

Workshop on High Seas Governance for the 21st Century

New York, October 17-19, 2007 Co-Chairs' Summary Report, December 2007





agriculture, nature and food quality















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EXECUTIVE SUMMARY

The Workshop on High Seas Governance for the 21st Century was held in New York City on 17-19 October 2007. Over 50 leading experts in international marine policy, science, law and economics gathered to explore policy and regulatory options to improve oceans governance beyond areas of national jurisdiction (BANJ) particularly as they relate to the protection and preservation of the marine environment and marine biological diversity. Participants attended in their personal capacity and the Workshop was conducted under the Chatham House Rule. Co-chairs of the Workshop were David Freestone, Kristina Gjerde, Rosemary Rayfuse and David VanderZwaag.¹

The Workshop opened with four keynote presentations, brief presentations based on written 'thought pieces', and plenary discussions. Participants next divided into three breakout groups to discuss the following: 1) implications of new and emerging oceans uses for oceans governance; 2) short-term approaches for improving oceans governance; and 3) medium-term approaches for improving oceans governance. Participants then returned to plenary to discuss their findings.

For ease of reference, the Workshop's key findings are grouped under the five themes to be considered at a meeting of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (the UN Working Group): 1) the environmental impacts of human activities on marine biological diversity BANJ; 2) coordination and cooperation among States as well as relevant inter-governmental organizations and bodies; 3) the role of area-based management tools; 4) genetic resources BANJ; and 5) whether there is a governance or regulatory gap, and if so, how it should be addressed.

Participants recognised that the 1982 United Nations Convention on the Law of the Sea (LOSC) forms the overarching framework for human activities in or affecting areas beyond national jurisdiction, but that a series of short-term and medium term measures are necessary to achieve effective protection of the marine environment and conservation and sustainable use of its resources.

Highlights of the key findings include:

1) **Environmental impacts:** In the short term, all States could be called upon, directly or through a UNGA resolution, to control the behavior of their nationals and vessels carrying out activities that may adversely affect the marine environment and biodiversity BANJ, including by requiring prior environmental impact assessments (EIAs) for such activities. In the medium term, a globally effective and transparent EIA regime could be developed, building on existing models. An Intergovernmental Panel for the Oceans could enhance understanding of cumulative human impacts

¹ The Co-Chairs would like to thank Tanya Rosen for her assistance in organizing the workshop and in editing the Co-Chairs Summary Report. We would also like to thank the workshop participants and sponsors for their intellectual rigor, moral support and timely assistance.

and better inform policy making in the same way as the Intergovernmental Panel on Climate Change.

2) **Coordination and cooperation:** In the short term, the mandate of an existing agency or process such as the UN Informal Consultative Process on Oceans and Law of the Sea might be expanded to serve as an intergovernmental steering mechanism. Existing regional arrangements for marine environmental protection, resource conservation and maritime surveillance and enforcement could be strengthened and extended into proximate high seas areas, building on experience in the Antarctic, the North East Atlantic and the Mediterranean. The Global Environment Facility (GEF) might be encouraged to provide financial assistance to enhance management and conservation capacity in developing States. Regional fisheries organizations might improve coordination though additional joint meetings as well as through flag State performance audits, port State and market State controls, and harmonized sanctions. In the medium term, regional organizations could develop into regional oceans management institutions, and a global mechanism could be established to review, coordinate and endorse programs and measures initiated at the regional level and by global sectoral bodies, as necessary.

3) **Role of area-based management tools:** In the short term, the scientific basis for area-based management can be advanced through identifying ecologically and biologically signifiant areas and establishing priority areas as pilot high seas marine protected areas (MPAs), building data bases, and promoting bioregional mapping and marine spatial planning pursuits such as those underway in the Antarctic and North East Altantic. In the medium term, further effort would be required to roll out representative networks of MPAs by 2012, including the identification of mechansims for management, monitoring and enforcement, while ensuring that all ocean activites BANJ are based on compatible principles of protection, conservation and sustaniable use.

4) Genetic resources beyond areas of national jurisdiction: If States are unable to find a common position with respect to the status of marine genetic resources on the seabed BANJ, they might consider an alternative approach. This could include applying equitable principles embodied in the LOSC and elsewhere to all marine resources and ecosystem services BANJ. The principles of intergenerational and intragenerational equity -- consideration of the interests of present and future generations -- and the CBD concept of biodiversity as the "common concern of humankind", may serve as the basis. A useful approach may be the concept of a trust whose proceeds could be used to fund institutional management arrangements or be reinvested in conservation and management activities.

5) Governance and regulatory gaps: Identified governance and regulatory gaps include:

• The absence of coordination mechanisms to ensure the consistent and coherent application of modern conservation norms and tools such as the ecosystem approach, the precautionary approach, EIAs, marine spatial planning and other area-based measures to the full range of ocean-based human activities;

- The limited nature of mechanism(s) to ensure transparency, accountability, and stakeholder participation in ocean legal regimes;
- The lack of regulations addressing the increasing environmental impacts from traditional activities such as shipping, marine scientific research, oil and gas exploration, and military activities (e.g., underwater noise) and from new activities which have emerged such as climate change mitigation techniques and potential construction and operation of floating energy and mariculture facilities.

To address the gaps, participants identified a "toolbox" of solutions – ranging from short to medium term, voluntary to legally binding, sectoral to regional and global. These include (a longer list is provided in the main text):

- Developing informal agreements and codes of conduct for unregulated activities;
- Establishing criteria for conducting flag State performance assessment, audit and evaluation;
- Enhancing of monitoring, control, surveillance, compliance and enforcement mechanisms;
- Establishing default mechanisms for interim regulation of new and emerging activities pending establishment of formal regulatory measures;
- Adopting, by the UNGA, of a Declaration on Principles of Oceans Governance reasserting the principles which have been developed in international law since the adoption of the LOSC; and
- Convening of a high level Oceans Summit to focus attention on the need for enhanced protection of the oceans within and beyond national jurisdiction.

While much progress could be made through implementing this toolbox, many participants observed significant advantages in moving towards a binding global agreement as a framework to guide the integrated development and implementation of sectoral and regional efforts. Possible elements of a new global instrument were identified as including:

- Objective and scope (to cover areas beyond national jurisdiction (high seas and the Area));
- General principles reflecting modern governance and conservation norms;
- EIA and strategic environmental assessment requirements;
- Spatial and area-based management tools, including MPAs;
- Monitoring and assessment of the status of the marine environment and biodiversity BANJ;
- Minimum standards for competent international and regional organizations;
- Monitoring, control, surveillance, compliance and enforcement mechanisms;
- Institutional underpinning, including identification/establishment of at least an interim default authority to regulate activities not expressly covered by existing institutions as well as review of mandates of existing regional bodies;
- Consideration of developing States, including capacity building and cooperation to assist them in complying with their environmental responsibilities under the LOSC;

- The potential need for further specific annexes to assist in the implementation of the marine environmental responsibilities set out in the LOSC; and
- Clarification of the relationship between the global framework and regional agreements.

Finally, participants recognized that other issues – such as dispute settlement and noncompliance mechanisms or principles related to the concept of intergenerational and intragenerational equity with respect to marine resources and ecosystem services in areas beyond national jurisdiction – deserved a fuller discussion which was not possible during the Workshop because of time constraints.

