

OCEAN GOVERNANCE AND ITS IMPLEMENTATION : GUIDING PRINCIPLES FOR THE ARCTIC REGION¹

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This background paper is intended to serve as an information piece which outlines Ocean Governance Theory, as envisioned by the late Elisabeth Mann Borgese, and as it may be applicable to the Arctic Region in support of the Arctic Council's (PAME) work in the elaboration of an Arctic *Marine Strategic Plan*. It is not the intent of this paper to review the current status of legal, political and institutional approaches to the management of Arctic resources and activities. These topics are extensively reviewed in the current literature and numerous relevant subject experts may contribute directly to the work of the Arctic Council.³ It is also not the intent of this paper to provide a prescriptive commentary on an approach to adopt in the Arctic Region. The contents of this paper are thus solely intended to contribute to the relevant discussions by providing an overview of Ocean Governance and its Implementation, all of which may be applicable in the context of the Arctic Council's work.

This paper is presented in two main parts. The first part outlines the principles upon which the theory of Ocean Governance is founded. The second part reviews current approaches to the implementation of Ocean Governance at the local, national, regional and international levels, by reviewing various relevant initiatives which may be of interest to policy makers as they discuss

¹ The content of this paper is the responsibility of the author(s) and does not necessarily represent the views of the PAME Working Group as a whole, or its member countries.

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³ See, *inter alia*, and in no particular order: L. Nowlan. *Arctic Legal Regime for Environmental Protection* IUCN Environmental Policy and Law Paper No. 44 (Cambridge: IUCN Environmental Law Center, 2001). 69 p.; D. VanderZwaag, R. Huebert and S. Ferrara. "The Arctic Environmental Protection Strategy, Arctic Council and the Multilateral Environmental Initiatives: Tinkering while the Arctic Marine Environment Totters" (2002) 30 Den. J. Int'l L. & Pol'y 131; G. Holland. "The Arctic Ocean—the Management of Change in the North Seas" (2002) 45 Ocean and Coastal Management 841; D. Rothwell. "International Law and the protection of the Arctic Environment" (1995) 44 I.C.L.Q. 280; D. D. Caron. "Toward an Arctic Environmental Regime" (1993) 24 Ocean Dev. & Int'l L. 377; R. Huebert. "New Directions in Circumpolar Cooperation: Canada, the Arctic Environmental Protection Strategy and the Arctic Council, (1998) 5 Canadian Foreign Policy 27; D. VanderZwaag. "Regionalism and the Arctic Marine Environmental Protection: Drifting Between Blurry Boundaries and Hazy Horizons, in D. Vidas and W. Ostreng ed. *Order for the Oceans at the Turn of the Century* (Boston: Kluwer Law International, 1999) 231; and D. M. Johnston. "The Future of the Arctic Ocean: Competing Domains of International Public Policy" [October 2002, draft paper on file with author].

the management of Arctic resources and activities and work towards the elaboration of an *Arctic Marine Strategic Plan*.

Intorduction: M anifestations of O cean Governance

It is becoming increasingly clear that protection of the marine environment, for the Arctic Region and beyond, requires the effective implementation of provisions made by the United Nations Convention on the Law of the Sea,⁴ the United Nations Conference on Environment and Development⁵ and the UNCED Process which ensued,⁶ as well as the entire emerging international, regional and bilateral ocean regimes.⁷

Such a task represents significant challenges to all States, and it is not surprising that even the most developed of nations are encountering challenges in their attempts to elaborate the appropriate policies on a national level as well as multilaterally.⁸ Furthermore, political, environmental and social factors, also present within the Arctic Region, compound the complexity of this task.

It is encouraging to note that, in an attempt to meet the challenges of marine environmental protection, and move towards the development of a comprehensive oceans management framework, many States are beginning to elaborate ocean policies and regional strategies in a manner consistent with the LOSC and the UNCED Process; in essence, Ocean Governance.

Broadly, and for the purposes of this paper, Ocean Governance can be understood as a set of rules, practices and institutions which interact at all levels to enable equity and sustainability in the allocation and management of Ocean resources and spaces.⁹ Indeed, the elaboration of such an Ocean Governance regime implicitly incorporates the protection of the marine environment as a necessary component of sustainable development. In many respects, the creation of the Arctic Council and the development of an *Arctic Marine Strategic Plan* can serve as the foundation for the establishment of such a regime for the Arctic Region.

It is also important to note the corresponding institutional developments within the United Nations. At this level, recent developments of note include, *inter alia*, UNEP's *Global Program of Action for the Protection of the Marine Environment from Land-based Activities*¹⁰ and the *United Nations Open-ended Informal Consultative Process established by the General Assembly in its resolution 54/33 in order to facilitate the annual review by the Assembly of developments in*

⁴ A/CONF.62/121. Hereafter: LOSC.

⁵ A/CONF.151/26 (Vol. I). Hereafter: UNCED.

⁶ Hereafter: UNCED Process. For the purposes of this paper, the UNCED Process also encompasses the results of the WSSD.

⁷ For a comprehensive list of instruments relevant to the Arctic Region, see: *Table 2: Status of International Agreements as of June 2000* in: 'PAME Report to Ministers October 12-13, 2000, Barrow, Alaska'; and for a list of instruments specific to shipping in the Arctic, see: Norwegian Maritime Directorate. *Appendix 2: Existing Legal and Other Instruments Relating to Shipping Activities in the Arctic* in 'PAME Snap Shot Analysis of Maritime Activities in the Arctic' Report # 2000-3220, p.56, and *Appendix VIII: Expert Progress Report on Revised Snap Shot Analysis* in 'PAME Working Group Meeting Report June 5-8, 2000.' NB: All PAME documents cited are available on the PAME website <www.pame.is> under the 'PAME Documents' link. Also see references cited in Note 2, *supra*.

⁸ See generally: E. L. Miles *et. al. Environmental Regime Effectiveness*. (Cambridge, MA: The MIT Press, 2002) 508 p.

⁹ International Ocean Institute (Elisabeth Mann Borgese and Francois N. Baillet). *Ocean Governance: Legal, Institutional and Implementation Considerations*. A Report Prepared for the Ship and Ocean Foundation of Japan. (Halifax, Canada: Dalhousie University-International Ocean Institute, 2001) 213 p.; R. L. Friedheim. 'Ocean Governance at the millennium: where we have been – where should we go' (1999) 42 *Ocean and Coastal Management* 747.

¹⁰ Intergovernmental Conference to Adopt a Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (Washington, D.C., 23 October - 3 November 1995) *Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities*. UNEP(OCA)/LBA/IG.2/7 Hereafter: UNEP-GPA.

ocean affairs.¹¹ Of course, one should also note UNEP's *Regional Seas Programme*,¹² and particularly the developments achieved in the Mediterranean Region in this regard. All of these mechanisms represent a clear expression of desire on the part of States to address Ocean issues with the appropriate level of cooperation and coordination necessary, and in a manner consistent with the approaches codified within the LOSC and the UNCED Process.

To the optimist, these developments can serve as an indication that the international community is beginning to mobilize itself in an effort to establish, perhaps unconsciously, an international Ocean Governance Order. However, we are still far from a clear definition of the elements which compose such a regime, or even defining the precise goals of the regime. Nonetheless, it is possible to identify what could be considered the ideological origins common to all these initiatives, and thus provide policy makers with certain guiding principles which should be incorporated in their work as much as possible. This is particularly the case with PAME's work in the Arctic Region, as the process is gaining momentum as well as political and technical attention.

