal agreement and its reliance on political processes. The ancestor of the Arctic Council, the Arctic Environmental Protection Strategy (AEPS), built ****693*** on two significant political initiatives: the 1987 Murmansk initiative[42] and the follow-up conference – the Consultative Meeting on the Protection of the Arctic Environment – convened by Finland in 1989. This started a negotiation process among the eight states possessing territories north of the Arctic Circle and led to the adoption of the AEPS in 1991 at a ministerial meeting held in Rovaniemi, Finland.

Delegates representing Arctic indigenous peoples participated in the meeting as observers, three indigenous people's organizations being granted the opportunity to deliver a statement.[43] The AEPS provides for further facilitation of the participation of indigenous people through the observer status granted to these three organizations.[44] An identical status was also attributed to other non-governmental organizations and with non-Arctic states.[45] The role of indigenous peoples' organizations was enhanced with the adoption of the Ottawa Declaration on the Establishment of the Arctic Council.[46] The Declaration creates a specific category for the participations of indigenous peoples' organizations to the newly established Arctic Council. According to article 2 of the Declaration, the three organizations already recognized under the AEPS are granted the status of Permanent Participants. This status is also open to other representative organizations under certain circumstances.[47] This enhanced role is defined in article 2, completed by the rules of procedures of the Arctic Council: ****694***

> The category of Permanent Participation is created to provide for active participation and full consultation with the Arctic indigenous representatives within the Arctic Council.[48] This principle applies to all meetings and activities of the Arctic Council.[49]

According to the rules of procedures, Permanent Participants have almost equal rights of participation in Arctic Council processes to the members of the Council, with an exception in regard to decision making. This status has been described as *close to a* de

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[42] See: for an analyse Donald R. Rothwell (1996), *supra* note 41, 229 and 231. Rothwell analyses the evolution of Arctic cooperation as a direct consequence of the evolution of the USSR policy towards its neighbours and qualify the speech delivers by Gorbachev as *the most important event of* this period.
[43] The three organizations were: the Inuit Circumpolar Council, the USSR Association of Small Peoples of the North and the Nordic Saami Council.
[44] AEPS, page 42.
[45] Timo Koivurova, "Limits and Possibilities of the Arctic Council in Arctic Governance", 46 *Polar Record* (2010): 148.
[46] Ottawa Declaration, see also: Leena Heinamaki, "Rethinking the Status of Indigenous Peoples", in Timo Koivurova (eds.), *Climate Governance in the Arctic*, Heidelberg: Springer (2009), 249 of an account of the discussions related to the participation of indigenous people to this process.
[47] According to the para. 2 of the Ottawa Declaration, can become Permanent Participants organizations with majority indigenous constituency, representing a single indigenous people resident in more than one Arctic State, or more than one Arctic indigenous people resident in a single Arctic state. The determination of the status is made by the Council considering that the total number of Permanent Participant shall not exceed the number of the members to the Council. Indeed, three additional organizations obtained the status, the Aleut International Association (AIA) in 1998, the Arctic Athabaskan Council (AAC) and the Gwich'in Council International (GCI) both in 2000.
[48] Article 2, para. 4.
[49] Rules of procedures of the Arctic Council, paragraph 6.

facto *power of veto should they all reject a particular proposal.*[50] In practice, Permanent Participants have taken part in the activities of each of the six working groups established under the Arctic Council, as well as in its main initiative in relation to climate impacts in the Arctic: the 2004 Arctic Climate Impact Assessment.[51] This recognition has not only contributed to facilitating the participation of indigenous communities to regional governance, whose input increases the quality of that governance, but also offered an opportunity for dialogue and cooperation between indigenous peoples' organizations and the governments of particular states.[52] This status is different from the one attributed to non-governmental organizations which might apply only to observer status to the Council.[53]

This status is unique in international environmental governance and has thus served as a model of how indigenous peoples' participation could be strengthened in other regimes.[54] Most other international agreements providing for the participation of the representatives of indigenous peoples approach this constituency only as one among the nine Major Groups of the civil society identified during the Rio Conference on Environment and Development, at the same level, for instance, as environmental NGOs, the representatives of trade unions, or of farmers.[55]

In relation to the discussions highlighted hereinafter on the development of a stronger framework for Arctic governance, there is however a danger that such negotiation might provide an opportunity for questioning the singular ****695*** status which indigenous peoples' organizations currently enjoy on the Arctic Council. Indeed, it is less likely that States will recognize such a privileged status in any formal agreement, although there is no formal obstacle to such recognition under international law.[56]

2.2.2. The Position of non-Arctic States[57]

The status of non-Arctic states in the Arctic Council is defined by paragraph 2 of the Declaration on the Establishment of the Arctic Council.[58] According to the Declaration, non-Arctic States might apply to obtain observer status at the council, thus falling under the same category as non-governmental organizations and intergovernmental organizations. The official rules and procedures of the Council further make this option conditional to the determination by the Council as to whether a particular state can *contribute to its work*, thus adding a subjective element to the

[50] Koivurova and Heinämäki, "The Participation of Indigenous Peoples in international Norm-Making in the Arctic",42 *Polar Record* (2006): 104.
[51] Lena Heinämäki, *The right to be a part of Nature: Indigenous Peoples and the Environment*, Rovaniemi: Lapland University Press (2010), 67.
[52] Evan T. Bloom, "Establishment of the Arctic Council", 93 *The American Journal of International Law* 3 (1999): 717.
[53] Ottawa Declaration, article 3. The difference between the two status is consequent given that the rules of procedures refer 17 times to the rights of Permanent Participants and only six times to those of Observers.
[54] Koivurova and Heinämäki, *supra* note 51, 101-109.
[55] See: Agenda 21, Section III, A/CONF.151/26 Vol.III.
[56] Timo Koivurova, "Alternatives for an Arctic Treaty – Evaluation and a New Proposal", 17 *Review of European Community & International Environmental Law* 1 (2008): 25.
[57] See also: Piotr Graczyk, "Observers in the Arctic Council – evolution and prospects", in this volume.
[58] Ottawa Declaration on the Establishment of the Arctic Council (1996).