LIST OF ACRONYMS

ABNJ	Areas beyond National Jurisdiction
BANJ	Beyond Areas of National Jurisdiction
CBD	1992 Convention on Biological Diversity
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CITES	1973 Convention on International Trade in Endangered Species
CIILD	of Wild Fauna and Flora
CMS	1979 Convention on the Conservation of Migratory Species of Wild Animals
COFI	(FAO) Committee on Fisheries
CoML	Census of Marine Life
EIA	Environmental Impact Assessment
Espoo Convention	1991 Espoo Convention on EIA in a Transboundary Context
FAO	Food and Agricultural Organization
FAO Compliance	1993 Agreement to Promote Compliance with International
Agreement	Conservation and Management Measures by Fishing Vessels on the High Seas
FIRMS	Fishery Resources Monitoring System
GEF	Global Environmental Facility
GRAME	Global Reporting and Assessment of the Marine Environment
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICES	International Council for the Exploration of the Sea
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
ISA	International Seabed Authority
IUU Fishing	Illegal, Unreported and Unregulated fishing
London Protocol	1996 Protocol to the Convention on the Prevention of Marine
	Pollution by Dumping of Wastes and Other Matte
LOSC	1982 United Nations Convention on the Law of the Sea
Madrid Protocol	1991 Protocol on Environmental Protection to the Antarctic Treaty
MARBEF	Network of Excellence on Marine Biodiversity and Ecosystem Functioning
MCSCE	Monitoring, Control, Surveillance, Compliance and Enforcement
MOU	Memorandum/a of Understanding
MPA	Marine Protected Area
NAMMCO	North Atlantic Marine Mammal Commission
NASCO	North Atlantic Salmon Conservation Organization
NEAFC	North East Atlantic Fisheries Commission
OSPAR	Commission for the Protection of the Marine Environment of the North East
	Atlantic
ROMO	Regional Ocean Management Organization
RFMO	Regional Fisheries Management Organization
SEA	Strategic Environmental Assessment
SPRFMO	South Pacific Regional Fisheries Management Organization
UNFSA	1995 UN Fish Stocks Agreement
UNGA	United Nations General Assembly
UNICPOLOS	United Nations Informal Consultative Process on Oceans and Law of the Sea
UN Working Group	Ad Hoc Open-ended Informal Working Group to study issues relating to the
	conservation and sustainable use of marine biological diversity beyond areas
	of national jurisdiction
VME	Vulnerable Marine Ecosystems

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INTRODUCTION

The Workshop on High Seas Governance for the 21st Century (the Workshop) was held in New York City on 17-19 October 2007. The purpose of the Workshop was to explore policy and regulatory options to improve oceans governance in areas beyond national jurisdiction (ABNJ) particularly as they relate to the protection and preservation of the marine environment and marine biological diversity.

The Workshop brought together over 50 leading experts in international marine policy, science, law and economics engaged in academia as well as in the governmental, intergovernmental and non-governmental sectors from Australia, Canada, Chile, China, Fiji, France, Italy, Japan, the Netherlands, New Zealand, Poland, Portugal, South Africa, the United States, the United Kingdom as well as from the United Nations. Participants attended in their personal capacity and the Workshop was conducted under the Chatham House Rule.

The Workshop was an initiative of the Sub-Group on High Seas Governance of the IUCN Commission on Environmental Law and its Specialist Group on Oceans, Coasts and Coral Reefs, a volunteer network of environmental law and policy experts from all regions of the world. It was organized with the cooperation and support of IUCN - The World Conservation Union, the Faculty of Law at the University of New South Wales, Australia, Pace University Law School, the Natural Resources Defense Council (NRDC), the Bard Center for Environmental Policy and Juice Energy, Inc. Major support was provided by Debevoise and Plimpton, LLP, the Australian Mission to the United Nations, the Australian Department of Environment and Water Resources, the JM Kaplan Fund and the Netherlands Ministry for Agriculture, Nature and Food Quality.

THE CONTEXT FOR THE WORKSHOP

For 25 years the 1982 United Nations Convention on the Law of the Sea (LOSC) has served as the legal framework for the governance of the world's oceans. Pursuant to the LOSC, in ABNJ States may enjoy the 'freedoms' of the high seas, including navigation, overflight, laying of submarine cables and pipelines, construction of artificial islands or installations, fishing, and marine scientific research. These freedoms are, however, subject to the rights and obligations and rules laid down in the LOSC, including the general obligations provided throughout the provisions of the LOSC to protect and preserve the marine environment, to conserve marine living resources, and to cooperate for these purposes, as well as other obligations laid down under relevant rules of international law. While the LOSC contains provisions laying down specific obligations aimed at furthering the objectives of the convention, these obligations are mostly of a general nature. Consequently, in furtherance of these obligations, States have adopted, over the years, a number of more detailed agreements regulating specific activities such as dumping, shipping and fishing. Nevertheless, as ocean uses intensify, more gaps in regulation become apparent, while failures to effectively implement the high seas legal regime stand out even further.

Recent discussions in international fora have raised questions as to the ability of the current legal regime to adequately protect the marine environment, including marine biodiversity and vulnerable marine ecosystems, from existing, new, and emerging activities and uses of ocean areas beyond national jurisdiction. The United Nations General Assembly (UNGA) has encouraged States and relevant international organizations to improve the scientific understanding and assessment of marine ecosystems and to consider ways to integrate and improve the management of risks to the marine environment and marine biodiversity within the framework of the LOSC. These issues have been raised through the UN Informal Consultative Process on Oceans and Law of the Sea (UNICPOLOS) and, in 2004, the UNGA established an Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (the UN Working Group). At its first meeting in 2006 most delegations agreed that priority should be given to improving the level of implementation of existing instruments. Although the possibility of a new legal instrument was considered, no consensus on this approach was reached. A second meeting of the Working Group will take place 28 April - 2 May 2008 and it is expected that discussion will focus on the following themes:

a) Addressing the environmental impact of human activities on marine biological diversity beyond areas of national jurisdiction;

b) Enhancing coordination and cooperation among States as well as relevant inter-governmental organizations and bodies;

c) The role of area-based management tools;

d) Genetic resources in ABNJ; and

e) Whether there is a governance or regulatory gap, and if so, how it should be addressed.

Also in May 2008, the Conference of the Parties (COP) to the 1992 Convention on Biological Diversity (CBD) will discuss numerous issues related to marine biodiversity in ABNJ.

THE FORMAT OF THE WORKSHOP

The Workshop was opened by His Excellency Ambassador Robert Hill, Australian Permanent Representative to the United Nations, who delivered the first of four keynote presentations intended to lay the groundwork for further discussions. Participants were then invited to make brief presentations and to share written 'thought pieces' centred on

the themes that will be considered by the Working Group at its next meeting in April – May 2008.

The presentations were followed by discussion of issues raised. Participants then divided into three breakout groups to discuss the issues under the following headings:

- 1) implications of new and emerging oceans uses for oceans governance;
- 2) short-term approaches for improving oceans governance; and
- 3) medium-term approaches for improving oceans governance.

Participants then returned to plenary to discuss their findings.

The Workshop's key findings are summarised below. Although discussions ranged widely, for ease of reference, the Workshop discussions and its key findings are grouped under the Working Group themes noted above, with the addition of the topic "Global and regional approaches to high seas governance".

Summaries of the keynote presentations are attached at Annex 1. Summaries of participants' presentations and discussions are attached at Annex 2. The list of Workshop participants is attached at Annex 3. The agenda for the Workshop is attached at Annex 4.

KEY FINDINGS

1. The Environmental Impacts of Human Activities on Marine Biological Diversity beyond Areas of National Jurisdiction

The marine environment is complex, dynamic and vast. Knowledge of the marine environment and its components, including marine biodiversity, is rudimentary, particularly in ABNJ, which have long been 'out of sight and therefore out of mind'. Scientists estimate that up to 100 million species exist in the oceans, many of which have not yet been documented or assessed. While the oceans have traditionally been considered to be inexhaustible, unlimited and capable of supporting any human activity or use, it is now clear that marine resources are exhaustible and that increasing and intensifying human activities and uses are pushing the oceans to the limits of their ecological carrying capacity. According to the most recent Food and Agricultural Organization (FAO) State of World Fisheries and Aquaculture (2006) more than 75 percent of world fish stocks are reported as already fully exploited or overexploited (or depleted and recovering from depletion). The situation is even more critical for some highly migratory, straddling and other fishery resources exploited solely or partially in the high seas (FAO State of World Fisheries and Aquaculture, 2006). More species of sharks and now corals are listed under the 2007 IUCN Red List of Threatened Species.