The implications of ignoring linkages between economic development and environmental protection, as well as the need to adopt an integrated management approach at all levels of governance in dealing with these linkages, has become quite widely observed and noted. However, when it comes to the implementation of such complex approaches, particularly with regards to the Ocean and in regions such as the Arctic, some difficult institutional and legal problems arise. These difficulties in implementation have led to the "implementation gap," as recently recognized by the WSSD and the UN Secretary General.¹³

However, this gap is not insurmountable, and the first step in surmounting it may lie in identifying an appropriate framework through which the plethora of relevant Ocean convention regimes, action plans and programs may be addressed, all the while satisfying the necessities of sustainable development. For the purpose of this paper, the criteria for developing such a framework will be simplified into two broad categories: Firstly, identifying the guiding principles (i.e. the overarching policy principles), and secondly, establishing the implementing frameworks at the appropriate levels of governance (i.e. the institutions or organizations and their mandates).¹⁴ The following two sections will thus provide an overview of these two categories of considerations and briefly comment on principles and approaches which may be of interest to the policy makers of the Arctic Region.

The Guiding Principles of Ocean Governance

An overview of Ocean Governance Theory will provide insight into the main guiding principles which may be of interest to the policy makers as they seek to elaborate a governance policy framework. Elisabeth Mann Borgese was a strong advocate of such an approach, and she drew on several principles to guide the elaboration of her vision of Ocean Governance. These principles are universal in character and can be summarized as follows:¹⁵

¹¹ A/RES/54/33 The Resolution adopted by the General Assembly establishing the ICP. (18 January 2000). Hereafter: ICP.

¹² See the program Website: < <http://www.unepmap.org/>> Accessed August 28, 2003.

¹³ See: *Report of the World Summit on Sustainable Development* (Johannesburg, South Africa, 26 August – 4 September, 2003). A/ CONF.199/20; *Chairperson's Summaries of the Round Tables* A/CONF.199/17/Add.1; and General Assembly. *Report of the Secretary-General on Oceans and the Law of the Sea*. A/58/65 and A/58/65/Add.1

¹⁴ Of course, the policy maker will always wish to include in such considerations, certain performance criteria and targets in order to ensure the process remains loyal to the guiding principles and relevant to the overall context.

¹⁵ This summary is drawn from numerous conversations, speeches and lectures delivered by Elisabeth Mann Borgese between 1997 and 2002, see also: Francois N. Baillet. "Ocean Governance: The Oceanic Circle." Plenary Intervention Delivered to *DOALOS/UNITAR Briefing on Developments in Ocean Affairs and the Law of the Sea 20 Years after the*

A. The *Common Heritage of Mankind* (CHM), proposed by Arvid Pardo in the early 1970s, and subsequently codified within PART XI of the LOSC, is the most important of these principles.¹⁶ Pardo's philosophy in this regard was strongly influenced by Elisabeth Mann Borgese and is the centerpiece of Ocean Governance Theory.

By proposing the unprecedented notion that a State or individual may not "claim or exercise sovereignty or sovereign rights over any part of the Area or its resources,"¹⁷ Pardo set in motion the codification of *res communis* and the recognition of the need to manage the commons for the good of the commons. The International Community's response to this proposal was, to say the least, controversial. But through long negotiations it eventually accepted to convey the management of this area, for the benefit of Mankind as a whole, and with particular consideration for the needs of the poor, to the International Seabed Authority. Pardo's principle also reserves the Area for peaceful purposes and stipulates that it must be conserved for future generations.¹⁸

The policy maker can extract from the CHM four universal values which can serve to guide the development of Ocean management policy frameworks, even if their work is not within the Area, and particularly in the case of the Arctic Region.¹⁹ These four values can be summarized as follows:

- *Economic values* – the need to develop oceanic resources is recognized;
- *Environmental values*– ocean resources and the environment must be conserved;
- *Peace and Security values* – the ocean must be reserved for peaceful purposes; and
- *Ethical values* – the benefits derived from the ocean must be shared equitably with particular consideration for the poor and indigenous peoples.

B. The notion of *interconnectedness* as it is eloquently expressed within the LOSC Preamble: "problems of ocean space are closely interrelated and need to be considered as a whole,"²⁰ is the second guiding principle which is at the heart of Ocean Governance Theory.

Conclusion of the United Nations Convention on the Law of the Sea. 25 September, 2002. (New York, United Nations Headquarters). Presentation available on the DOALOS website <<http://www.un.org/Depts/los>> <Accessed 3 October 2002>; International Ocean Institute (Elisabeth Mann Borgese and Francois N. Baillet). *Ocean Governance: Legal, Institutional and Implementation Considerations*. A Report Prepared for the Ship and Ocean Foundation of Japan. (Halifax, Canada: Dalhousie University–International Ocean Institute, 2001) 213 p.; Elisabeth Mann Borgese. *The Oceanic Circle: Governing the Seas as a Global Resource* (Tokyo: United Nations University Press, 1988) 240 p. and Elisabeth Mann Borgese. *Ocean Governance and the United Nations*. (2nd Ed.) (Halifax: Dalhousie University, 1996). 246 p.

¹⁶ Cf. United Nations General Assembly (32nd Session). *Request for the inclusion of a supplemental item in the agenda of the twenty-second session: Declaration and treaty concerning the reservation exclusively for the peaceful purposes of the sea-bed and of the ocean floor, underlying the seas beyond the limits of present national jurisdiction, and the use of their resources in the interests of mankind*. Note verbale dated 17 August 1967 from the Permanent Mission of Malta to the United Nations addressed to the Secretary-General (A/6695). Of course, this note was introduced by Ambassador Arvid Pardo of Malta and the drafting of the accompanying text, which was to become the *pietre angulaire* of the Common Heritage of Mankind and Part XI of UNCLOS, was undertaken by both the Ambassador and Elisabeth Mann Borgese.

¹⁷ LOSC, Article 137. (the 'Area' being defined as 'the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction [LOSC, Part 1, § 1(1)].

¹⁸ Cf. generally: LOSC, Part XI.

¹⁹ It is interesting to note that Elisabeth Mann Borgese was a strong advocate of extending these values to the management regimes of all marine areas beyond the territorial seas of States. She would often demonstrate that this approach had already begun through the codification of the numerous ocean conventions and management regimes at all levels of governance, if not implicitly, then at least between the lines of what she affectionately referred to as 'legal jargon'.

²⁰ LOSC, Preamble.

Although political compromises and “on the ground” realities often render the implementation of this approach somewhat challenging, it must nonetheless remain central to the work of policy makers.

Furthermore, as we move towards the development of Ocean Governance regimes, it is imperative that policy makers seek to reconcile, as much as possible, all aspects of Ocean usage, and pay particular attention to the needs and issues arising from traditional uses of these spaces and their resources.

C. The *Brundtland Commission’s* concept of sustainable development, as further elaborated and applied through the UNCED Process, is the final major founding principle from which Ocean Governance Theory draws its inspiration. Sustainable development takes the underlying ideology of LOSC one step further by solidifying the linkages between the economic and environmental dimensions of ocean management all the while maintaining the emphasis on equity through the objective of poverty eradication. All are proposed as preconditions for, and elements of, sustainable development.²¹

In their efforts to operationalize provisions made by the UNCED Process and its related initiatives, the International Community has accomplished significant developments and refinements of the concept of sustainable development. The WSSD has also served the same purpose in its efforts to aid in the implementation of this concept.²² Although there is still much work to be done in this regard, one can gain considerable insight from these efforts and extract valuable principles which can serve to guide policy makers. A visit to the United Nation’s Division for Sustainable Development website will reveal the immense, and overwhelming, body of knowledge and experience which has been amassed in this pursuit.²³ However, for the purposes of this paper, and without sacrificing the essence of the current direction of thought, six key principles can be extracted. Collectively, these are referred to as the “Lisbon Principles of Sustainable Governance,” and are as follows:²⁴

A. *Responsibility*, as a user of resources, to harvest in an ecological and sustainable manner, ensuring economic efficiency and social equity. In the words of R. Costanza *et al*, “corporate responsibilities and incentives [including subsidies] should be aligned with each other and with broad social and economical goals.” In essence, this is an expansion of the CHM ideology to all aspects of marine resource use and protection.