granting of observer status.[59] Observers are invited to the meetings and projects of the Arctic Council,[60] and to deliver statements and make submissions to the process. This status is, however, not permanent. It only applies as long as none of the 8 member states objects, and can be suspended in case of an observer engaging *in activities which are at odds with the Council's Declaration*.[61]

So far, six states have been granted the status, four through the conversion of their observer status under the AEPS (the Netherlands, the United Kingdom, Germany and Poland) while only two have applied successfully through the established procedure (France obtained the status in 2000[62] and Spain in 2006[63]). The rules and procedures also provide the possibility for the Council to grant ad-hoc observer status to a state for a particular meeting. A shift in the policy of accepting new states as permanent observers occurred at the 2009 ministerial meeting during which the applications of China, Italy, ****696*** South Korea and the European Union were put on hold.[64] Since this meeting, Japan has also submitted an application to become observer.

Enhancing transparency in the work of the Arctic Council was considered one of the priorities of the Common objectives and priorities for the Norwegian, Danish and Swedish chairmanships.[65] The permanent observer states, as well as states having applied to the status, hold a meeting in the presence of a representative of the Danish chairmanship in 2010, partly to discuss the issue of the lack of uniform criteria in the allocation of the observer status.[66] The press also reported in 2008 the claims of some of the non-Arctic States of a wish to play a full role in the Arctic Council.[67]

Another potential issue of inclusiveness of Arctic governance was raised in 2008 when the five Arctic coastal states participated to a ministerial meeting in Illulissat on the invitation of Denmark, thus excluding the three Arctic States lacking access to the Arctic Ocean. In the main outcome of the meeting – the Illulissat Declaration – the five States emphasized their unique position to address the possibilities and challenges arising in the region and reiterated their role as *stewards*

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[59] Rules of Procedure of the Arctic Council, para. 36.
[60] In practice, the participation of observers might be more difficult in relation to the work of the working groups.
[61] Rules of procedure of the Arctic Council, para. 37
[62] See: the Barrow Declaration on the occasion of the Second Ministerial Meeting of the Arctic Council, 11th August, 2000, para. 24.
[63] See: the Salekhard Declaration on the occasion of the tenth Anniversary of the Arctic Council, 26th October 2006, page 9.
[64] In the context of the imminent adoption of a ban of seal products by the EU, the refusal of its application as a new observer is transparent. See: Charles K. Ebinger and Evie Zambetakis, "The geopolitics of Arctic melt", 85 *International Affairs* 6 (2009): 1230. On the other hand, the refusal of the Chinese application was less expected. See Koivurova analysing in 2008 that China "is very likely to be approved as a permanent observer at the April 2009 ministerial meeting", Koivurova Timo, *supra* note 46, 150.
[65] The priorities are available at: http://arctic-council.org/filearchive/Formannskapsprogram_ArcticCouncil.pdf (accessed 3 March 2011).
[66] See: a short account of the meeting, http://www.msz.gov.pl/Warsaw,Meeting,of,Arctic,Council,Observer,States,34660.html (accessed 3 March 2011).
[67] See: http://www.barentsobserver.com/non-arctic-countries-want-membership-in-arctic-council.4516094-16174.html (accessed 3 March 2011).

of the Ocean.[68] Finally, the five states rejected the proposals for Arctic governance supported by a legally binding agreement and declared *see[ing] no need to develop a new comprehensive international legal regime to govern the Arctic Ocean.*[69]

The Declaration was controversial due to the exclusivity of the meeting.[70] Firstly, while the parties to this meeting reiterated their commitment to cooperate within existing forums such as the Arctic Council, the coastal states did not invite the three other members of the Arctic Council to participate. ***697*** Secondly, the meeting failed to follow the practice of the Arctic Council to invite representatives of indigenous peoples. References to international instruments relating to the rights of indigenous peoples were also absent from the Illulissat Declaration. The Inuit Circumpolar Council criticized this lack of respect for the role of indigenous peoples' organizations in the following months.[71] The European Union also reacted to the Declaration in the form of the European Parliament Resolution adopted on the 9 October 2008 on Arctic Governance, which takes note of the Illulissat Declaration, expressing concerns about a possible *race for resources*, and instructs the Commission to prepare itself for negotiations towards a regional legally binding agreement inspired by the ATS.[72] Indigenous peoples' organizations have also called for enhanced cooperation on the Arctic including indigenous organizations, Arctic States as well as non-Arctic States.[73]

In one possible approach, Griffiths proposes that the current structure of the membership be revised to include a third tier of participants comprised of non-Arctic States. These states would be granted Consultative Status and would be allowed to intervene directly in the process.[74] The author suggests a few additional conditions for states to be acknowledged as Consultative Parties, such as financial contribution to the Arctic Fund, a demonstrated interest and *a plan of action on behalf of cooperative stewardship*. In this context, the Arctic states could draw from the experience of Antarctic governance and the differentiated participation to the APS among several categories of states. Indeed the regime recognized a particular role for a limited number of countries while at the same time securing broad acceptance of its main tenets among other states by opening to some degree participation to a specific membership.