It was recognised that effective protection of the marine environment and conservation and sustainable use of its resources requires greater knowledge and understanding of all aspects of the marine environment, including the impacts of both existing and emerging human activities.

1.1 Assessing the state of the marine environment

To address the gaps in knowledge about the marine environment the Workshop participants suggested the following approaches:

- support the assessment of the state of the marine environment in ABNJ as part of the preparatory stage for the Global Reporting and Assessment of the Marine Environment (GRAME), currently underway pursuant to UNGA resolution 60/30;
- support and promote existing and new scientific initiatives such as the Census of Marine Life (CoML) and the Network of Excellence on Marine Biodiversity and Ecosystem Functioning (MARBEF) to understand marine ecosystem functions, processes and services, historic and ongoing impacts, and the potential synergistic consequences of current human uses and the impacts of climate change; and

• convene, with the support of private foundations, a meeting involving physical and social scientists, as well as specialists in oceans policy and the 'Intergovernmental Panel on Climate Change' (IPCC) process, to examine the need, feasibility, and scope of an "Intergovernmental Panel on the Oceans" to better inform oceans policy-making in the same way as the IPCC has done in recent years. It could build on the GRAME process by enhancing understanding of cumulative and synergistic impacts of climate change on ocean systems.

1.2 Evaluation of existing and emerging activities and uses

The adverse effects of activities such as over-fishing or destructive fishing practices, dumping and pollution on the marine environment have been well documented. However, other human activities and uses also have the potential to cause harm. New threats may emerge from the scaling up of existing activities or the extension into high seas areas of traditional uses, including fishing, cable and pipeline laying, artificial installation construction, navigation, and marine scientific research. In addition, new threats are posed by emerging uses such as ocean fertilization (e.g., iron and urea), CO_2 sequestration, bio-prospecting, acoustic thermometry, and floating energy and mariculture facilities.

A fundamental *leitmotiv* that emerged from the discussions was the need for environmental impact assessment (EIA) of all uses and activities with the potential to adversely affect the marine environment. Issues to be considered in operationalising a globally effective EIA regime were identified as including:

- the role of existing international and regional organizations, instruments and arrangements and their coordination;
- the role of, and criteria for, responsible States regarding activities in, or proceeding from, a State, or that are under the control of a national of a State;
- required steps and content of EIAs including elements such as an initial environmental evaluation, triggers for a more comprehensive evaluation, and requirements for ongoing monitoring and cumulative impact assessment;
- decision criteria, including socio-economic aspects; and
- notification, transparency and participation requirements.

Appropriate models for a high seas EIA framework could be found, for example, in the 1991 Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol), the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Protocol), the 1991 Espoo Convention on EIA in a Transboundary Context (Espoo Convention) and its 2003 Kiev Protocol on

Strategic Environmental Assessment, as well as the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

In addition, the following actions were seen as useful for promoting the effective development and implementation of EIA requirements:

- an immediate call on States via an UNGA resolution to control the behaviour of their nationals who are carrying out activities in the high seas in the same manner as States control the activities of their nationals within national jurisdiction, including requiring EIA for their activities. This is particularly urgent at present in light of the plethora of proposals seeking to slow global climate change: for example, using the oceans to sequester CO₂, without full and transparent consideration of the potential impacts on the marine ecosystems and species, or assurance of the effectiveness of the proposals; and
- public and user awareness and education programs to develop a common understanding of the needs and goals of protection of the marine environment in ABNJ and the implications of individual and cumulative effects of human activities on the marine environment, to better inform consumer choices, to provide avenues for public participation in decision-making, and to improve transparency and accountability.

2. Coordination and Cooperation among States as well as Relevant Intergovernmental Organizations and Bodies

High seas management is currently fragmented among a variety of sectoral and geographically based bodies. The international community has recognized a need for greater cooperation and coordination between these institutions. The Workshop identified the need for stronger horizontal and vertical links to be forged among regional environmental protection organizations, other global and regional organizations and mechanisms with sectoral responsibilities for activities in high seas areas such as regional fisheries management organizations (RFMOs), the International Maritime Organization (IMO) and port State control Memoranda of Understanding (MOU).

The Workshop identified the following mechanisms for achieving greater cross-sectoral coordination and stronger regional coalitions for high seas governance:

- revising and strengthening the mandate of an existing agency or process such as the UN Informal Consultative Process on Oceans and Law of the Sea to:
 - serve as an intergovernmental steering mechanism to enhance coordination and cooperation among States as well as relevant inter-governmental organizations and bodies, industry and civil society;
 - contribute to the development of memoranda of understanding and joint programmes of work between and among sectoral and regional bodies and existing multilateral environmental agreements (e.g. CBD, 1979 Convention on the Conservation of Migratory Species of Wild Animals (CMS), 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)); and
 - promote the coherence of United Nations system activities related to ABNJ (for example, through a systematic review of decisions, mandates and scope of related institutions and activities and their level of implementation);
- building stronger regional coalitions of States and non-State actors committed to protecting the marine environment of their own oceanic regions, possibly with the goal of establishing or consolidating regional oceans governance institutions;
- strengthening and extending existing regional arrangements for marine environmental protection, conservation of resources and maritime surveillance and enforcement, and extending their application to proximate high seas areas, learning from experiences in the Antarctic, the North East Atlantic and the Mediterranean;
- adopting a global mechanism to review and endorse programs and measures initiated at the regional level;

- encouraging States, international financial institutions and private donors to enhance their assistance for high seas management and governance; and
- encouraging State members of the Global Environmental Facility (GEF) to consider including the issue of high seas conservation in the possible next extension of the GEF funding cycle and allocation funds for this purpose while continuing to assist in the development of regional oceans management capacity.

Although the focus of the Workshop was on all high seas uses and activities and on high seas governance in general, considerable discussion was focused on the fisheries sector where participants considered that port State and market based measures were a welcome, indeed much needed, supplement to flag State measures. Mechanisms for improving cooperation and coordination within that sector to ensure that all flag States and RFMO member States improve compliance with their international obligations were identified as follows:

- assisting developing States to meet their duties and responsibilities and develop proportionate measures if States, despite assistance, do not meet their obligations under international law. This could involve, for example, the introduction of a variety of incentives for States party to the 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement) to submit to the FAO information on fishing vessels entitled to fly their flags on the high seas as well as the articulation of a range of consequences for those States that do not comply. States not yet party to the Compliance Agreement could be encouraged to submit their data on a voluntary basis through the creative use of incentives;
- building inter-RFMO cooperation through joint meetings, following the example of the joint tuna RFMO meeting, to discuss measures which may include:
 - the recommendations in the 'Recommended Best Practices for Regional Fisheries Management Organizations' (Chatham House, 2007) especially in relation to compliance with RFMO rules, as well as Illegal, Unreported and Unregulated (IUU) fishing activities;
 - joint catch documentation and vessel identification schemes that are consistent across all RFMOs to enable data sharing and coordination;
 - joint positive and negative lists of IUU fishing vessels and substandard flag States;
 - port State and market based measures, including restricting port access for vessels or market access for fisheries products in the case of IUU fishing or substandard flag state performance;

- a unified or coordinated approach to monitoring, control, surveillance, compliance and enforcement (MCSCE);
- the elimination of perverse incentives provided by fishing subsidies that support excess capacity in fishing fleets; and
- $\circ~$ the role that non-fishing States with an interest in the conservation and sustainable use of living marine resources could play in RFMO processes; and
- convening of a High Level Summit amongst key fish-consuming nations/markets (e.g., China, the European Union, Japan, the United States) to develop a common market-based approach to eradicate IUU fishing and substandard flag State performance.