B. *Scale-matching* is a critical principle in that ecological scales rarely coincide with political and legal scales. Thus, the development of frameworks should pay particular attention to match the scale of their objectives with the appropriate institutions and provide for effective mechanisms to exchange information between all levels. Again, in the words of R. Costanza *et al*, “the appropriate scales of governance will be those that have the most relevant information, can respond quickly and effectively, and are able to integrate across boundaries.” This principle is

²¹ See: *Rio Declaration, Report of The United Nations Conference on Environment and Development A/CONF/151/26* (Vol. 1) and *Report of the United Nations Conference on Environment and Development, Chapter 17 of Agenda 21 A/CONF/151/26* (Vol. 2); *WSSD Plan of Implementation* (5 September 2002) available on the CSD website: <http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm>. Accessed 1 September 2003; A. J. Hanson. “Sustainable Development and the Oceans” (1998) 39 *Oceans & Coastal Management* 167.

²² See: *World Summit on Sustainable Development Plan of Implementation*. Particularly Sections 29-34 and 52-55 which are of relevance to the Ocean; and *The Johannesburg Declaration on Sustainable Development*. A/CONF.199/L.6/Rev.2 (4 September 2002).

²³ Division for Sustainable Development Homepage: <<http://www.un.org/esa/sustdev/index.html>>

²⁴ R. Costanza *et al*. “Principles for Sustainable Governance of the Oceans” (1998) 281 *Science* 198; R. L. Friedheim. “Ocean Governance at the Millennium: Where We Have Been – Where Should We Go” (1999) 42 *Ocean and Coastal Management* 747. p. 760.

thus key to the identification and possible creation of implementation capacity, as will be discussed *infra*.

C. *Precaution*, to err on the side of caution, is increasingly becoming recognized as the only way to effectively manage the inherent uncertainties of nature and the anthropogenic impacts on nature. In practical terms, policy should shift the burden of proof to the users while ensuring that proper impact assessments are being utilized.²⁵

D. *Full Cost Allocation* seeks to adjust the market in accordance with all internal and external socio-economic and ecological costs and benefits of resource use. There is much to be done in this realm of ecological-accounting: user-pay, environmental bonding, and cost internalization. However, if the appropriate balance is to be struck between economic imperatives and ecological realities, then such principles must be further developed and incorporated into management frameworks.

E. *Adaptive Management* is a management approach which recognizes the uncertainties of the context and thus continuously interrogates the appropriate ecological, social and economical parameters so as to ensure relevance and adapt to change. Considerations under this principle will also guide decisions in the management scales, as efficient adaptive management is a primary criteria for scale-matching.²⁶ However, at all levels, meeting the challenge posed by adaptive management approaches is considerable as there often lacks a single management structure with "The Ocean Mandate," thus leading to fragmentation and conflicts of jurisdiction.

F. *Participation* of all stakeholders in the elaboration and implementation of the framework. Such an approach guarantees not only that the appropriate management scale is adopted, but also clarifies the assignments of corresponding responsibilities and fosters credibility and buy-in on the part of the users. This principle will be further elaborated on *infra*.

Taken together, these universal guiding principles are the foundations of Ocean Governance and we must seek to incorporate them into new Ocean policy frameworks, including marine environmental protection strategies contained within such regimes. Of course, such a holistic approach which takes into account all aspects of major ocean issues and calls for both horizontal and vertical integration of ocean management regimes, at all levels, may yet be far off. However, this approach is the only sustainable way forward, and despite the legal and institutional challenge at hand, it is obtainable. The Arctic Region provides us with a unique opportunity in this regard, as much of the work remains to be done and the foundations are, perhaps, being already laid by the Arctic Council.

Levels of Implementation of Ocean Governance

As the Arctic Region policy makers move forward in their deliberations, taking into account the principles enumerated *supra*, it is also important for them to note the various levels of governance which can each provide unique and distinct opportunities for implementation. These levels are the local, national, regional and global; and although they may sometimes intersect, and their relevance may not initially appear obvious, it is none the less useful to examine each as independent but interconnected and apply the scale matching principle accordingly.

²⁵ See generally: D. VanderZwaag. *CEPA and the precautionary principle/approach*. (Hull: CEPA Office, Environment Canada, 1994) 32; and, by the same author: "The Precautionary Principle and Marine Environmental Protection: Slippery Shores, Rough Seas, and Rising Normative Tides" (2002) 33 *Ocean Development and International Law* 165.

²⁶ It is interesting to note in this regard A. J. Hanson's 'just in time management' metaphor for Ocean Governance, as it calls for similar management characteristics to allow managers to strive for 'continuous improvement towards the difficult objective of integrated use.' A. J. Hanson. "Sustainable Development and the Oceans" (1998) 39 *Oceans & Coastal Management* 167. p. 170.

A. *The local level* is the level at which the individual lives and experiences the environment. It is the most basic level of organization, where households band together and organize for survival and prosperity. Fundamentally, it is the level of the people. As such, this level will be commented on in a bit more detail than subsequent ones, particularly as the Arctic Region falls almost completely within national jurisdictions and will thus require national implementation of almost all initiatives through local-level action.

At this level, in many parts of the world, one can observe the emergence and formalization of a governance approach which is often grafted on very ancient traditions. This approach has already been generally referred to as the *Participation* principle, but with the consideration of certain nuances, such terms as, *inter alia*, ‘co-management’²⁷ and ‘subsidiarity’²⁸ may also occur. However, for the purposes of this paper, these approaches can be condensed into a management approach which includes frameworks to allow for cooperation amongst stakeholders and between these entities and the various levels of government in the pursuit of their joint welfare, and, where appropriate, the devolution of decision making powers to the lowest possible level of jurisdiction in accordance with the *scale-matching* principle.²⁹

This definition follows the guidelines laid down in the Brundtland Report, for the ‘blurring of the boundaries’ between Departments and disciplines (horizontal integration) as well as between levels of governance (local-national-regional-global: vertical integration). It also makes the whole system participatory and bottom-up, as it involves stakeholders in decision-making at the level of the local community, and the local community in decision-making of the national government. Such a structure also affords opportunity to address user conflicts, and perhaps resolve them amicably the setting of the local communities and without top-down intervention.³⁰ It is a phenomenon of national decentralization and of empowerment of the local community. There are good examples for this system in South Africa, in Latin America and the Caribbean, in Japan, in China, and in Norway.³¹

This approach is also the official policy of the Canadian Government,³² and is particularly well developed in the Atlantic Provinces and in the Arctic.

With regard to the Canadian Arctic,

The experience... includes experimentation with alternative management regimes and institutional arrangements for the resolution of multiple-use conflicts, and the integration of levels of governance from the local to the international. These experiences are of interest to the international community; developing an effective ocean governance system cannot be done and regional levels. There are

²⁷ F. Berkes, P. J. George and R. J. Preston. ‘Co-management’ (1991) 18(2) *Alternatives* 12; and *Sustainable strategies for oceans: A co-management Guide* (Ottawa: Supply and Services Canada 1996) 666.

²⁸ *Commission Report to the European Council on the Adaptation of Community legislation to the subsidiarity principle*. (Brussels: Commission of the European Communities, 1993) COM(93)545; and A. J. Hanson. ‘Sustainable Development and the Oceans’ (1998) 39 *Oceans & Coastal Management* 167 p. 170. It should also be noted that there exists an academic debate on the merits of adopting such an approach, with the dissenting opinion best summarized as ‘too many cooks spoil the broth...’ See: M. Olson. *The Logic of Collective Action*. (Cambridge: Harvard University Press, 1971) at p. 36.

²⁹ See, generally: E. Ostrom. *Governing the Commons* (Cambridge: Cambridge University Press, 1990).

³⁰ E. G. Foster M. Haward. ‘Integrated Management Councils: A Conceptual Model for Ocean Policy Conflict Management in Australia.’ (2003) 46 *Ocean and Coastal Management* 547.