2.2.3. The Development of an Inclusive and Comprehensive Framework for Arctic Governance

On this basis of the experience of Antarctic governance, this section develops the argument that a more inclusive governance model could be applied in the Arctic and would benefit each set of actors involved. A more open forum would address concerns by non-Arctic States about the inclusiveness of Arctic governance, while

[68] Illulissat Declaration, adopted at the Arctic Ocean Conference, 27th – 29th May 2008, para. 3 and 5.
[69] *Ibid.*, page 2
[70] Dodds Klaus, "A Polar Mediterranean? Accessibility, Resources and Sovereignty in the Arctic Ocean", 1 *Global Policy* 3 (2010): 6.
[71] Circumpolar Inuit Declaration on Arctic Sovereignty, para. 2.6, http://www.itk.ca/circumpolar-inuit-declaration-arctic-sovereignty (accessed 3 March 2011).
[72] EU Parliament Resolution of October 9th, 2008, on Arctic Governance, P6_TA (2008) 0474.
[73] Circumpolar Inuit Declaration on Arctic Sovereignty, *supra* note 72, para. 3.8.
[74] Griffiths Franklyn, *supra* note 42, at 118.

providing a positive framework for developing ***698*** a win-win approach for the expansion of economic activities in the Arctic.[75] Such an approach would also reduce the risk of non-Arctic countries, frustrated by a lack of opportunities to take part in Arctic governance, deciding to free-ride in relation to the development of economic activities in the region with little regard for environmental consequences. The experience in the development of the Antarctic Treaty System provides a useful example of how parties have addressed concerns of the international community about the inclusiveness of the ATS while maintaining objective criteria for full participation of additional states to the regime.

As no state contests the legitimacy and particular interest of the five coastal states, a new regime would not need to put all states participating on an equal footing. Different categories of membership could be maintained, as is currently the case in the ATS. Koivoruva and Molenaar proposed the considerations of four categories of participants in their study of opportunities for a legally binding agreement on the Arctic: *Arctic Ocean coastal states; Arctic states; any state or REIO provided the existing members agree by consensus that a certain qualifying criterion is met, [and] any state or REIO*.[76] A more comprehensive and more inclusive regional regulatory framework could rely on a flexible approach, based on a core framework agreement, the content of which would be limited to defining the objectives, principles and institutional aspects of Arctic Governance. Other international agreements have relied on the use of protocols and annexes to provide flexibility in the regime. For example, in the International Convention for the Prevention of Pollution From Ships[77] only the acceptance of annexes I and II is compulsory when ratifying the Convention; parties remain free to decide whether or not to accept the four other annexes.[78] A similar approach could be adopted with the conclusion of sectoral or regional annexes covering each particular economic activity developed in the Arctic. The Arctic States could ***699*** design the regime in such a way as to identify the level of inclusiveness in the participation to each annex based on the right and entitlement of different categories of states under the law of the sea in relation to the given activity. In this case, an annex addressing the issue of mineral exploitation would legitimately allow for a more limited role to non-Arctic states than an annex covering the issue of maritime transport. Such an approach would allow the coastal states to increase the level of compliance by third states with any regulations adopted to guarantee the environmental integrity of the Ocean, while addressing the claims of non-Arctic states willing – and strongly intending – to play a role in this regional cooperation.

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[75] See: for instance the argument made in relation to bilateral relations in Lasserre Frederic, "China and the Arctic: Threat or Cooperation Potential for Canada?", China Papers No. 11, Canadian International Council (2010), 11.

[76] Timo Koivurova and Erik J. Molenaar, "International Governance and Regulation of the Marine Arctic", Three Reports prepared for the WWF (2010), at 103.

[77] See: for instance the case of the International Convention for the Prevention of Pollution From Ships (MARPOL) 12 *ILM* (1973) 1319, which comprises of 6 annexes, each dealing with a particular case of marine pollution.

[78] In practice, parties to the Convention have utilized this freedom to choose to which annex they accepted as the Annexes show a different number of parties, 135 parties having accepted Annex III, 127 the Annex IV, 141 the Annex V and only 62 the Annex VI, compared to 150 parties to the MARPOL itself (numbers based on the 31.12.2010). Source: IMO summary of the status of ratification, http://www.imo.org/About/Conventions/StatusOfConventions/Documents/Summary%20of%20Status.xls (accessed 3 March 2011).

3. Implementation of the precautionary approach

Its emergence described as "the most prominent – and perhaps the most controversial – development in international environmental law in the last two decades", the precautionary approach constitutes one of the central components of international environmental law.[79] Diverging views on the scope and content of the approach exist among states and lawyers.[80] In the absence of a unique and agreed-upon definition of the approach, the most authoritative statement is provided in Principle 15 of the Rio Declaration,[81] reading as follow:

> [i]n 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.[82]

As illustrated below, the precautionary approach is sometimes elevated to the status of a legal principle.[83] While different wording seem to imply different legal status, Birnie and Boyle argue that this difference carries little consequence in practice but can be mainly explained by the existence of diverging ****700*** interpretation of the legal implication of the recognition of precaution as a legal concept.[84] Trouwborst further notes that this interpretation is supported by state practice and by the inconsistency in between the use of the two terms in international environmental instruments, for instance between the Rio Declaration (defining the precautionary *approach*) and in the Programme for the Further Implementation of Agenda 21[85] (referring to the precautionary *principle* contained into the Rio Declaration).[86] Finally, the question of whether the precautionary approach or principle has secured the status of customary law also divides the legal scholarship.[87] For the sake of clarity, the term precautionary approach will be used generically in this article.

As highlighted above, the physical conditions prevailing in both Polar Regions have contributed to define these regions as frontiers for human activities in which innovation plays a major role in the development of modern economic activities. The

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[79] Jonathan B. Wiener, "Precaution", in Daniel Bodansky, Jutta Brunnée, Hellen Hey, eds., *The Oxford Handbook of International Environmental Law*, Oxford: Oxford University Press (2007), 599.
[80] See: Philippe Sands, *Principles of International Environmental Law, 2nd Edition*, Cambridge: Cambridge University Press (2003), 273. See also: Lakshman Guruswamy, *International Environmental Law in a Nutshel*, St Paul: West Publishing (2003), 551-553.
[81] Malgosia Fitzemaurice, *Contemporary issues in International Environmental Law* (Cheltenham: Edward Elgar Publishing, 2009), 3-10 and 62-66.
[82] Principle 15, Rio Declaration on Environment and Development, 1992, 31 *ILM* 874.
[83] See: infra, section 3.2.
[84] Patricia Birnie and Alan Boyle, *International Law and the Environment*, *2nd edition*, Oxford: Oxford University Press (2002), 116.
[85] Resolution S/19-2, Annex B no. 36, para 14 of the programme.
[86] Arie Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, The Hagen: Kluwer Law International (2002), 3ff.
[87] Cameron and Abouchar provide an enriching early account of the debate. James Cameron and Juli Abouchar, "The Status of the Precautionary Principle in International Law", in David Freestone and Elle Hey (eds), *The precautionary principle and international law: the challenge of implementation,* The Hagen: Kluwer Law International (1996), 36 ff.

particular vulnerability of the local ecosystems, combined with the important role of new technologies for the development of regional industries, makes the effective implementation of the precautionary approach a key criterion in the success of environmental governance in both Antarctic and Arctic.