3. The Role of Area-Based Management Tools

Area based management tools, including marine protected areas (MPAs) and broaderbased spatial planning, can offer vital assistance in protecting and preserving marine areas beyond national jurisdiction, in promoting the conservation and sustainable use of biological diversity, and in preventing conflicts between and among user groups. Their inherent integrated nature means that area-based management tools, such as MPAs, offer many benefits that traditional sectoral tools, such as catch, gear and effort controls, cannot. Moreover, closure of portions of the high seas to certain activities has the potential to prevent the loss of marine biodiversity without compromising the social and economic values at stake. However, as noted frequently, such measures are not a panacea and can be undermined if ocean activities and uses in ABNJ are not managed based on compatible principles of protection, conservation and sustainable use.

While stressing that MPAs are only one aspect of area-based management, the participants recognised that in order to meet the 2012 target for networks of representative MPAs to which international leaders committed at the 2002 World Summit on Sustainable Development, significant efforts will be required, particularly given the very low number of existing MPAs in ABNJ at present (seven Antarctic Specially Protected or Managed Areas in the Southern Ocean and one Specially Protected Area of Mediterranean Importance in the Ligurian Sea). In light of the lack of an explicit global framework for MPAs under the LOSC, a combination of short-term and medium-term measures was considered necessary including:

- advancing work on the definition of criteria for ecologically and biologically significant marine areas in need of protection, declining species, vulnerable marine ecosystems (VMEs) and for representative networks of MPAs, as well as on the bioregionalization of the open ocean and deep sea environments at the global and regional scales. The efforts of the CBD Expert Workshop on Ecological Criteria and Bio-geographic Classification systems for marine areas in need of protection (Azores, 2-4 October 2007), the Mexico City Workshop on Bio-geographic Classification Systems (Mexico City, 22-24 January, 2007) and the Scientific Experts' Workshop on Criteria for Identifying Ecologically or Biologically Significant Areas Beyond National Jurisdiction (Ottawa, 6-8 December 2005) provide a solid basis for progress at the 13th meeting of the CBD Subsidiary Body on Technical, Technological and Scientific Advice in February 2008, the UN Working Group in April 2008 and the 9th COP to the CBD in May 2008;
- calling on States to recognize and protect, within the appropriate international framework, VMEs identified by RFMOs in accordance with operative paragraphs 80-90 of UNGA Resolution 61/105 in order to provide consistent and complementary efforts to the fisheries closures;
- requesting that Parties to the CBD, United Nations Environment Programme and the FAO collaborate on the development of data-bases on the deep seabed and open ocean, including data on VMEs and the location of activities likely to cause damage

to such ecosystems, and to encourage States, research institutions, industry and other data holders to freely share relevant information;

- establishing pilot high seas MPAs, including through joint efforts between regional bodies in the designation and possible management of high seas MPAs (e.g., North East Atlantic Fisheries Commission (NEAFC), International Council for the Exploration of the Sea (ICES) and the Commission for the Protection of the Marine Environment of the North East Atlantic (OSPAR) on the Mid-Atlantic Ridge);
- supporting efforts to identify priority areas for protection, to develop initial voluntary agreements among interested States to control the behaviour of their nationals and vessels, and to seek additional protective measures through utilization of existing institutions where possible, e.g., RFMOs, IMO and International Seabed Authority (ISA);
- promoting bioregional mapping and marine spatial planning activities by, among other things, supporting ongoing work at the global level and refining this work at the regional level where necessary;
- encouraging the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to continue its bio-geographical mapping process, to enhance its scientific basis for representative MPA establishment and management; and
- further refining key issues for MPAs, including:
 - Definition and criteria for identification;
 - Selection process;
 - Articulation of the management objective of the relevant MPAs;
 - Requirements for EIA and cumulative impact assessments;
 - Decision and listing process;
 - Role of existing international and regional institutions and organizations;
 - Role of coastal States;
 - Monitoring and enforcement; and
 - Developing/identifying a management body (advising, reviewing, approving/rejecting activities).

4. Genetic Resources beyond Areas of National Jurisdiction

It was thought that there could be interest in moving beyond the debate over whether or not marine genetic resources of the seabed in ABNJ constitute the common heritage of mankind. Rather, it may be possible to find new ways to operationalise the principles of intragenerational and intergenerational equity, inherent in the principle of sustainable development, to all ocean areas beyond national jurisdiction, by re-conceptualizing the oceans as being the 'common concern of humanity'. This would reflect the principle already accepted in the preamble to the CBD that "the conservation of biological diversity is a common concern of humankind".

Although in its infancy, one way to explore the application of the common concern principle is through the analogy of a trust whose proceeds are used to fund institutional management arrangements, or reinvested in conservation and management through, for example, funding enforcement or remediation efforts, for the benefit of future generations. Dispersal of funds to current generations might also be appropriate in certain circumstances.

Both the complexity and the central importance of its resolution to the future of high seas governance were recognised and participants suggested that convening an experts' workshop could help to identify the full range of possible benefit-sharing principles and arrangements related to marine resources and ecosystems services in ABNJ.

5. Whether There is a Governance or Regulatory Gap, and If So, How It Should Be Addressed

5.1 Identifying the governance and regulatory gaps

Although often referred to as 'freedoms', the conduct of all high seas activities is subject to the provisions of the LOSC, including Part XII, which specifies the duty to protect and preserve the marine environment, and to other rules of international law. However, while the LOSC forms the overarching framework for human activities in or affecting ABNJ, it was recognised that a number of governance and regulatory gaps do exist.

Governance gaps identified included:

- Absence of coordination mechanisms or processes to ensure the consistent and coherent application of modern conservation principles and tools such as the ecosystem approach, the precautionary approach, EIA, marine spatial planning and other area-based measures to the full range of ocean-based human activities;
- Limited nature of mechanism(s) to ensure transparency, accountability, and stakeholder participation in ocean legal regimes;
- Limited nature of mechanisms and provisions regarding the equitable use of resources, other than those being developed for the mineral resources of the seabed in ABNJ;
- Absence of a mechanism for assessing the consistency of ongoing and emerging uses of the oceans, including geoengineering and other climate change mitigation and adaptation techniques, with the obligation to protect and preserve the marine environment and its biodiversity; and
- Absence of provisions and mechanisms enabling national or international authorities to have standing to raise claims on behalf of the international community before an international dispute settlement body for breach of State duties to protect the marine environment and biodiversity in ABNJ.

Regulatory gaps identified included:

• The absence of an instrument or mechanism to ensure that modern conservation principles and tools such as the ecosystem and precautionary approaches and areabased measures (derived from the general obligations contained, *inter alia*, in LOSC, the Convention on Biological Diversity (CBD) and the United Nations Fish Stocks Agreement (UNFSA)) are consistently incorporated and/or applied in all existing global and regional instruments that apply to ABNJ.

- Lack of detailed provisions addressing the environmental impacts of non-mining related seabed activities in ABNJ such as marine scientific research, bio-prospecting, laying of cables and pipelines and construction of various types of seabed installations;
- Lack of regulations addressing the increasing environmental impacts from traditional activities such as shipping, marine scientific research, oil and gas exploration, and military activities (e.g., underwater noise) and from new activities which have emerged such as climate change mitigation techniques and the potential construction and operation of floating energy and mariculture facilities;
- Lack of rules or a process to enhance coordination of activities in the high seas water column and activities in the extended continental shelf of coastal States to ensure compatibility with coastal States rights and duties with respect to the resources of the extended continental shelf and flag State rights and duties with respect to high seas fishing, the coastal State, and the marine environment; and
- Lack of effective compliance and enforcement mechanisms at the national, regional and global level.