³¹ R. Hasler. ‘Towards Political Ecologies of Scale: Conceptualizing Community-based Coastal and Fisheries Co-Management on the West Coast of South Africa.’ *Ocean Yearbook* 14 (Chicago: Chicago University Press, 2000). Also see generally: (1997) 36 *Ocean & Coastal Management* which regroups numerous articles on co-management from around the world.

³² See, for example: National Round Table on the Environment and the Economy. *Sustainable Strategies for Oceans. A Co-Management Guide* (Ottawa, 1998).

coastal management and multiple-use issues at the local levels and national levels of governance that need to be linked up to the international.³³

This approach is formalized through numerous aboriginal land claims settlement agreements,³⁴ and in this context, co-management is defined by the Canadian Government as:

institutional agreements whereby governments and Aboriginal (and sometimes other parties) enter into formal agreements specifying their respective rights, powers and obligations with reference to the management and allocation of resources in a particular area.³⁵

A most interesting example of many such approaches can be found in the *Nunavut Land Claims Agreement Act* which codifies co-management by providing the ‘Inuit with wildlife harvesting rights and rights to participate in decision-making concerning wildlife harvesting.’³⁶ Operationalization of this approach is ensured through provisions made within the *Nunavut Land Claims Agreement* which stipulates the sharing of resource management jurisdiction between government and Aboriginal peoples through the establishment of a complete co-management regime:

The Nunavut Impact Review Board (NIRB), the Nunavut Water Board (NWB), the Nunavut Planning Commission (NPC) and the Nunavut Wildlife Managing Board (NWMB) may jointly as a Nunavut Marine Council, or severally advise and make recommendations to other government agencies regarding the marine areas, and Government shall consider such advice and recommendations in making decisions which affect marine areas.’³⁷

Each one of these bodies is itself a co-management body having equal government and Inuit representation. Thus, through the proper implementation of these provisions, the consensus-building approach of institutions like the Marine Council would mean that their recommendations, that is, those formulated at the local level, should carry the day.³⁸

Furthermore, the Agreement stipulates that ‘there is a need for Inuit involvement in aspects of Arctic marine management, including research.’³⁹ Through this approach, a further benefit of co-management can be achieved as it ensures the involvement of indigenous Peoples in scientific research. This provides for a mechanism by which an interface with valuable traditional knowledge is possible, thus enriching science through local observation.⁴⁰ At the same time, this

³³ F. Berkes *et al.*, ‘The Canadian Arctic and the Oceans Act: the Development of Participatory Environmental Research and Management’ (2001) 44 *Ocean and Coastal Management* 451. p. 452.

³⁴ C. Notzke. ‘A New Perspective in Aboriginal Natural Resource Management: Co-management.’ (1995) 26 *Geoforum* 187.

³⁵ *Report of the Royal Commission on Aboriginal Peoples*. vol. 2, Part 2. (Ottawa: Supply and Services Canada, 1996) 666 p.

³⁶ Preamble, *Nunavut Land Claims Agreement Act*, 1993, c. 29.

³⁷ Article 15.4.1. *Nunavut Land Claims Agreement*.

³⁸ Bruce Gillies. ‘The Nunavut Final Agreement and Marine Management in the North,’ 23(1) *Northern Perspectives*. Canadian Arctic Resources Commission.

³⁹ Article 15.1.1(g) *Nunavut Land Claims Agreement*.

⁴⁰ See, generally: J. McIver. ‘Environmental Protection, Indigenous Rights and the Arctic Council: Rock, Paper, Scissors on the Ice?’ 10 *Geo. Int’l Env. L. Rev.* 147; F. Berkes. *Sacred Ecology: Traditional Ecological Knowledge and Resource Management*. (London: Taylor and Francis, 1999); S. Jentoft and K. H. Mikalsen. ‘Regulating Fjord Fisheries: Folk Management or Interest Group Politics?’ in C. I. Dyer and J. R. McGoodwin, eds. *Folk Management in the World’s Fisheries: Lessons for Modern Fisheries Management*. (Niwot: University Press of Colorado, 1994); *Traditional Knowledge Policy* (Yellowknife: Government of the Northwest Territories, 1993); Harold E. Welch. ‘Marine Conservation in the Canadian Arctic: Regional Overview’ (1994) 23(1) *Northern Perspectives*. It should also be noted that an academic debate exists with regards to legitimacy of traditional knowledge and the benefits of Aboriginal participation in co-management: A. Howard and F. Widdowson. ‘Traditional Knowledge Threatens

arrangement makes science available to the local level so that they can use it as a tool along with their indigenous knowledge.⁴¹

Another noteworthy co-management initiative which may serve to inform policy makers can be found in the Atlantic Canadian Region. This highly successful initiative, launched in 1991 by Environment Canada, is called the Atlantic Coastal Action Program (ACAP).⁴² This program was born out of the Federal Department's recognition of an "urgent need to restore damaged coastal environments [through the mobilization] of local communities to address their own environmental and developmental challenges."⁴³ The ACAP Program's approach recognizes that:

In the past, the development of government-formulated coastal zone management plans have met with limited success since these plans were not community driven. The ACAP process represents a great step forward in the involvement of community interests. Indeed, the fundamental basis for ACAP is the recognition that local communities are the best and most effective proponents for effective action leading to sustainable development.⁴⁴

ACAP currently has 14 sites across Atlantic Canada which are delimited along ecological boundaries of watersheds.⁴⁵ Each site is managed through a Board of Directors which is incorporated as a non-profit organization and is composed of representatives from all local stakeholder groups. These Boards help local communities "define common objectives for environmentally appropriate use of their resources and to develop plans and strategies that will help achieve them."⁴⁶ Environment Canada contributes to project funding, and community stakeholders contribute most of the resources through volunteer labor, in-kind contributions, and

Environmental Assessment" (1996) 17(9) Policy Options 34; and in reply: F. Berkes and T. Henley. "Co-management and Traditional Knowledge: A Threat or Opportunity" (1997) 18(2) Policy Option 29.

⁴¹ The same approach applies to technology transfer. Co-management provides the best institutional framework for the blending of native skills and indigenous technologies, contributed by the local community, an high technology which may be provided by the extra-regional sources and government agencies. The blending of traditional wisdom and high technology into relevant and low impact applications is an important contribution to sustainable development in coastal areas, particularly remote coastal communities.

A further aspect of co-management which has not received sufficient attention in the past is the need to include the insurance industry among the stakeholders so that they may participate in the decision-making process. This proposition is based on the insurance industry's basic need for risk reduction to expand insurability and how this coincides with the coastal community's need for risk reduction to reduce vulnerability, enhance sustainable development and protect the environment.

Coastal communities could greatly benefit from the knowledge and technology of the insurance industry to assist in identifying vulnerability indicators, to make risk assessments, laws, regulations, to improve warning systems and mitigation measures. On the other hand, the insurance industry could benefit from the actions of organizations who seek to create awareness and design training programs, for government officials and local communities and for continued dialogue between the ocean and coastal Community and the insurance industry. A. J. Hanson. "Sustainable Development and the Oceans" (1998) 39 Oceans & Coastal Management 167; and International Ocean Institute. *Report on Insurance Industry's Role in Coastal Zone Management*. (Halifax: International Ocean Institute and Swiss Re-insurance Ltd., 2000).

⁴² J. P. Ellsworth, L. P. Hildebrand and E. A. Glover. "Canada's Atlantic Coastal Action Program: A community-based Approach to Collective Governance" (1997) 36 Ocean & Coastal Management 121; and J. McCleave, X. Xiongzi, and H. Huasheng. "Lessons Learned from 'Decentralized' ICM: an Analysis of Canada's Atlantic Coastal Action Program and China's Xiamen ICM Program." (2003) 46 Ocean Development & International Law 59.