3.1. Progressive strengthening of the Precautionary Approach in the Antarctic

The precautionary approach adopted by the ATS constitutes a defining characteristic of the regime and a key to its effectiveness.[88] This section highlights the evolution of the ATS regime and the status of the precautionary approach in each of the agreements composing the regime. The final subsection concludes this review with a more critical analysis of the implementation of this approach in governance over the region.

3.1.1. The Precautionary Approach prior to and in the Antarctic Treaty

The Antarctic Treaty itself does not contain direct references to the precautionary approach. Indeed, the main purpose of the Treaty of Washington is ****701*** to promote the peaceful use of the Antarctic continent, in particular in the context of the existence of overlapping jurisdictional claims.[89] Article V of the Treaty regulating nuclear activities on the continent provides an early example of the type of precautionary measures that will be taken in the following decades with regards to environmental protection and is advocated as a policy option in the Arctic. Article V provides:

> 1. Any nuclear explosions in Antarctica and the disposal there of radioactive waste material shall be prohibited.
> 2. In the event of the conclusion of international agreements concerning the use of nuclear energy, including nuclear explosions and the disposal of radioactive waste material, to which all of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX are parties, the rules established under such agreements shall apply in Antarctica.

Firstly, paragraph 1 establishes prohibition of the pursuit of certain activities, before any of these activities occurred on the continent. Secondly, this ban is not absolute, but aims to address a regulatory vacuum. Indeed, the second paragraph provides that such activity might be allowed in the future in the case that this activity would be further regulated under another international agreement.

The Consultative Parties adopted in 1964 the Agreed Measures for the Conservation of Antarctic Fauna and Flora[90] which constitutes the first step towards the evolution of the ATS into an environmental focused regime.[91] The Agreed Measures implemented a precautionary approach in relation to the introduction of

[88] D.R. Rothwell, *supra* note 41, 401.
[89] Antarctic Treaty, article 1.
[90] Agreed Measures for the Conservation of Antarctic Fauna and Flora, adopted in June 2nd, 1964.
[91] Donald Rothwell, *supra* note 41, 113.

non-indigenous species. Article IX contains wording referring to the possibility of a risk for the local environment[92] and to the *precautions* that parties should take.[93]

The Convention for the Conservation of Antarctic Seals,[94] adopted in 1972, takes a similar approach in relation to Antarctic sealing. At the time of the adoption of the Convention, no commercial sealing was occurring in the Antarctic Region. The Convention thus did not govern an ongoing activity, but rather provided a regulatory framework in case of the resuming of this ****702*** activity.[95] Similarly, no institution is created under the Convention, which nevertheless provides a possibility for the parties to establish a commission in case economic sealing resumes.[96]

3.1.2. Further Implementation of the Approach in the CCAMLR and CRAMRA

The adoption of the Convention on the Conservation of Antarctic Marine Living Resources in 1980 represents a major step forward in the implementation of the precautionary approach in the Southern Ocean. The Convention has been described as having one of the longest track records for the definition and the implementation of the precautionary approach.[97] This implementation has mainly taken the form of limitation of the impacts of fisheries on other species,[98] of the prohibition of certain fisheries[99] and in the definition of Precautionary Total Allowable Catches for specific fisheries.[100]

In the context of the development of new fisheries regardless of the lack of adequate information concerning their potential impacts, the Commission imposed in 1991 the following requirement:

> A Member intending to develop a new fishery shall notify the Commission not less than three months in advance of the next regular meeting of the Commission, where the matter shall be considered. The Member shall not initiate a new fishery pending [the consideration of the Scientific Committee and the review by the Commission].[101]

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[92] Art. IX, para 2. referring to the introduction of an *"animal or plant [which] might cause harmful interference with the natural system*.
[93] Art. IX, para 4, and Annex D listing several *precautions* required from parties.
[94] CCAS, http://www.ats.aq/documents/recatt/Att076_e.pdf (accessed 3 March 2011).
[95] Elli Louka, *International Environmental Law: Fairness, Effectiveness and World Order*, Cambridge: Cambridge University Press (2006), 340.
[96] CCAS, article 6.
[97] Mace Pamela M. and Gabriel Wendy L., "Evolution, Scope, and Current Applications of the Precautionary Approach in Fisheries", Proceedings, 5th NMFS NSAW. 1999. NOAA Tech. Memo. NMFS-F/SPO-40.
[98] See: for instance Conservation Measure 25-03, http://www.ccamlr.org/pu/e/e_pubs/cm/10-11/25-03.pdf (accessed 3 March 2011).
[99] Conservation Measure 22-08, http://www.ccamlr.org/pu/e/e_pubs/cm/10-11/22-08.pdf (accessed March 2011).
[100] Conservation Measure 51-03, http://www.ccamlr.org/pu/e/e_pubs/cm/10-11/51-03.pdf (accessed 3 March 2011).
[101] Conservation Measure 31/X, para. 2, available at http://www.ccamlr.org/pu/e/e_pubs/cm/94-95/31-x.pdf (accessed 3 March 2011). See: a further description of the application of the conservation measure in Graeme Parkes, "Precautionary Fisheries management: the CCAMLR approach",24 *Marine Policy* (2000): 86-87.