It was agreed that these governance and regulatory gaps are compounded by failures of implementation which were identified as including:

- Failure of States to adequately implement and enforce the duties in the LOSC to cooperate in the protection and preservation of the marine environment and the conservation and sustainable use of marine biodiversity and to adequately assess, monitor and control the activities of their nationals, as well as processes and activities otherwise under their jurisdiction and control in ABNJ, as exemplified by the absence of specific requirements for EIA; and
- Failure of members of RFMOs and other sectoral or global agreements and arrangements to adequately implement and enforce their obligations under these agreements and arrangements.

5.2 Principles and management tools to be applied to modern oceans governance

To address these gaps it was concluded that modern principles of environmental protection as well as modern conservation approaches and management tools should be applied to oceans governance and management in ABNJ.

Key governance and conservation principles that could be applied to modern oceans governance were identified as including:

- conditional freedoms of activity on the high seas;
- protection and preservation of the marine environment;
- conservation and sustainable use and management of biodiversity;

- cooperation (between States and institutions);
- transparent, science-driven approach to sustainability;
- intergenerational and intragenerational equity;
- precautionary approach including EIA;
- ecosystem approach;
- polluter pays principle; and
- responsibility and accountability.

In addition, most current management thinking is based on the assumption that oceans systems are stable. However, it was noted that the oceans are, in fact, dynamic, unstable, non-linear systems, subject to sudden changes and tipping thresholds. Key conservation approaches and management tools that were identified as appropriate for application in modern oceans management include:

- flexible institutions;
- risk-based management;
- management under uncertainty;
- adaptive management;
- integrated management;
- spatial planning;
- strategic environmental assessment, including cumulative impact assessments, ongoing monitoring, and requirements for remediation measures;
- networks of representative MPAs;
- cross-sectoral coordination mechanisms;
- adequate control of nationals; and
- enforcement of responsible flag State behaviour through performance assessment and through port State, trade and other measures.

5.3 Mechanisms for addressing the governance and regulatory gaps

Possible approaches for addressing these governance and regulatory gaps were identified, ranging from short-term to medium- and long-term approaches spanning the continuum from voluntary to legally binding solutions. It was agreed that a whole 'tool box' of solutions would be necessary and that different options would have to be pursued in parallel.

While much progress could be made at the sectoral and regional levels incorporating both voluntary and binding approaches, ultimately there would be significant advantages in moving towards a binding global agreement as a framework to guide the holistic development and implementation of sectoral and regional efforts.

Actions that could be included in this toolbox were identified as follows:

• Revising, updating and/or broadening the mandates of regional bodies.

- Expanding and enhancing the responsibility of States within a region for further developing integrated management on a regional basis, for example through establishment of Regional Ocean Management Organizations (ROMOs), or through strengthening cooperation among or between existing global and regional institutions, agreements and arrangements (such as MOUs, joint programmes of action,)
- Reforming RFMOs and performance assessment, audit and evaluation;
- Establishing criteria for conducting flag state performance assessment, audit and evaluation;
- Implementing and enhancing MCSCE mechanisms;
- Developing informal agreements and codes of conduct on marine scientific research, cable laying, bioprospecting and other activities, particularly in the short term;
- Reforming and where necessary developing new sectoral agreements modelled, for example, on the current initiative to develop a legally binding instrument on minimum standards for port State measures building upon the FAO Port State Model Scheme and the International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing;
- Developing interagency cross-sectoral coordination mechanisms as discussed in section 2 above;
- Establishing default mechanisms for interim regulation of new and emerging activities pending establishment of formal regulatory measures (e.g., the agreement on interim measures to control high seas bottom trawling, which are in effect pending the establishment of the South Pacific Regional Fisheries Management Organization (SPRFMO));
- Promoting the adoption by the UNGA of a Declaration on Principles of Oceans Governance reasserting the principles which have been developed in international law since the adoption of the LOSC, including those principles found in the 1995 UN Fish Stocks Agreement (UNFSA) such as the principles relating to the precautionary approach, ecosystem approach, protection of biodiversity and complementarity), as a measure against which institutions can assess their existing mandates to ensure that they incorporate modern international norms and best practice and to guide States in the responsible conduct of high seas activities and in developing their national regulatory frameworks to that end; the declaration could also identify consequences for failure to comply with the obligations set forth therein;
- Convening of an expert workshop to elaborate potential options for a new global instrument, based on the LOSC, for the protection and preservation of the

marine environment and conservation and sustainable management and use of marine biodiversity in ABNJ;

- Establishing a global framework on principles and approaches for regional implementation;
- Establishing a new comprehensive legally binding global instrument.
- Convening of a high level Oceans Summit to focus attention on the need for enhanced protection of the oceans within and beyond national jurisdiction. This would have to be spearheaded by governments at high levels and preferably involve the UN Secretary General. Options for a Global Oceans Summit might include a high level meeting at the 9th COP to the CBD in Germany during May of 2008, the IUCN World Conservation Congress in Barcelona in October 2008, or a stand-alone conference during 2009.

Possible key elements of a new global instrument were discussed and identified as follows:

- Objective and scope (to cover areas beyond national jurisdiction (high seas and the Area));
- General principles;
- EIA and strategic environmental assessment requirements;
- Spatial and area-based management tools, including MPAs;
- Monitoring and assessment of the status of the marine environment and biodiversity in ABNJ;
- Minimum requirements/guidance for competent international and regional organizations;
- Monitoring, compliance and enforcement;
- Institutional underpinning, including identification/establishment of at least an interim default authority to regulate activities not expressly covered by existing institutions as well as possibly expanding the mandates of existing bodies/ institutions and/or creating a new institution or process;
- Consideration of developing States, including capacity building and cooperation to assist them in complying with their environmental responsibilities under the LOSC;
- The potential need for further specific annexes to assist in the implementation of the marine environmental responsibilities set out in the LOSC; and
- Clarification of the relationship between global framework and regional agreements.

6. Issues for Further Discussion

A number of other issues were raised during the Workshop but due to time constraints these were not fully addressed. They included:

- Dispute settlement mechanisms, including the possible use of the International Tribunal for the Law of the Sea (ITLOS) jurisdiction to provide advisory opinions;
- The applicability of mechanisms to address non-compliance such as those currently existing in multilateral environmental agreements (MEAs); and
- The principles and potential arrangements related to the concept of intergenerational and intragenerational equity (fairness to present and future generations) with respect to marine resources and ecosystem services in ABNJ.

Finally, it was considered that all of the issues discussed would benefit from more detailed and comprehensive analysis and consideration of the practical aspects of implementation, and that future discussions would benefit from participation of an even broader range of expertise.

Annex 1 - KEYNOTE PRESENTATIONS

Keynote 1. The Challenge of High Seas Governance: Scientific, Economic and Legal Issues – H.E. Ambassador Robert Hill, Permanent Representative to the United Nations

Amb. Hill began his presentation by speaking of the importance of the issue of high seas governance for Australia and of his personal experience in promoting this issue during his time as Minister for the Environment and Minister for Defence. He then turned to address the scientific, economic, and legal issues relating to high seas governance. Noting the traditional sectoral approach to governance in areas beyond national jurisdiction he highlighted the lack of coordination between the elements of a highly fragmented institutional and legal structure, which hinders the overall effectiveness of high seas governance.

On the scientific aspects of high seas governance, Amb. Hill noted that it was imperative that areas of high biodiversity value be identified to ensure the protection of vulnerable marine ecosystems. Economic challenges arise from the failure to incorporate into policy settings the indirect and potential long-term value of marine ecosystem services. In the fisheries context, limited resources for high seas enforcement militates in favour of greater consideration and use of market-based and port State measures. Best practice in this regard should be replicated across all RFMOs. States should also work to reduce the economic drivers of unsustainable fisheries, including the elimination of perverse fishing subsidies.