⁴³ Atlantic Coastal Action Program Website < <http://atlantic-web1.ns.ec.gc.ca/community/acap> > Accessed September 2, 2003.

⁴⁴ *Ibid.*

⁴⁵ An updated list of sites is available on the ACAP Website.

⁴⁶ *Ibid.* An updated list of ACAP community projects within each site is available on the ACAP Website.

financial support. The program is based on three core principles: stakeholder involvement,⁴⁷ shared responsibility through partnerships⁴⁸ and consensus.⁴⁹

Furthermore, the ACAP approach has clearly demonstrated that subsidiary approaches to environmental management can result not only in strong community buy-in and successful program implementation, but also in significant savings for government. Indeed, a recently conducted independent audit of the ACAP Program concluded the following:

Based on the evidence compiled in this report, Environment Canada has obtained a substantial return on their ACAP investment and has been well-served by its support for the ACAP organizations. As seen in the Cost Analysis Section, for the department to accomplish what the ACAP organizations have accomplished via a **direct delivery model Environment Canada would have incurred 12 times their current ACAP program expenditures**. Given the underlying tenant of the program being community-based management, it is highly doubtful that Environment Canada could replicate the outcomes achieved through the current set of ACAP organization projects and accomplishments.⁵⁰

This initiative provides an excellent example of the potential afforded by local level management which could be adapted to many communities world-wide, including those of the Arctic Region. In this regard, the *Atlantic Coastal Action Program: Lessons Learned*⁵¹ report outlines many valuable issues which should be considered by policy makers while deliberating on possible local-level management approaches.⁵²

⁴⁷ The commitment to involve all stakeholders who have an interest in the environment of the coastal zone. This interest may be an industrial or business interest, a government interest, or an interest based on residency or environmental concern. In other words, anyone who is willing to support the program through volunteer time and/or in-kind resources is eligible to become part of the community stakeholder committee set up under ACAP. Environment Canada. *Sharing the Challenge: A Guide for Community-Based Environmental Planning*. Vol. 1, p. vi. Available on the ACAP Website.

⁴⁸ The commitment to partnerships encouraging stakeholders within the committee not only to share in the planning but to share responsibility for the outcome. Partnership in the stakeholder committee has two key functions: stakeholders having traditionally opposed positions (i.e. industry versus environmental organizations) have a neutral forum in which to work on common problems; and, secondly, all those responsible for implementing the solutions are together in one forum. Having all interests at the table allows pooling of resources and expertise, and often forges non-traditional working partnerships within the group. *Ibid.*

⁴⁹ The commitment of the committees to work wherever possible by consensus. Working by consensus simply means that there is no vote and a solution must be reached that is agreeable to all parties. Every stakeholder has the opportunity to put forward ideas and suggestions which are openly discussed; if there is no dissent, consensus has been reached. *Ibid.*

⁵⁰ Gardner Pinfold Consulting Economists Limited. *An Evaluation of the Atlantic Coastal Action Program (ACAP) : Economic Impact and Return on Investment* (2002) p. 24. Emphasis added. Available on the ACAP Website.

⁵¹ S. B. Moir Consulting. *Atlantic Coastal Action Program: Lessons Learned*. 1997. 56p. *Ibid.*

⁵² For ease of reference, some of the main conclusions drawn by S. B. Moir Consulting are as follows (page numbers in brackets correspond to respective sections in report cited *supra*):

- For program purposes *watershed* boundaries provide an appropriate definition of community.(p. 6)
- The multi-stakeholder approach to address issues is effective, although obtaining full representation of all interests is difficult. (p.8)
- It is important to determine ACAP Board composition (i.e. which stakeholders are critical to success) at each site in relation to local issues. (p. 9).
- Ensuring multi-stakeholder participation is difficult. Methods to ensure participation include:
 - involving other departments and levels of government as stakeholders in the ACAP
 - process from the beginning (p. 10);
 - identification of key issue(s) of concern to the general public at each site (p. 11);
 - communications/networking to promote awareness and participation (p.11);
 - involving stakeholders who are committed to bringing about change (p. 9);
 - organizing action projects where people can participate and can see results of their

In conclusion, if one wanted to generalize the experience of various co-management institutions to envisage some general features of an institutional framework for ocean governance at the local level, the legislative foundation for this framework might include the following provisions:

The municipal council of a coastal village or town shall elect a Marine Resources Council, composed of representatives of all stake-holders, such as the port authority, ship owners, fishing associations, marine industries including coastal engineering and local offices of the offshore oil and gas industry, the tourist board, insurance companies, research institutes, nongovernmental organizations and consumer cooperatives;

The Marine Resources Council shall deliberate on all matters affecting the sustainable development of marine resources, the protection of the marine and coastal environment, research and training in ocean affairs, and shall prepare legislation thereon for the Municipal Council;

The Marine Resources Council shall prepare short-term (one year) and medium-term (five years) plans for sustainable resource development and the protection of the marine environment, and submit them, through the Municipal Council, to the Provincial Government;

The Marine Resources Council shall be responsible for the local implementation of, *inter alia*, the LOSC, Chapter 17 of Agenda 21, the marine-related parts of the Biodiversity and Climate Conventions, the Agreement on Straddling Stocks and Highly Migratory Stocks in the High Seas, the Global Programme of Action on the Prevention of Pollution from Land-based Activities, the Regional Seas Programme and other ocean-related agreements and programs;

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- efforts (p.14); and,
 - ensuring that people are involved in decision-making and feel that their concerns are acknowledged (p. 13)
- Consistent with the program model, ACAP sites find that decision-making by consensus is effective for most decisions. (p. 16)
 - Where an existing community-based group shares the ACAP sustainable development objectives, there may be advantages in having it assume the ACAP mantle as a means to help in program start-up, reduce duplication, and possibly avoid conflict.(p. 19)
 - ACAP participants perceive many mutual benefits in cooperating with other organizations that share ACAP interests, although the actual extent of cooperation varies. (p. 19)
 - Annual conferences and workshops can provide valuable assistance to participants in community-based initiatives. (p. 21)
 - Participants in community-based initiatives value and require ongoing training to better participate in their volunteer organizations. (p. 23)
 - Time and effort are required by the “stakeholders” in the ACAP program (Boards, EC windows, ACAP administrative staff, RMC) to establish and maintain working relationships and understandings of one another’s roles. (p. 25)
 - The governance model for the program should be clearly defined and understood. (p. 25)
 - Projects that provide social, economic and environmental benefits can also serve to raise public awareness, public participation, and deliver other government programs. (p. 32)
 - ACAP activities contribute to greater awareness and to changes in public attitudes toward environmental issues. (p. 34)
- Through the multi-stakeholder approach community-based initiatives can encourage changes in industrial, commercial and household practices. (p. 35)
- Factors that contribute to the success of community-based initiatives like ACAP were included in the program design – multi-stakeholder approach, core-funding for professional staff, consultative/consensual approach to decision-making. A sustainable approach requiring consideration of social, economic and environmental factors came later in the program. (p.40)

Municipalities, though their Marine Resources Councils, shall cooperate, within their Province and with the municipalities of neighboring Provinces as well as with municipalities of neighboring countries on matters affecting their common ecosystem. Appropriate provincial, national or international conferences shall be arranged for this purpose.⁵³

B. *The National Level* must also benefit from the considerable advantages presented by a horizontally and vertically integrated framework. The direct involvement of the national level is necessary to compliment local-level action. This ensures that the appropriate level of resources are made available, that issues extending beyond the local-level jurisdictions, including of an international character, can be effectively addressed in a coordinated manner, and that a national approach is developed and implemented accordingly.⁵⁴

An excellent example of this approach is provided by the ocean governance system of the Netherlands, which involves government, research institutions, parliament, and the non-governmental sector. At the political level, this system provides for a *Board of Ministers* under the chairmanship of the Prime Minister. The Board is advised by a *Parliamentary Commission on Ocean Affairs* as well as by a non-governmental advisory council comprising industry, science, and non-governmental organizations. The work of these advisory bodies is coordinated by the *Minister of Transport and Public Works*.