These features have led the Convention to be described as *in line with the most advanced contemporary developments in international environmental* ****703*** *law*[102] and *as being among the most precautionary* among fisheries organizations.[103] Despites this comparatively strong application of the precautionary approach, the CCAMLR is not immune from criticism for its failure to adopt an approach strong enough to prevent long-term negative consequences of fishing activities.[104]

The Convention on the Regulation of Antarctic Mineral Resource Activities marked a further stage of the implementation of the precautionary approach in the Antarctic, despite a lack of explicit reference to this concept.[105] The Convention was adopted in the context of expectations that exploitation of mineral resources from the continent would become economically profitable and that industrial development of the Antarctic was imminent. The Consultative Parties to the Antarctic Treaty thus decided to regulate this activity before any exploitation began. Respect for a precautionary approach is guaranteed in the Convention by the heavy burden of proof imposed on economic actors.[106] The Convention provides that no Antarctic mineral resource activity shall take place until its impacts on air, water, associated ecosystems and weather and climatic patterns are assessed, both in relation to the project itself and to its contribution to cumulative impact of several such activities.[107] It further makes these activities conditional on the availability of technologies to effectively conduct the assessment, as well as monitoring impacts on the environment and responding adequately in case of an accident.[108]

The CRAMRA nevertheless failed to enter into force due to the decision of two states parties, Australia and France, to not ratify the Convention. They maintained that the regime established would not sufficiently protect the ****704*** Antarctic environment. This refusal paved the way for negotiations towards a stronger framework under the Madrid Protocol.[109]

3.1.3. The Environmental Protocol

Besides this request of stringent measures in relation to the exploitation of mineral resources on the continent, calls from parties to designate Antarctica as a world park set the context in which the Environmental Protocol was adopted.[110] The protocol

[102] Vicuna Francisco Orrego, "The regime of Antarctic Marine Living Resources", in Francioni Francesco and Scovazzi Tullio (eds.) *International Law for Antarctica*, The Hagen: Kluwer Law International (1995), 147.
[103] Cooney, R., *The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners*, Gland: IUCN, 2004, at 21.
[104] See: for instance in relation to Krill Fisheries, Philip Bender, "The Precautionary Approach and Management of the Antarctic Krill", 18 *Journal of Environmental Law* 2 (2006): 229–244.
[105] The CRAMRA is described as *the most important example in this regard* in Cameron James and Wade-Gery Will, "Addressing uncertainty: Law, Policy and the Development of the Precautionary Principle", CSERG Working Paper GEC 92-43.
[106] Trouwborst Arie, *Precautionary rights and duties of states*, Leiden: Koninkiljke Brill (2006), 202.
[107] CRAMRA, Article 4. (2), (3) and (5).
[108] *Ibid.*, Art. 4 (4)
[109] The refusal of these two states to ratify the Convention made extremely unlikely the fulfilment of the conditions for the entry into force of the Convention as provided in article 61(2).
[110] Lothar Gündling, *International Environmental Law: Marine Environment, Polar Regions, Outer Space, 2nd Edition*, Geneva: UNITAR (2006), 131.

indeed characterises the Antarctic as a *natural reserve, devoted to peace and science.*[111] The overarching objective of the protocol is defined as the *protection of the Antarctic environment [...] and the intrinsic value of Antarctica, including its wilderness and aesthetic values and its value as an area for the conduct of scientific research.*[112] This objective is promoted through the preventive prohibition of certain activities – the list of activities prohibited is similar to those listed in the CRAMRA[113] – unless it is proven that their environmental impact is limited.

The main reference to a precautionary approach relates to the exploitation of mineral resources.[114] The protocol imposes an *a priori* ban on the exploitation of mineral resources on the continent. Donald Rothwell described this preventive prohibition as a more extreme implementation of the approach.[115] Indeed while the CRAMRA aimed at defining conditions under which mineral exploitation can occur on the continent, the prohibition provided in the protocol does not foresee circumstances under which the impact of such exploitation could be mitigated and the exploitation authorized. Furthermore, and building on the experience of the CCAS and the CCAMLR in preventing a regulatory gap, the protocol further provides that no amendment to this prohibition shall take place unless a legally binding regime regulates this activity.[116] ****705***

3.1.4. Critical Considerations in the Implementation of the Precautionary Approach in the Antarctic

Despite broad recognition of the precautionary approach in the norms developed within the frame of the ATS, the assessment of the implementation of the approach nevertheless highlights some gaps and difficulties, for instance in relation to tourism and sub-glacial lake drilling. Although exploitation of the Antarctic as a tourism destination had already started prior to the signature of the Antarctic Treaty, the drafters of the treaty had decided to leave this activity outside of the scope of their discussions.[117] This original regulatory gap is explained by the fact that tourism was not considered an issue in earlier stages of the development of the ATS.[118] Following the adoption of the Madrid Protocol, a debate opened on the shape that regulation of Antarctic tourism should take and whether a sub-regime focused on this activity should be created.[119] In the context of the rapid development of this activity, Bastmeijer and Roura highlight the lack of a more strategic approach to these

[111] Protocol on Environmental Protection to the Antarctic Treaty, Art. 2.
[112] *Ibid.,* Art. 3.1.
[113] Redgwell Catherine, "Environmental Protection in Antarctica: The 1991 Protocol", 43 *The International and Comparative Law Quarterly* 3 (1994): 633.
[114] Protocol on Environmental Protection to the Antarctic Treaty, Article 7.
[115] Donald Rothwell, *supra* note 41, 401.
[116] Protocol on Environmental Protection to the Antarctic Treaty, Article 25(5) a.
[117] See: for an account of the historical evolution of regulation of tourism in the Antarctic, Richard A. Heer, "The regulation of Antarctic tourism: a study in regime effectiveness", in Olav Schram Stokke and Davor Vidas (eds.) *Governing the Antarctic: The effectiveness and legitimacy of the Antarctic Treaty System"*, Cambridge: Cambridge University Press (1996), 204.
[118] See: for instance J. A. Heap observing that "tourism has not given rise to problems […]" except when accidents require scientific stations to divert their activities into rescue operations. J. A. Heap, " Current and future problems arising from activities in the Antarctic", in Gillian D. Triggs (ed.), *The Antarctic Treaty Regime: Law, Environment and Resources,* Cambridge: Cambridge University Press (1989), 204
[119] *Ibid*., 216.