In discussing the legal challenges, Amb. Hill noted that the application of international law instruments to the high seas is fragmented and somewhat incomplete - he encouraged the workshop to identify both short and long-term responses to these deficiencies, as well as possible cross-sectoral solutions. He highlighted that RFMOs needed to be a part of broader efforts to conserve high seas biodiversity by addressing holistically the drivers and effects of IUU fishing. There was also scope to consider options for better regulating bioprospecting, and the establishment of high seas marine protected areas.

Amb. Hill concluded by noting that an effective high seas regime required finding a balance between sustainable use and conservation. While such a balance could be supported through better implementation of existing frameworks, we should also keep our minds open to possible architectural changes in the medium to long term.

Keynote 2: Principles Applicable to Modern Oceans Governance – Dr. David Freestone

Dr. Freestone's presentation addressed the question: where have we come from and where do we need to go? He traced the evolution, from 1958, of the existing international law principles on which developments in high seas governance could be built. He noted that the LOSC already subjects the exercise of a number of the freedoms of the high seas to important restrictions. For example, States, whose nationals are exercising freedom of fishing under Articles 116 and 117 of the LOSC, are required to ensure that they comply with international law and their treaty obligations and that they cooperate with the nationals of other States in taking measures to conserve the living resources of the high seas. The LOSC also imposes unequivocal obligations to protect and preserve the marine environment and to protect and preserve rare or fragile species and ecosystems in all parts of the marine environment, as well as the habitat of depleted, threatened or endangered species and other forms of marine life (Arts 192 and 194(5)).

Dr. Freestone then pointed out that the UNFSA has moved this agenda even further forward for straddling fish stocks and highly migratory fish stocks. Parties to the UNFSA have committed themselves to the sustainable use of such stocks and to an ecosystem approach and a precautionary approach to the conservation of these stocks. The UNFSA addresses free riders by restricting the rights of non-members of RFMOs, and introduces the power for port States to take enforcement measures. By establishing the parameters for the exercise of what could be called a "conditional" freedom to fish, the UNFSA supported long-term sustainability of highly migratory and straddling stocks and promoted their optimum utilization. Nevertheless, he noted that there was still a need for modern governance structures to be effectively implemented in many RFMOs, including transparent science driven decision-making processes and a need for expanded enforcement of RFMOs conservation and management measures.

Although the UNFSA only applies to certain species, the principles upon which it is based could form the basis for a more widely applicable modern ocean governance regime. General international law also recognizes important general principles, which would also be applicable. In addition to "the duty to cooperate with one another … in the various spheres of international relations" international law now recognizes the new paradigm of "sustainable use" or "sustainable development" as called for by instruments such as the 1992 Rio Declaration and its Agenda 21 and by the International Court of Justice in the 1997 *Gabcikovo-Nagymaros* case.

In addition, it would be useful to develop the concept of States acting "responsibly" – as they are called upon to do in the 1995 Code of Conduct for Responsible Fisheries. The concept of "responsible" high seas activities can be seen as a manifestation of the general duty on States not to allow their nationals to cause damage to other States or to areas beyond national jurisdiction. Dr Freestone asked whether, given the depleted state of many capture fisheries, there was a general duty on States to ensure that their nationals fish in conformity with applicable conservation and management measures; breach of which duty might justify counter-measures.

He concluded by proposing a first draft of the general principles that should be recognized as applying to all high seas activities:

- "Conditional" freedom of activity on the high seas;
- Protection and preservation of the marine environment;
- Conservation and sustainable use and management of marine biodiversity
- Cooperation;
- Transparent, science-driven approach to sustainability;
- Precautionary approach;
- Ecosystem approach; and
- Responsibility.

Keynote 3. Managerial and Legal Gaps in the High Seas Governance Regime – Dr. Erik Jaap Molenaar

Dr. Molenaar addressed the issues of regulatory and governance gaps in the context of integrated oceans governance as well as equitable use of ocean resources, including a case study on the North East Atlantic. He began by noting the fundamental governance gap which arises as a result of the absence of checks and balances on the exercise of State sovereignty embodied in the concept of primacy of flag State jurisdiction in ABNJ. As examples he referred to the effects of sovereignty on lack of participation in and implementation of relevant legal regimes, difficulties engendered by consensus decision making, and the lack of application of powers by competent international organizations in ABNJ. He then identified a range of regulatory gaps including gaps in high seas coverage with RFMOs and arrangements, the inadequate global coverage of regional seas conventions and the lack of coordination and cooperation between the fisheries and environmental sectors. Among the reasons for these gaps are lack of capacity and willingness and political disputes.

Some of the main substantive gaps are the non-applicability of the UNFSA to discrete high seas fish stocks, lack of clarity on the applicable regime to bioprospecting for marine genetic resources in ABNJ and lack of clarity on the interaction between the regime of the high seas and the regime of the outer continental shelf. Dr. Molenaar also noted that no regulatory regime exists for a number of existing maritime activities on the high seas including marine scientific research, bioprospecting, the laying of cables and pipelines and military activities. No regulatory regime exists for emerging and new activities, including, CO2 sequestration, floating installations and deep sea tourism. In addition there are no global rules elaborating on the basic requirements in the LOSC and the CBD for EIA relating to any of these existing and emerging activities and uses. These gaps hinder achievement of integrated ecosystem based oceans governance on the high seas.

Dr. Molenaar then presented a case study on the North East Atlantic. He explained that it now has 100% spatial coverage by multilateral organizations with complementary

mandates and increasing inter-institutional coherence. Those organizations include the Commission for the Protection of the Marine Environment of the North-East Atlantic (OSPAR), International Commission for the Conservation of Atlantic Tunas (ICCAT), North Atlantic Marine Mammal Commission (NAMMCO), North Atlantic Salmon Conservation Organization (NASCO), NEAFC and ICES. He noted that this is a unique situation for a marine region except for the Antarctic Treaty system. The OSPAR Commission has responsibility for regional implementation of the CBD and authority by default for monitoring and assessment of activities on the high seas and the establishment of MPAs. Shortcomings of the system, however, included the failure by ICCAT to adopt the ecosystem approach and the failure by NEAFC and OSPAR to properly operationalize it. In addition he noted the absence of any regulation of many activities and limitations on participation in the regional organizations. More serious shortcomings included the lack of OSPAR's authority over other sectors in the region and the lack of any overarching strategy or division of competence between sectors in the region. Even if regional States were to agree on an overarching strategy or competence, this still did not protect transoceanic species, establish a global network of MPAs or establish international minimum standards for regulating currently unregulated activities. It also did not address compliance by non-participating States or establish a level playing field between regions by adopting consistent standards.

Turning to the basic requirements he considered necessary for effective governance of ABNJ, Dr. Molenaar suggested the need for modern regulatory tools to designate MPAs on the high seas and to regulate activities in them. EIA requirements and the precautionary approach should be operationalised for all high seas activities and a globally applicable default mechanism for existing, emerging and new activities on the high seas should be established in the absence of global and regional regimes. In this respect he suggested that UNGA Resolution language on bottom fishing may provide a model for such a default mechanism. To preserve inter-generational equity he suggested articulation of the concept of a right to marine biodiversity, which encompasses both the right to use and the right not to use biodiversity now and in the future. Finally he noted that sectoral governance of high seas activities was no longer sufficient and that cross-sectoral coordination and cooperation was necessary.