At the bureaucratic level, there is an *Interdepartmental Commission*, composed of senior officials of 13 Departments and usually chaired by a former Prime Minister. It is the responsibility of this Commission to prepare the work for the *Ministerial Board*. Decisions by the Board are made by consensus. The agreed policy will be the nation's integrated ocean and coastal area policy.

Although institutional arrangements will vary within each nation depending on existing structures, state of economic development, culture, etc.,⁵⁵ the following features should be considered in the development of a national ocean governance framework:

- There must be effective linkages between the local and national governance systems;
- There must be effective linkages between all government departments and ministries involved one way or another in ocean affairs. In fact almost all departments or ministries are involved in some manner. If each one of these makes its decisions independently, it will obviously be impossible to generate an integrated policy. The most promising approach to solving this problem is to establish some sort of inter-ministerial council, under the responsibility of a lead agency or, in many cases of the Prime Minister or the Deputy Prime Minister.⁵⁶

⁵³ Adapted from: E. Mann Borgese *The Oceanic Circle* (Tokyo: United Nations University Press, 1998).

⁵⁴ B. T. Brower and D. J. Schwab. *An Introduction to Coastal Zone Management*. (Washington: Island Press, 1994).

⁵⁵ For an overview of American, Australian and Canadian approaches to government roles in coastal zone planning and management, see: D. Huggett. "The Role of Federal Government Intervention in Coastal Zone Planning and Management." (1990) 39 *Ocean and Coastal Management* 33, and L. Juda. "Changing National Approaches to Ocean Governance: The United States, Canada, and Australia." (2003) 34 *Ocean Development and International Law* 161; and for a US – Italy comparison see: A. Vallega "Focus on Integrated Coastal Management: Comparing Perspectives." (2001) 44 *Ocean Development and International Law* 119.

⁵⁶ It is interesting to note in the Canadian context that an Minister's Advisory Council on Oceans has been established, but this Council only reports to the Minister of Fisheries and Oceans. See: the Council's Website <http://www.maco-c.com.ca/dir/about_e.html>. Also of note, in 1990 the Canadian Wildlife Ministers' Council called for the establishment of a: 'permanent mechanism for interagency consultation... to provide for cross -sectoral definition of policies and management programmes for the conservation of air, water and wildlife. A central unit may be needed for this purpose.' See: *A Wildlife Policy for Canada*. Adopted by the Wildlife Ministers' Council of Canada (September 1990).

- The national level must lead in the development of ocean policy, including the enumeration of clear principles and goals. Such work must be coordinated by a lead agency which holds “The Ocean Mandate,” and done in close cooperation with the relevant local-level entities;
- The system must be open to the participation of the stake-holders, civil society and the non-governmental sector in both the policy development and implementation. In this regard, a national level Advisory Group, composed of government and non-government representatives, should advise the inter-ministerial structure; and
- The entire structure must be underpinned by a robust legislative framework.

Trying to generalize this system, taking into account the recommendations made for governance framework at the local level, a set of recommendations for an ocean governance framework at the national level might include the following:

National ocean governance should provide for wide participation and an effective decision-making system linking government, scientific institution, industry local communities and NGOs;

At the political level, there should be a Board of Ministers, preferably under the chairmanship of the Prime Minister;

The Board should be advised by a Parliamentary Commission on ocean affairs as well as by a Nongovernmental Advisory Council comprising industry and science as well as the representatives of the Municipal Marine Resources Councils and Nongovernmental Organizations;

The work of these Advisory Bodies should be coordinated by the Minister with the widest responsibility for ocean affairs; and

At the bureaucratic level there should be an Interdepartmental Commission, composed of senior officials of all the Departments involved in one way or another in ocean affairs. It might be chaired by a former Prime Minister. It would be its responsibility to prepare the work for the Ministerial Board.⁵⁷

In this manner, and through the application of the principles of participation and adaptive management (with particular attention to scale-matching), the framework will allow for an effective vertical integration reaching from the local level through to the national, and horizontal integration between all relevant sectors of government and Civil Society.

C. The Regional Level. Innovative and effective approaches and structures at this level are, in many respects, very well developed in the Arctic Region through the establishment of the Arctic Council and its Working Groups. The work of the Council and its Working Groups represents a unique and pioneering approach to the elaboration of a common knowledge base for a Region which, in turn, serves to develop policy recommendations that member states strive to implement at the national level. As elaborated *supra*, the approach is also a pioneer in the area of integrating the traditional knowledge of the Arctic Peoples in science and decision making by providing indigenous organizations equal footing with government representatives and undertake cooperative research.⁵⁸ It is through this model that the Region may benefit from a common

⁵⁷ Adapted from: International Ocean Institute (Elisabeth Mann Borgese and Francois N. Baillet). *Ocean Governance: Legal, Institutional and Implementation Considerations*. A Report Prepared for the Ship and Ocean Foundation of Japan. (Halifax, Canada: Dalhousie University– International Ocean Institute, 2001) 213 p.

⁵⁸ D. Riedlinger and F. Berkes. “Contributions of Traditional Knowledge to Understanding Climate Change in the Canadian Arctic.” (2001) 37 *Polar Record* 315.

approach to addressing the challenges of Ocean Governance, and indeed, the structure itself should serve as a model for other regions world-wide.

Given that this paper is prepared for PAME, it would be presumptuous to enter into the finer details on the inner-workings of the Arctic Council and its Working Groups. However, some general highlights in this regard may be warranted in order to familiarize to the less informed reader with some of the major contributions this organization has made to Regional governance.

Firstly, it is important to highlight that the Arctic Council considers the protection of the marine environment as an integral part of sustainable development. This optic was agreed-upon by the 2000 Arctic Council Ministerial Meeting and is spelled out in the Arctic Council's *Sustainable Development Framework Document*.⁵⁹ Basing their work on this framework, the Working Group on Sustainable Development is now addressing various sustainable development issues related to the socio-economics and culture. This work is of particular importance to the Region as natural resource exploitation, shipping and tourism must be properly framed, at all levels, in order to ensure that the livelihoods of the indigenous peoples are sustained.

However, the Arctic Council is also faced with the devastating realities of climate change and the necessity for the protection of the environment and wildlife. In this regard, some initiatives should be highlighted.

With regards to climate change, during the 2000 Arctic Council Ministerial Meeting, the ministers adopted the Arctic Climate Impact Assessment (ACIA) whose goal is to:

- Evaluate and synthesize knowledge on climate variability, climate change, and increased UV radiation and their consequences, and
- Provide useful and reliable information to the governments, organizations and peoples of the Arctic region in order to support policy-making processes and to IPCC' s further work on climate change issues.

The assessment will include environmental, human health, and social and economic impacts and recommend further actions. This assessment will be conducted in the context of other developments and pressures on the Arctic environment, its economy, regional resources, and peoples.⁶⁰

This initiative exemplifies the commitment of all Arctic states and observers to cooperate in real terms in order to share knowledge and work together towards a common goal which is so crucial to the Region, and beyond.

Another example of the Arctic Council's contribution to models of regional governance can be found in the work of the Arctic Monitoring and Assessment Programme (AMAP), whose mandate is the following:

Provide reliable and sufficient information on the status of, and threats to, the Arctic environment, and providing scientific advice on actions to be taken in order to support Arctic governments in their efforts to take remedial and preventive actions relating to contaminants.⁶¹

⁵⁹ Arctic Council. *Sustainable Development Framework Document*. October 15, 2000.

⁶⁰ Arctic Climate Impact Assessment (Assessment Steering Committee). *An Assessment of Consequences of Climate Variability and Change and the Effects of Increased UV in the Arctic Region* (Implementation Plan Version 3.7, September 2000).