discussions as one of the main issue hindering the effective implementation of the approach.[120] The discrepancy between the weak application of the precautionary approach to tourism and its strong implementation with regards to other economic activities is also described as threatening to damage the *environmental credentials of the ATS.*[121]

The case of the drilling in Antarctica sub-glacial lakes also exemplifies issues related to the implementation by individual states of the precautionary approach when conducting or authorizing research projects on the continent. Some of these lakes constitute reserves of freshwater sealed under an ice sheet and thus contain an undisturbed environment, which may contain unique forms of life.[122] The Scientific Committee on Antarctic Research ***706** (SCAR, inter-disciplinary committee of the International Council for Science) has recognized the link between the technologies employed in the drilling and the duty to preserve this environment for future generations.[123] The Antarctic and Southern Ocean Coalition (ASOC) has denounced plans to drill into the Lake Vostok prior to the conclusion of an EIA as what "*could be most serious failure of State Parties and the international science community in regard to the obligations under the Protocol".*[124] Despite communicating with other parties on the advancement of the drilling project, Russia – the main state currently involved in deep drilling – weighted potential benefit to scientific research heavier than the potential risk implied by the drilling in this unique ecosystem.[125]

3.2 Application of the Precautionary Approach in the Arctic

Having established that the implementation of the precautionary principle within the frame of the ATS has been one of the major elements contributing to the environmental effectiveness of Antarctic governance, we will now consider whether the approach is also implemented in the Arctic and how it could further contribute to an enhancement of Arctic governance. Given that most of the Arctic in which human activity currently takes place falls under the territorial jurisdiction of one of the coastal states, a study of the recognition of the precautionary approach in domestic regulation is particularly relevant.[126] The series of examples provided in this section is not intended to be exhaustive but rather to provide sufficient material to assess the broad spread of the recognition of the precautionary approach in diverse sectoral policies of several states relevant to the governance of the Arctic Ocean. We will then adopt a forward looking perspective, identifying concrete opportunities to strengthen its effective implementation in the region. References to the implementation of the

[120] Kees Bastmeijer and Ricardo Roura, *supra* note 39, 778.
[121] Shirley V. Scott, "How Cautions Is Precautious?: Antarctic Tourism and the Precautionary Principle", 50 *The International and Comparative Law Quarterly* 4 (2001): 970.
[122] Quirin Schiermeier, "Teams set for first taste of Antarctic lakes", 464 *Nature* (2010): 472-473.
[123] See: the Information Paper (IP 100) produced by the SCAR for the agenda item 13 of the XXVIIth ATCM, page 4, (accessed 3rd March 2011).
[124] See: the paper *Applying Environmental Assessment to the Lake Vostok* prepared by the Antarctic and Southern Ocean Coalition in 2002, at 4, http://www.docstoc.com/docs/28925368/applying-EIA-to-lake-vostok (accessed 3 March 2011).
[125] Kees Bastmeijer, C. J. Bastmeijer, *The Antarctic environmental protocol and its domestic legal implementation* (The Hagen: Kluwer Law International 2003), at 348.
[126] David VanderZwaag, "The Precautionary Principle and Marine Environmental protection: Slippery Shores, Rough Seas, and Rising Normative Tides", 33 *Ocean Development & International Law* 2 (2002):165-188.

approach extracted from policy statements will support the view that some of the actors present in the region have expressed support for such strengthening. However, these policy statements fall short ***707** of* having the same legal status as the explicit references to the approach contained in most of the legal instruments adopted in the frame of the ATS.

3.2.1. Current Implementation in Sectoral Policies

A recent example of the implementation of the precautionary approach by the U.S. government can be identified in relation to deep drilling--also relevant in the U.S. Arctic waters--during the aftermath of the Deepwater Horizon oil spill. Kenneth Lee Salazar, U.S. Secretary of the Interior, imposed a temporary moratorium on this activity.[127] The decision memorandum justifying the moratorium includes a careful analysis of three specific risks related to safety, containment and response issues in the context of deep sea drilling,[128] and the assessment of a need for further information gathering. The original length of the moratorium is based on the timeframe identified as sufficient to collect information concerning the three risks identified, as well as to learn from the experience of the Deepwater Horizon accident. The decision to impose a moratorium provides for the possibility of an early lifting of the ban in case the Bureau of Ocean Energy Management, the addressee of the memorandum, confirms that all the risks have been addressed.[129] The Secretary of Interior indeed lifted the moratorium about three weeks prior to the original timeframe.[130]

In Canada, the precautionary approach constitutes one of the three key principles of the country's ocean strategy.[131] The 1996 Ocean Act provides for these three principles and contains a definition of the approach as *"erring on the side of caution*".[132] The approach is also implemented in sectoral policies of Canada. While the Fisheries Act[133] currently in force does not include a direct reference to the precautionary approach, the approach is now ***708*** integrated part of the Canadian Sustainable Fisheries Framework and the subject of a specific paper by the Department of Fisheries and Ocean.[134]

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[127] Decision Memorandum regarding the suspension of certain offshore permitting and drilling activities on the Outer Continental Shelf, US Secretary of the Interior, of the 12th July 2010, http://www.interior.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=38375 (accessed March 2011).
[128] *Ibid,* 7-17.
[129] *Ibid,* 21-22.
[130] Decision Memorandum on the Termination of the suspension onf certain offshore permitting and drilling activities on the Outer Continental Shelf, US Secretary of the Interior, of the 12th October 2010, http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=64767 (accessed 3 March 2011).
[131] Alf Håkon Hoel, ed., *Best Practices in Ecosystems Based Oceans Management in the Arctic* (BePOMAr), Report Series No. 129, Norwegian Polar Institute: 2009, 85.
[132] Canada Ocean Act, S.C. 1996, c. 31, para. 30.
[133] Canada Fisheries Act. R.S., c. F-14, s. 1., http://laws.justice.gc.ca/PDF/Statute/F/F-14.pdf (accessed 3 March 2011).
[134] See: the paper released by the Department of Fisheries and Oceans, *A fishery decision-making framework incorporating the Precautionary Approach,* http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-eng.htm#_ftn1 (accessed 3 March 2011).