Keynote 4. Global Approaches to High Seas Governance - Professor Rosemary Rayfuse

Professor Rayfuse examined the underlying juridical basis for high seas governance. She began by noting that the freedom of the high seas had never been absolute but was subject to restrictions adopted by the international community, in the LOSC and other rules of international law and suggested that the time had come for the application of a communitarian approach based neither on further extension of coastal State jurisdiction nor on the traditional unregulated freedom of users, but on accommodation of the multiple and complex competing political, economic, social, technological, scientific, biological and other interests through integrated, holistic and comprehensive regulation of all high seas uses and activities in the common interest of all States. Referring to the tension between the common property regime of the water column and the calls for broader application of the common heritage regime of the deep seabed minerals regime, she suggested a common ground could be found in the application of the principles of international public trusteeship already evidenced in other areas of international law, including the World Heritage Convention and the UNFSA. She then applied this concept to the high seas, identifying the essential elements that would be necessary to achieve the goal of comprehensive, integrated (cross-sectoral) governance which regulates access to and use of the high seas and its resources in the common interest of all States and which fills the gaps that had been identified by previous speakers. She noted that these elements are consistent with existing and emerging State practice and *opinio juris*.

Professor Rayfuse noted that application of the trust analogy had implications for individual and collective State responsibility and the ability to enforce the terms of the trust. Identifying the inadequacy of traditional reliance on flag State jurisdiction to protect the interests of the international community she highlighted the existence of secondary jurisdiction in non-flag States and suggested the need for articulation of clear criteria and standards for its invocation in respect of all high seas activities and uses. She also noted the need for development of global standards, guidelines, requirements of best practice and oversight mechanisms to monitor the performance of all high seas institutions such as RFMOs and other sectoral treaty regimes.

With respect to institutional design Professor Rayfuse suggested a decentralized model with a global instrument setting out the terms of the trust and the principles for its enforcement and review, but leaving specific authority for implementation to regional and sectoral instruments. This, she analogized to a cross-sectoral version of the UNFSA, which sets out globally applicable principles, duties and standards, while leaving management to regional bodies. Alternatively, she suggested a centralized model involving the establishment by global agreement of a new international organization charged with all aspects of high seas governance and management. In either case, a global instrument was necessary, she suggested, to provide a global imprimatur of global norms and to coordinate the parallel strands of sectoral and integrated marine environmental protection activity.

Annex 2 -- THOUGHT PIECES AND DISCUSSION

1. Addressing the Environmental Impacts of Human Activities

The absence of EIA provisions regulating activities in most areas of the high seas was a key concern of a number of participants. Several speakers noted the need for international standards for EIAs and ongoing monitoring of environmental impacts in ABNJ. Existing models such as those used in the Antarctic Treaty System, the International Seabed Authority (ISA) and the Espoo Convention could be drawn on to assist in this process, such as an instrument providing detailed standards and procedures for EIA and strategic environmental assessment (SEA) for activities that may impact ABNJ. It was also noted that environmental protection measures developed for the high seas need to be compatible with those developed for both the seabed beyond national jurisdiction and for areas subject to national jurisdiction.

In the short term, a number of participants suggested that a system could be put into place requiring States to notify others of new or intensifying activities in the high seas by vessels or nationals under their jurisdiction or control, combined with requirements to assess the likely impact of such activities and to continue to monitor for actual and potential cumulative effects on the marine environment. This information should be readily available to all States and civil society through a web-based system.

It was also pointed out that the assessment of environmental impacts could benefit from the ultimate establishment of a regular process for global reporting and assessment of the state of the marine environment. The preparatory stage for the GRAME was launched by the UNGA in 2005. It is contemplated that a 'regular process' would build on and strengthen existing regional assessments and examine inter-regional linkages. However, more may be required to factor in global environmental trends such as climate change, marine acidification, shifting currents, sea level rise and the melting of the polar ice caps. As natural systems are dynamic and subject to rapid change, high seas management systems must be similarly dynamic, adaptive and responsive to changing conditions, information and emerging uses. This indicated a need for an ongoing global process for scientific assessment and advice to assist States and intergovernmental bodies to more effectively operationalize the precautionary and ecosystem approaches.

2. Enhancing Coordination and Cooperation among States as well as Relevant Intergovernmental Organizations and Bodies

Many participants noted that while the high seas need to be managed in a more integrated way, the duty to cooperate in the protection and preservation of the marine environment and the conservation of biodiversity in ABNJ was not well developed, despite being required in existing instruments such as the LOSC and the CBD. As a result, existing institutions such as RFMOs and most regional seas organizations were not well equipped to protect marine biodiversity in ABNJ. Mechanisms were therefore needed to improve the coordination of efforts to address threats to marine biodiversity in these regions. At the global level, it was noted that UN-Oceans and the United Nations Informal Consultative Process on Oceans and Law of the Sea (UNICPOLOS) might be used more effectively to enhance cooperation and coordination through an expansion of their respective mandates.

At the sectoral level, the importance of the FAO initiative in developing an international instrument on port State measures was appreciated, but it was noted that the two port State control systems -- to enforce conservation and management measures for high seas fisheries and to enforce pollution prevention and safety requirements on ships -- would benefit from greater coordination at the global level to prevent the development of 'ports of convenience'. Further coordination of agreed reciprocal boarding and inspection schemes could be developed and applied across sectors to enforce biodiversity conservation and other marine environmental measures beyond national jurisdiction. Other coordination measures recommended included standardising data collected by RFMOs, such as vessel identification information; standardising EIA processes across institutions regulating activities beyond national jurisdiction; and, building on the review of RFMOs as called for by the UNFSA Review Conference in 2006 and reiterated by the FAO Committee on Fisheries (COFI) in 2007 in the context of supporting more rigorous application of UNFSA and the development of common criteria for the evaluation of core functions and obligations of RFMOs, encouraging the conduct of audits of the performance of RFMOs and other sectoral bodies to highlight areas in need of strengthening. The need for and benefits of involving marine scientists and relevant industry bodies throughout these processes were emphasized many times.

3. Role of Area-Based Management Tools in Managing Multiple Human Activities

Some participants commented that large-scale marine spatial planning was a key component of implementing an ecosystem-based approach to managing the marine environment beyond national jurisdiction. Others noted the need for a global network of marine protected areas including in ABNJ. They noted that States had committed to this at the 2002 World Summit on Sustainable Development, as reflected in the Johannesburg Plan of Implementation, and subsequently reaffirmed this commitment in the context of the COP to the CBD and the UNGA. Still others suggested a greater role for regional organizations in managing marine protected areas beyond national jurisdiction, but noted that these organizations would need to have a cross-sectoral focus to ensure that all activities and impacts affecting particular areas were taken into account. The potential for conflicting management measures was illustrated by the example of a situation in which seabed mining might be approved by the ISA on a seamount in waters currently subject to RFMO conservation measures.

One participant advocated a framework of place and ecosystem-based solutions to marine environmental management using the Arctic as a model. Another participant described a system of marine bioregional planning based on ecological sustainability and key ecological characteristics of particular regions, which was being implemented in areas under Australian jurisdiction. While it was difficult to achieve consistency across sectors in implementing ecological sustainability, this approach was already achieving some success and hence could provide a potential model for areas beyond national jurisdiction. Another participant noted how CCAMLR, through its bioregionalization efforts, seeks to identify a representative network of MPAs which reflects the broad range of ecosystems that exist in the Southern Ocean. To address the fact that interconnectivity between the pelagic and benthic regions of the ocean are not very well understood, one of the proposals was to create two separate bioregionalisation schemes for the pelagic and benthic zones. Some participants were in favour of drawing on the experiences of those regions which are most advanced in integrated oceans management and biodiversity conservation such as the Antarctic, North East Atlantic and the Mediterranean in order to develop overarching global standards for ABNJ which would include the establishment of MPAs and other place-based management tools, as well as larger-scale marine spatial planning.

4. Managing and Conserving Marine Genetic Resources

There was general agreement among participants that marine genetic resources are a difficult issue but that the interests and needs of developing countries must be taken into account however the issue was handled. One participant argued that as the development of a binding legal regime will take time, existing norms should be made more explicit and soft law principles should be developed in the form of a UNGA Declaration or Code of Conduct to guide these activities in the interim. Another participant examined the existing international law provisions which could apply to marine genetic resources under the LOSC and options for building on those provisions to design a management regime for marine genetic resources beyond national jurisdiction. These options included classifying such resources as marine living resources, applying the principles of sustainable and equitable development, or expanding the mandate of the ISA to encompass marine genetic resources.