⁶¹ Arctic Monitoring and Assessment Program Website <http://www.amap.no/>. Accessed September 10, 2003.

It is through the work of this Programme that the Arctic Council can recommend policy and actions based on the collective scientific knowledge of the Region, including that of the indigenous People. In fact, the Programme has prepared two comprehensive assessments of the state of the Arctic environment and continues to monitor the Arctic environment with an emphasis on contaminants and their effects.⁶²

This example not only serves to demonstrate the opportunities which regional cooperation within scientific research can afford the policy makers, but it also reveals how such sound action on a regional scale can lead to significant changes in the international political sphere. For it is without a doubt that the findings contained in the AMAP report significantly influenced the positions and rigor adopted by delegations from nations of the Arctic Region during the negotiations of the 2001 Stockholm Convention on POPs. And as a follow-up, the Arctic Council is now seeking to facilitate the implementation of the provisions through the elaboration of an action plan taking aim at the reduction and elimination of particularly persistent pollutants (e.g. PCBs and mercury).

A final example to be noted lies in the work of the Arctic Council's Working Group on the Protection of the Marine Environment, whose mandate was defined by the 1998 Iqaluit Minister's Meeting as:

Work vigorously for the early implementation of the actions described in the first phase of the Regional Programme of Action (RPA) and its further development in a manner consistent with the associated international agreements and arrangements;

Seek appropriate support to help Russia finalize the Russian NPA-Arctic and host Partnership Conference to be organized with the assistance of the Advisory Committee on Protection of the Sea (ACOPS) which would seek funds to remediate regional priority pollution sources and activities identified in the RPA and Russian NPA-Arctic;

Review the effectiveness and general usage of the 1997 Offshore Oil and Gas Guidelines in the year 2000;

Assess current and potential shipping activities to assist in determining what, if any, additional Arctic shipping measures are required; and

Assess the adequacy of existing international agreements and arrangements related to the protection of the Arctic marine environment.⁶³

The above mandate is quoted as it provides another excellent example of how regional working groups can influence and interact with the international sphere and "bring home" the benefits, so to speak.

Indeed, based on various country reports and the results of other scientific research, PAME developed in 1998 a *Regional Programme of Action for the Protection of the Marine Environment from Land-based Activities*.⁶⁴ This program of action follows the UNEP-GPA

⁶² AMAP. *AMAP Assessment Report: Arctic Pollution Issues*. (Oslo: AMAP, 1998) 859 p., and AMAP. *Arctic Pollution 2002 (Persistent Organic Pollutants, Heavy Metals, Radioactivity, Human Health, Changing Pathways)*. (Oslo: AMAP, 2002) 112 p. See also: AMAP. *Assessment 2002: The Influence of Global Change on Contaminant Pathways to, within, and from the Arctic*. (Oslo: AMAP, 2002) 65 p.; and AMAP *Assessment 2002: Human Health in the Arctic*. (Oslo: AMAP, 2003) Norway. 137 p.

⁶³ Programme on the Protection of the Arctic Marine Environment Website <<http://www.pame.is/sidur/sidur.asp?id=6&menu=program>>. Accessed September 12, 2003.

⁶⁴ Arctic Council. *Regional Programme of Action for the Protection of the Marine Environment from Land-based Activities*. (Ottawa: Minister of Public Works and Government Services Canada, 1999) 23 p. (Adopted September 18, 1998).

methodology and represents the Arctic Region's initiative to implement the GPA in the Region. Following this model, PAME is the coordinating organization for the implementation of the program of action and works closely with member states in an effort to contribute to the development of national policies and programs in this regard. And if to "bring it all home," it was under this program that in September 2001 Russia finalized its *Arctic National Plan of Action*⁶⁵ in partnership with ACOPS, PAME, various member states and observers of the Arctic Council, GEF,⁶⁶ NGOs, and the relevant United Nations bodies.

Furthermore, as mandated by the Arctic Minister's meeting, PAME continues to monitor the international developments with regards to shipping and to develop Arctic-specific oil and gas guidelines.⁶⁷ In the case of shipping, it is again important to note the work of PAME in supporting the initiatives of various Arctic Council member states within the international fora; in this case IMO's work in the development of the *Guidelines for Ships Operating in Arctic Ice-covered waters*.⁶⁸ These voluntary guidelines seek to ensure the protection of the Arctic marine environment and stipulate minimum criteria to ensure the safety of polar ships. However, the guidelines are meant to supplement, not replace, the existing maritime conventions and protocols such as the IMO conventions on the *Safety of Life at Sea* (SOLAS), the *International Convention for the Prevention of Pollution from Ships* (MARPOL 73/78); and the *Convention on Standards of Training, Certification and Watchkeeping for Seafarers* (STCW). Nonetheless, if IMO Assembly approval is any indication of acceptance by flag-states to follow such guidelines, then the work of the Arctic Council and its member states will have gone a long way in furthering environmental security in the Arctic Region.

Other regional initiatives which also provide informative approaches to cooperation and management at this scale can be found in UNEP's Regional Seas Program, particularly the 1995 revision of the *Barcelona Convention System* by the Mediterranean States,⁶⁹ and UNEP's *Global Program of Action for the Prevention of Pollution from Land-based Activities* (UNEP-GPA). The GPA has already been discussed above in the Arctic context, and the importance of the regional linkages to such a global program should be evident. It is however important to keep in mind that despite the efforts of the Arctic Council, implementation fundamentally lies within the jurisdiction of the state. Russia's recent elaboration of a plan of action is a welcomed development in this context, and it should be further underlined that the implementation frameworks in all nations should be guided by the considerations enumerated in the previous sections of this paper; namely those made in the local and national level sections and, generally, the guiding principles of Ocean Governance.

⁶⁵ Advisory Committee on Protection of the Sea and Inter-Agency Commission on Arctic and Antarctic Affairs of the Russian Federation. *National Plan of Action for the Protection of the Marine Environment from Anthropogenic Pollution in the Arctic Region of the Russian Federation (Npa – Arctic)*. May 2000. Available on URL: <http://www.acops.org/NPA_Arctic.htm>. Accessed September 1, 2003.

⁶⁶ See GEF's Program website < http://www.acops.org/GEF_Russia.htm>. Accessed September 5, 2003.

⁶⁷ Arctic Council. *Arctic Offshore Oil & Gas Guidelines*. PAME, October 10, 2002. Available on PAME's Website on URL: <<http://www.pame.is/sidur/uploads/ArcticGuidelines.pdf>>. Accessed September 13, 2003.

⁶⁸ IMO. *Guidelines for Ships Operating in Arctic Ice-Covered Waters*. IMO Document FP 46/6 (Annex 1) 31 July 2001. (Approved by IMO in December 2002).

⁶⁹ The *Convention for the Protection of the Mediterranean Sea Against Pollution* (the Barcelona Convention) was adopted in Barcelona on 16 February, 1976 by the Conference of Plenipotentiaries of the Coastal States of the Mediterranean Region for the Protection of the Mediterranean Sea. The Convention entered into force on 12 February 1978. The original Convention has been modified by amendments adopted on 10 June 1995 by the Conference of Plenipotentiaries on the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, held in Barcelona on 9-10 June, 1995 (UNEP(OCA)/MED IG.6/7). The amended Convention, recorded as *Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean* has not yet entered into force.

The second example comes from the Mediterranean Regional Seas Program, which was the first in what is now a world-spanning series of programs. It is also the most developed of these programs, and with the revision of its Convention and Action Plan, it is once more in the forefront of this development. The 1995 revision of these instruments has brought the program up from the sectoral approach to an integrated approach: from pollution control to sustainable development.⁷⁰ It has incorporated the major new concepts of the UNCED Process, such as the precautionary approach, integrated ocean and coastal management, and it has created the first regional *Commission on Sustainable Development* which incorporates the nongovernmental sector as equal partners into the decision-making process giving them the right to vote. This development should be considered as a model by all Regions, and might serve as the basis for the creation of a *Regional Assembly*.