Besides references in several domestic laws and policies of the coastal states, regional environmental agreements also contain references to the precautionary approach. Early agreements aiming at the preservation of Arctic fauna are implicitly based on the recognition of the approach, such as the Fur Seal Convention[135] and the Polar Bear Agreement.[136] The approach is also referred to explicitly in more recent regional regime of environmental management. The North Atlantic Salmon Conservation Organization (NASCO) relies on the implementation of the precautionary as a core of its decisions. NASCO adopted in 1998 the Agreement on Adoption of a precautionary approach[137] and in 1999 its Action Plan for Application of the Precautionary Approach.[138] The Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention),[139] the geographic scope of which covers a small section of the Arctic Ocean, also espouses the precautionary approach, recognizing it explicitly as a legal principle. According to Article 2.2(a), the parties to the Convention shall apply:

> the **precautionary principle**, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects (emphasis mine).

The Convention on the Future Multilateral Cooperation in North-East Atlantic Fisheries.[140] which establishes the North East Atlantic Fisheries Commission ****709*** (NEAFC), contains a direct reference to the precautionary approach. Article 4, which mandates the Commission to perform the tasks assigned in the Convention, a provision specifically directs the Commission to *apply the precautionary approach.* The contracting parties to the NEAFC have, for instance, responded to the risk for the marine environment with the adoption of interim measure, as in the case of the closure of an area in the proximity of the Reykjanes Ridge to bottom trawling and static gear fishing in 2005 and 2006. [141]

The Arctic Council does not have the mandate to formally regulate human activities in the Arctic, but the Council has nevertheless contributed to the

[135] Convention on the between Great Britain, Japan, Russia and the United States respecting Measures for the Preservation and Protection of Fur Seals in the North Atlantic Ocean, in force 1911, 214 ConTS 80 (not in force anymore).
[136] Agreement on the Conservation of Polar Bears, *ILM* 13 (1974), 13.
[137] CNL (98) 46, Agreement on Adoption of a Precautionary Approach (1998), http://www.nasco.int/pdf/agreements/pa_agreement.pdf (accessed 26 January 2011).
[138] CNL (99) 48, Action Plan for Application of the Precautionary Approach (1999) NASCO, available online at http://www.nasco.int/pdf/nasco_res_actionplan.pdf. (accessed 3 March 2011).
[139] Convention for the Protection of the Marine Environment of the North-East Atlantic, (adopted 2007, not yet into force).
[140] Convention on the Future Multilateral Cooperation in North-East Atlantic Fisheries, Misc. 2 (1980), Cmnd 8474.
[141] Recommendation IV for the Protection of Vulnerable Deep-Water Habitats, adopted with a reservation by the Russian Federation at the 23rd Annual Meeting of NEAFC in 2004. The moratorium is imposed from 1 January 2005 until 31 January 2007. Example provided in Arie Trouwborst, *Precautionary rights and duties of states*, Leiden: Koninkiljke Brill (2006), 167.

development of regional norms and policies applied across the eight Arctic States. Recently, it provided guidance on management of the Arctic marine environment in endorsing the conclusions of the Best Practices in Ecosystems Based Oceans Management in the Arctic Project (BePOMAr).[142] The redaction of the report was launched in 2006, building on the experience of two of the Working Groups functioning under the Arctic Council. The approach adopted consisted in providing recommendations for ecosystem-based management according to the assessment of best practices among the coastal states of the Arctic region rather than on a desk study of international environmental principles.[143] The 2009 ministerial meeting formally welcomed the report and endorsed its conclusions, which contain six key practices whose implementations have proven particularly effective.[144] The BePOMAr report takes note of the recent affirmation of the precautionary approach as a legal principle in Norway in relation to environmental protection.[145] All but one of the seven domestic regimes studied identified references to the implementation of the precautionary approach in the description of various aspects of their domestic maritime policies.[146] In this context, one should deplore the absence of references to the approach among the six concrete practices endorsed by the Arctic Council. ***710**

3.2.2. Deepening the implementation of the precautionary principle in the Arctic

The previous study identified numerous references to the precautionary principle in national and regional regulations applying to the Arctic. In most of these cases, the precautionary approach is referenced in order to limit the risks of potential negative environmental impact of an activity currently occurring. These cases compare to the implementation of the approach adopted in the Antarctic in the context of the exploitation of marine living resources under the CCAMLR. However, the most enriching lesson that Arctic states could draw from Antarctic governance relates to the more proactive approach adopted by the states party to the ATS in relation to the regulation of economic activities *prior to* their development.

Indeed, the two Polar regions share similar characteristics: among them, their shared nature as frontiers, where economic and industrial development is absent or limited but which may become significant in the near future. While such prospects have not materialized so far in the Antarctic, and are unlikely to do so in the coming years, the parties to the ATS have addressed proactively the potential threats that such activities could pose to the fragile local environment by taking preventive regulatory actions. The study of the recognition of the precautionary approach in the ATS, which was presented in the previous section, identified the development towards an implementation of the approach in two steps. In a first step, state ban activities, which do not occur yet but are likely to develop and thus possibly to induce potential environmental damages, as long as no regulatory framework is adopted to ensure that these risks are minimized. The provision of the Environmental Protocol in relation to

[142] BePOMAr report, *supra* note 133.
[143] All the member states of the Arctic Council but Sweden participated, Sweden considering its marine management activities as being of "oceanic" character.
[144] See: Tromsø Declaration, page 7, available at http://arctic-council.org/filearchive/Tromsoe%20Declaration-1..pdf (accessed 3 March 2011).
[145] BePOMAr report, *supra* note 133.
[146] Besides Sweden, which is not included in the report, the chapter on Finland is the only state which does not refer to the precautionary approach.

mineral resource activities constitutes a prime example of this approach. As future scenarios for the Arctic augur the development of several new and existing – but currently limited – economic activities, moratoriums imposed on these developments (as long as no legal framework is implemented) would ensure that economic development does occur in a legal vacuum. This approach could prevent environmental risks in a particularly vulnerable environment.