The question as to whether marine genetic resources in the Area as defined in the LOSC should be considered the common heritage of mankind or subject to an open access regime was also addressed with at least one participant in favour of the former option. Some speakers advocated deferring consideration of benefit sharing in these resources until a system of access and protection was established. Others suggested avoiding a discussion of regulating 'access' and concentrating instead on developing agreement on certain aspects of benefit-sharing and further development of the LOSC regime to ensure notification and reporting of any activities and avoid adverse impacts on marine biodiversity. Still others noted the need to include equitable considerations with respect to all marine living resources and ecosystem services, particularly the principles of intergenerational and intragenerational equity, into discussions of high seas governance.

5. High Seas Regulatory and Governance Gaps

Participants commented on a wide range of regulatory and governance gaps identified in Dr. Molenaar's presentation in the regime for marine areas beyond national jurisdiction. There was a general view that while a variety of approaches including, short-term, medium-term, sectoral, and integrated non-binding and binding approaches were needed to address these gaps, some form of global overarching strategy was required to guide and enhance high seas governance. Many participants favoured an approach that built on existing legal instruments such as the LOSC, the CBD and the UNFSA to provide a set of global principles for best practice management of ABNJ to be implemented by organizations of States and other non-State actors at the regional level.

Various models and options were discussed including an Implementing Agreement to the LOSC as proposed by the EU and NGOs and non-legally binding options such as a Declaration of Principles which might be a transitional measure pending the development of a legally binding instrument. One participant noted the trade-offs between legally binding and non-legally binding systems. States will often agree on more content in non-legally binding instruments since it is easier to change such instruments whereas States and individuals were likely to pay more attention to legally binding instruments. Some participants suggested that establishing the substantive elements of a possible regime should be a priority rather than the form in which these are established.

There was considerable consensus among the participants on many of the key elements, to be included in such a global instrument or set of principles. These elements are:

- the obligation to conserve and sustainably use biodiversity and its components in ABNJ and to protect the marine environment;
- the requirement for EIAs of human activities in such areas;
- the ability to implement marine protected areas including in ABNJ;
- the need to accommodate new, emerging and intensifying uses of the high seas under the umbrella of such an instrument or set of principles;

• the application of modern oceans governance and management principles such as the precautionary approach, ecosystem based management and the polluter pays principle; and

• a coordination mechanism/cooperation procedure.

There was also discussion of the need to build political will for such an instrument and the need to include elements reflecting the differing capacities of developed and developing countries to implement its provisions. Various methods of increasing public awareness and understanding of high seas issues were also discussed including further emphasis on the human impact of a collapse of ocean resources. The need for some form of global endorsement of regional conservation and management measures in ABNJ was also acknowledged.

6. Global and Regional Approaches to High Seas Governance

Participants also commented on the wide range of implementation gaps that may need to be addressed at both the global and regional levels. In the particular context of high seas fishing activities, it was noted that reliance on flag State jurisdiction to enforce conservation and management measures for fish stocks has proven ineffective as many States may lack the capacity and/or the political will to enforce these measures on the high seas. The inability to enforce RFMO measures against non-members risks severe over-exploitation of fisheries in high seas areas unless cooperative surveillance and enforcement arrangements can be improved. Consensus decision-making and objection procedures within RFMOs further hinders RFMO effectiveness and they need to focus more attention on securing compliance with conservation and management measures by their own members.

Options for more effective compliance and enforcement of conservation and management measures for fish stocks included: the further expansion of reporting systems and vessel monitoring; the strengthening of non-flag State enforcement methods such as port State controls and trade related measures; and involving industry and NGOs in the compliance and enforcement efforts. Given the global nature of modern high seas fishery activities, to be truly effective such measures would need to be harmonized at the global level. One participant suggested that a system of review of flag State performance should be introduced so that if flag States failed to control their vessels they would be in breach of their obligations and internationally responsible. It would be necessary to identify the steps that could then be taken by other States but these would include the non-flag State measures mentioned above. It was considered important to identify the responsible flag State and not just the responsible vessel to be able to invoke international sanctions. Another participant suggested that a possible solution to the so called 'new entrant problem' would be to combine vigorous action against unregulated fishing with a scheme to enable non-members to buy or lease quotas or allocations from original members of RFMOs as set forth in the 'Recommended Best Practices for Regional Fisheries Management Organizations' (Chatham House, 2007).

Annex 3 - List of Participants

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Annex 4 – Workshop Agenda

Experts' Informal Workshop on High Seas Governance for the 21st Century Agenda

Wednesday 17 October 2007

9.00- 9.15	Welcome coffee	
9.15- 9.30	Opening and Introduction Co-Chairs: David VanderZwaag, Dalhousie University, Kristina M. Gjerde, IUCN Global Marine Program	
	(Rapporteurs: Lisa Speer and Robin Warner)	
9.30	The challenge of high seas governance: scientific, economic and legal issues – HE <i>Ambassador Robert Hill, Australia</i>	
9:55 Freesto	Principles Applicable to Modern Oceans Governance <i>David</i> one, World Bank	
10.20 -10.40	Morning Tea	
10:40 - 13:00	Possible Governance Mechanisms for the 21 st Century	
10:40	Managerial and legal gaps in the high seas governance regime – <i>Erik</i> Jaap Molenaar, Netherlands Institute for the Law of the Sea (NILOS).	
11.05	Global approaches to high seas governance – <i>Rosemary Rayfuse</i> , <i>University</i> of New South Wales, Australia	
11.30	Discussion	
12.50	Chair's Summary	
13.00 - 14.00	Lunch	
14.00- 16:00	Plenary session: A series of informal thought-pieces (~5 minutes) by participants. Thou pieces may address one or all of the following issues. (Short backing papers a welcome):	
	 Addressing regulatory and governance gaps Enhancing coordination and cooperation Role of area-based management tools Addressing marine genetic resources Global and/or regional approaches 	

16: 00 – 16.20 Afternoon Tea

16.20 -18:00 Facilitated discussion: responses to thought pieces

18:00	Day's Close
18.30	Cocktail reception at Jane K. Rosen
	Thursday 18 October 2007
9.00 – 9.15	Opening and instructions to participants. Co-Chairs: <i>David Freestone and Rosemary Rayfuse</i>
9.15 – 10:45	Break-out groups (3) Discussions on options for improving High Seas Governance, setting out pros and cons for each in order to develop an annotated list of options/ recommendations that acknowledges differences while building a common understanding Working Group Chairs: Hans Nieuwenhuis, Donna Petrachenko and Tullio Treves/Dire Tladi
	(Rapporteurs: Peggy Kalas, Dionysia-Theodora Avgerinopoulou and Tanya Rosen)
10.45 - 11.00	Morning Tea
11.00 -12.30	Continued group discussions
12.30 - 13.30	Lunch
13.30 -15.30	Continued group discussions
15.30 -15.45	Afternoon Tea
15.45 - 16.30	Rapporteurs of each group present their reports (15 minutes each)
16:30 - 17:45	Plenary discussion. Development of draft outcomes.
17.45 - 18.00	Co-Chairs' summary
18.30 Cockta	ail reception at Australian Mission to the United Nations
	Friday 19 October 2007
9.00 – 9.15	Opening : Co-Chairs: <i>David Freestone and David Vanderzwaag</i>
9:15 - 10.30	Plenary review of consolidated draft outcomes.
10.30 - 11.00	Morning Tea
11:00 -12:30	Continued review
12:30 - 13:00	Co-Chairs wrap up and workshop closure
13.00 - 14.00	Lunch and farewell



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