Thus, the Arctic Region could benefit from this example as a comprehensive framework for regional Ocean Governance which seeks to address in a coordinated manner all aspects of ocean use and space. Perhaps the Mediterranean example could inform the eventual broadening of the Arctic Council's mandate in the coming decades?

D. *The Global Level* has been more than alluded to in the preceding sections with respect to UNEP and IMO. However, the United Nations System is far broader and is composed of a plethora of organizations which could all contribute to Regional efforts in Ocean Governance, including the Arctic Region.

Given the current work of PAME and the scope of this paper, it would be cumbersome to proceed with such a comprehensive review of all organizations. It is nonetheless important to note here some of the major UN bodies and their broad mandates in the fields of Ocean Governance in order to inform potential further inquiries as to the possibilities of developing cooperative programs. These bodies are as follows:

- The Organization for Cooperation and Development (OECD) – Focuses its work on, *inter alia*, socio-economics and capacity building and has a Group of Experts on Integrated Coastal Zone Management;
- The World Health Organization (WHO) – Is responsible for toxicity of food and water, health issues in the marine environment including disease and experiments in genetics;
- The World Meteorological Organization (WMO) – Works in the field of climate and climate issues, including weather forecasts and climate modeling;
- The United Nations Education, Science and Cultural Organization (UNESCO) – Holds the mandate for biosphere programs, socio-economic and cultural programs and has an Intergovernmental Oceanographic Commission (IOC) which deals exclusively with scientific research, ocean data collection, and marine services and training;
- The United Nations Environment Program (UNEP) – Is the lead organization within the UN System for environmental coordination, including land based pollution (GPA) and Regional Seas Programmes;

⁷⁰ Note that the Barcelona Convention is supplemented by six protocols which, when taken together, provide a framework through which to address a large majority of Ocean issues in the region. These Protocols deal with the following: Dumping, Prevention and Emergency; LBS; Specially Protected Areas and Biodiversity; Offshore; and Hazardous Waste.

- The Fisheries and Agriculture Organization (FAO) – Is responsible for all issues pertaining to fisheries and aquaculture, including the land-sea influences of agriculture;
- The International Maritime Organization (IMO) – Is the UN Specialized agency responsible for marine transportation, safety of navigation, ship source pollution, waste disposal at sea, etc.; and
- The United Nations Conference on Trade and Development (UNCTAD) – Is the lead agency for all matters related to trade and development, including training and capacity building in the shipping sector and trade policies in the context of development.⁷¹

Given the vast and often overlapping nature of the mandates highlighted above, and considering that the list is by no means exhaustive, one may legitimately wonder how do all these organizations effectively implement their mandates in a rational manner! In the Ocean sector, this question has often been posed at the highest of levels. In the case of UNEP-GPA, the issue was addressed as follows:

The collaboration of UNEP and its partner agencies as well as relevant global and regional programmes, structures and agreements, will be essential for successful implementation of the Global Programme of Action. Such collaboration will ensure that implementation of the Global Programme of Action will be approached in a wider context, encompassing, *inter alia*, concern for human health (WHO), productivity of coastal areas (FAO), loss of biodiversity (CBI and others), radiation protection and marine pollution monitoring (IAEA and WHO), retarded development and poverty (UNDP), shifting demographic patterns (UNCHS/Habitat), declining food security (FAO, WFP), global environmental change (IGBP of ICSU), nature conservation (WWF, IUCN), marine pollution monitoring and radiation protection (IAEA and others).⁷²

However, since the end of UNCLOS III there has not been another UN forum where the governments and people could discuss the closely interrelated problems of ocean space as a whole. As indicated, awareness of the need for such a forum has been growing over the past few years and is has even been recognized within the Seventh Session of the Commission on Sustainable Development in 1999 (CSD7) which was devoted to ocean affairs.

During CSD7, there was general agreement that the only organ in the United Nations System which was competent to address the complexity posed by Oceans, was indeed the General Assembly with its universal membership and broad mandate. It was also clear to all, that the General Assembly simply did not have the time to do justice to this very comprehensive task; and that the Secretary General's annual report on this agenda item⁷³ was becoming longer and more complex every year indicating an increasing number of issues on which actions have to be taken. To think that the General Assembly could thus properly consider these matters in the half day usually allotted was thus obviously unrealistic.

⁷¹ Adapted from G. L. Holland. "The Role of International Organizations in Coastal Zone Management." (1998) 39 *Ocean and Coastal Management* 25.

⁷² See: *Draft Proposal Submitted by the United Nations Environment Program on Institutional Arrangements for Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities*. (28 October 1996).

⁷³ For a comprehensive source of all Reports See: the Division of Ocean Affairs and the Law of the Sea Website's section entitled "Reports of the Secretary General" which can be found on the URL: <http://www.un.org/Depts/los/general_assembly/general_assembly_reports.htm>.

Thus, on the recommendation of CSD7, the ICP was created with the mandate to:

facilitate the annual review by the General Assembly, in an effective and constructive manner, of developments in ocean affairs by considering the Secretary-General's Report on oceans and the law of the sea and by suggesting particular issues to be considered by it, with an emphasis on identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced.⁷⁴

The ICP is open to all members and observers (Intergovernmental Organizations) of the General Assembly as well as to the Major Groups, and as a *process* of the General Assembly, it is trans-sectoral and interdisciplinary in its composition and integrative in its function. It is thus the global counterpart to the assemblies discussed in the previous sections, at the regional, national, and local levels.⁷⁵

As if to close Elisabeth Mann Borgese's "Ocean Governance Circle," in its institutional component, the 2000 session of the ICP stressed the importance, at regional, national and local levels, of integrated processes, which enable all the sectors involved to contribute, for the purpose of formulating policy and making decisions. It also sent a reminder to national governments of their responsibility to establish such processes, and to coordinate their strategies and approaches in the different international forums, so as to avoid the fragmentation of decision-making on the oceans.⁷⁶

Conclusion

This paper provides an overview of the fundamental principles of Ocean Governance Theory and their implementation at the local, national, regional and international levels of governance, with the objective of contributing to the deliberations on the development of an *Arctic Marine Strategic Plan* for the Arctic Region.

With respect to Ocean Governance Theory, the philosophies of the CHM, the interconnectedness of ocean issues and the various aspects of implementing sustainable development were considered while underlying their importance as guiding principles for the development of Ocean Governance policies. Furthermore, by reviewing various approaches to local, national, regional and international Ocean Governance approaches, the importance of co-management and traditional knowledge, vertical and horizontal integration, harmonization, cooperation and coordination of approaches, were all underlined as key aspects of successful approaches to Ocean Governance.

It is hoped that this background paper will contribute to the deliberations of the Arctic Council, Observers and relevant Working Groups as they pursue their Ocean Governance objectives in the Arctic Region. Furthermore, the current opportunities provided to us by the considerable advances already achieved in this Region, through the work of the littoral States, the Arctic Council, and the numerous sub-Regional organisations, should be capitalized on in an effort to elaborate a truly integrated and functional Regional Arctic Ocean Governance Policy.

⁷⁴ A/RES/54/33. (18 January 2000).

⁷⁵ As other pieces of the global institutional framework of Ocean Governance will evolve, the implementation of the mandate of the former Subcommittee on Ocean Affairs of the Administrative Coordination Committee (ACC/SOCA) to streamline and coordinate the ocean-related activities of the UN Specialized Agencies and Programs will have to be reallocated. This can only be achieved through guidelines given by the General Assembly, which will be greatly facilitated by the various inputs provided by national and regional bodies through the work of the ICP.

⁷⁶ A/57/80 Report on the work of the United Nations Open-ended Informal Consultative Process established by the General Assembly in its resolution 54/33 in order to facilitate the annual review by the Assembly of developments in ocean affairs at its third meeting, 2 July 2002.