The U.S. Congress proposed such an approach in October 2007 in its consideration of the necessity of international cooperation regarding the migratory, transboundary, and straddling fish stocks in the Arctic Ocean.[147] In a Joint Resolution with the House of Representatives, the Senate invited the ***711** U.S. government to cooperate with the other Arctic nations in order to negotiate an agreement managing the regional fisheries, establish the appropriate international organization or organizations, and reinforce the implementation of the existing provisions under the UN Fish Stock Agreement. [148] This call was accompanied by the following request:

> 4. until the agreement or agreements negotiated pursuant to paragraph (1) come into force and measures consistent with the United Nations Fish Stocks Agreement are in effect, the United States should support international efforts to halt the expansion of commercial fishing activities in the high seas of the Arctic Ocean.

The second step of the implementation of the precautionary approach in the frame of the ATS consists of regulating the conditions of the exploitation of natural resources or of the development of a particular industry before any such exploitation or activity takes place. This preventive approach allows for the development of economic activities, but first allows legislators to regulate this activity in a more serene context. It enables regulators to set effective and ambitious norms as starting point for the industry, rather than to attempt to initiate the more difficult process of regulating an already established activity. The latter approach would also imply higher transaction costs for the economic actors involved, as they might have to adapt existing processes and infrastructure to regulations. The provisions of the CCAMLR in relation to the exploitation of new fish stocks and of the CRAMRA implement such an approach. In the Arctic context, the European Union[149] has called for a similar scheme to be implemented in relation to new Arctic fisheries:

> Put in place a regulatory framework for the part of the Arctic high seas not yet covered by an international conservation and management regime before new fishing opportunities arise. This will prevent fisheries developing in a regulatory vacuum.[150]

[147] US Senate Joint Resolution 17, Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and transboundary fish stocks in the Arctic Ocean 110th Congress, 5 October 2007.
[148] *Ibid*, paragraphs (1) and (2).
[149] Membership to the EU does not include any Arctic coastal state. However private actors of several member states are already involved in economic activities in the Arctic.
[150] Communication from the Commission to the European Parliament and the Council of the European Union on the European Union and the Arctic Region 2008CoBrussels, 20.11.2008, COM(2008) 763 final, at 7-8.

Depending on issues of jurisdiction and on the geographic scope of each activity susceptible to develop rapidly in the Arctic, the implementation of a proactive precautionary approach might prove most relevant at the local, national or regional level. The implementation of the precautionary approach under the ATS has greatly contributed to the protection of the particularly vulnerable Antarctic environment. While Arctic ecosystems are ***712*** already undergoing stress due to the physical impacts of climate change, a similar proactive approach to the regulation of emerging economic sectors such as fisheries, shipping, oil and gas exploitation, and tourism could help in reproducing this positive Southern experience around the Northern Pole. The wish expressed by the U.S. senate and the EU parliament for such an approach should be followed up in practice with the rapid adoption of moratoriums and regulatory frameworks for each activity likely to develop in the region.

4. Conclusion: Governing the Arctic building on the Antarctic Experience

The relevance of the comparison between governance models for both Polar Regions has been decried as lacking understanding of inherently different political and human contexts prevailing in each region. The presence of indigenous peoples across the Arctic and the undisputed sovereignty of a few coastal states on most of Arctic natural resources undoubtedly limit the scope of such a comparative exercise. Nevertheless, the two Polar Regions share several similarities. In both cases, human activities have had little impact on the particularly vulnerable regional ecosystems.

This vulnerability demands that all states active in the region cooperate and abide by common minimum standards. While the Arctic "race to resources" often depicted in the general media has not yet materialized, frustration over the lack of inclusiveness of the Arctic Council is growing as the eight Arctic states reflect on the role in regional governance, which they are ready to grant to non-Arctic states. In their search for a satisfactory scheme, the middle way adopted by the Consultative Parties to the Antarctic Treaty might prove to be a thought-provoking example. Between the recognition of sovereign equality implemented in the UN system and the creation of a closed club of privileged nations, the signatories to the Washington Treaty have conceived a regime leaving the opportunity for third states to join at a later stage while preserving for themselves a special role. A particular challenge for the eight Arctic states would be to balance the interest of the inclusion of new states in the processes related to the Arctic Council, while preserving the current favourable status granted to representative organizations of indigenous people.

In addition, both regional governance regimes have evolved under similar economic characteristics. A major driving force during the emergence of the ATS had been the expectation that economic activities might boom in the near future, and might carry severe environmental risks. The response of the parties to the ATS has been to adopt a remarkable proactive and precautionary approach ***713*** to the regulation of these activities. Implemented to its full extent, the precautionary approach has led to the adoption of provisional moratoriums and regulatory frameworks guaranteeing that economic activities do not occur in the absence of legal norms.

The parties to the Antarctic Treaty benefited from a relatively long timeframe to build an innovative model of regional governance and experiment with new approaches. The evolution of the ATS is thus the consequence of successive agreements and decisions contributing to the modelling of the regime as we know it. However, scientific and economic scenarios predict a much shorter window of opportunity for Arctic states to establish and maintain an adequate platform for regional cooperation capable of addressing new issues as – or even better, before – they emerge. In order to overcome such a steep learning curve, the Arctic states would benefit greatly from the lessons accumulated from half a century of governing the other Pole.