# Ad Hoc Open-ended Informal Working Group of the General Assembly to study issues related to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction

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**(Please check against delivery)**

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## Agenda Item 4: Aspects of the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, including activities of the the United Nations and other relevant international organizations

Mme/Mr. Co-Chair,

IUCN the International Union for Conservation of Nature helps the world to find pragmatic solutions to our most pressing environment and development challenges. Recognizing the need to conserve, manage and ensure the sustainable and equitable use of the world's natural resources, we bring governments, non-government organizations, United Nations agencies, companies and local communities together to develop and implement policy, laws and best practice.

IUCN's members, who include governments and nongovernmental organizations, adopted a resolution[1] at the World Conservation Congress in Barcelona in October 2008 that called *inter alia* to:

- enhance efforts under current arrangements and agreements to protect the marine environment and biodiversity in areas beyond national jurisdiction, including inter alia, to identify ecologically and biologically significant areas using scientific criteria and guidelines of the CBD and other relevant criteria, to protect habitats and species in such areas through the application of multiple tools including the establishment of MPAs, and to facilitate the development of representative networks of MPAs in areas beyond national jurisdiction;
- promote arrangements, processes and agreements that ensure the consistent, coordinated and coherent application of the best conservation and governance principles and approaches, including integrated ecosystem-based management and the precautionary approach;

[1] WCC4.031 Achieving conservation of marine biodiversity in areas beyond national jurisdictions

- examine the need for further agreements to implement UNCLOS with respect to the conservation and protection of the marine environment and marine biodiversity in areas beyond national jurisdiction;…
- develop assessment processes, including the assessment of cumulative impacts, of human activities with a potential for significant adverse impacts on the marine environment, living marine resources and biodiversity in areas beyond national jurisdiction; and
- ensure that assessed activities with the potential for such significant adverse impacts are subject to prior authorization by states responsible for nationals and vessels engaged in those activities, consistent with international law, and that such activities are managed to prevent such significant adverse impacts, or not authorized to proceed;

**Agenda Item 5: Indication, where appropriate, of possible options and approaches to promote international cooperation and coordination for the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction**

IUCN believes we must move forward rapidly to conserve, manage and sustainably and equitably use the marine biodiversity of areas beyond national jurisdiction. The United Nations Conference on Environment and Development in Rio de Janeiro in 2012 provides an important opportunity to secure renewed political commitment for sustainable development, to assess progress to date and remaining gaps in the implementation of previous meetings and agreements and to address new and emerging challenges. For oceans there remain many such challenges.

IUCN believes we need to make progress on identifying and agreeing on the relevant legal regime on marine genetic resources in areas beyond national jurisdiction in accordance with the Convention that will protect the rights of all States, including those that at present do not have the capacity to explore for and develop benefits from those resources. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity may provide ideas for a way forward, including its Annex with an indicative list of monetary and non-monetary benefits.

At the same time, we need to accelerate progress on conservation and sustainable use, including:

1) *Assessments:* States should move forward with agreement to require environmental impact assessments and strategic environmental assessments, including of cumulative impacts, of human activities with a potential for significant adverse impacts on the marine environment, living marine resources and biodiversity in areas beyond national jurisdiction.
2) *Area management and marine protected areas:* States and the relevant organizations should develop cooperative frameworks for marine spatial planning, including the development of representative networks of marine protected areas in areas beyond national jurisdiction. A global agreement, mechanism or process, building on regional efforts and experience, could enhance cooperation, coordination and coherency.
3) *Regional activities*: States should support and expedite regional processes to identify ecologically and biologically significant areas and adopt suitable protections for them. Regional arrangements could be encouraged to pursue new approaches to governance that will promote the conservation and sustainable and equitable development of marine biodiversity in areas beyond national jurisdiction for all.
4) *Global progress*: Progress is also needed on a global basis, noting that the United Nations General Assembly has a central role relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction.

**Agenda Item 5(b): Capacity-building and technology transfer**

We recognize the need for capacity building. As noted last year, IUCN publishes the IUCN Red List of Threatened Species™, the world's most comprehensive, authoritative and objective resource on the global conservation status of plant and annual species, including their global risk for extinction. It is available online at www.iucnredlist.org. With reference specifically to marine biodiversity, IUCN published in 2008 a "Red List Status of the World's Marine Species" in which it was noted that the number of marine species that had been assessed lagged far behind those of the terrestrial world. To fill this knowledge gap, IUCN with partners including Conservation International and Old Dominion University undertook a Global Marine Species Assessment to assess over 20,000 marine species by 2012. Results to date confirm that marine biodiversity is under threat. IUCN is now also undertaking consideration of the development of a parallel IUCN Red List of Ecosystems, to be modeled after the IUCN Red List of Threatened Species.

With respect to environmental impact assessments, many countries now have experience within national jurisdiction. Principle 17 of the Rio Declaration on Environment and Development adopted at Rio de Janeiro in 1992 proclaimed that "Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority." Agenda 21 contains many references to environmental impact assessments.

UNEP published goals and principles in 1991 and in 2004 published the report "Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach" by Hussein Abaza of UNEP, with Ron Bisset and Barry Sadler, which can be found online. The 2004 report includes case studies that may be helpful to us.[2]

For the application of environmental impact assessment beyond national jurisdiction, the Antarctic Treaty System provides a good example. Assessments have been conducted with respect of activities in Antarctica since at least the 1980s. Parties to the Protocol on Environmental Protection to the Antarctic Treaty have had an obligation since the Protocol came into force in 1998 to conduct assessments, thus they have considerable experience with this. The Secretariat of the Antarctic Treaty maintains on its website a database that lists 814 assessments from as far back as 1988. Many of the assessments listed include links to actual assessment documents from the following countries: Argentina, Australia, Belgium, Brazil, Canada, Chile, China, the Czech Republic, Ecuador, Finland, France, Germany, India, Italy, Japan, the Republic of Korea, Netherlands, New Zealand, Norway, Peru, Romania, the Russian Federation, South Africa, Spain, Sweden, Ukraine, United Kingdom, United States, Uruguay, and Venezuela. Assessment documents are available in the four Treaty languages, English, French, Spanish, Russian, though the plurality are in English. These assessment documents can serve as examples or templates for assessments to be done in areas beyond national jurisdiction. For this reason, this database could be considered as a potential capacity-building source. As assessments are from a number of countries from around the world, this offers opportunities to pursue capacity building and cooperation on a South-South, South-North, North-South and North-North basis.[3]

[2] http://www.unep.ch/etb/publications/EnvImpAss/textONUBr.pdf
[3] http://www.ats.aq/devAS/ep_eia_list.aspx?lang=e

Another example of capacity building with respect of assessment and the marine environment, reflecting practice within national jurisdiction, is offered through the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 and the 1996 London Protocol thereto. Under both agreements, capacity building has long been addressed and technical cooperation and assistance is on the agenda annually at governing body meetings. Through the Convention and the Protocol, regional workshops to assist with the development of capacity have been held. The website current lists reports from eighteen such workshops.[4]

With respect to area-based management tools, some opportunities are available, many of them within regions. For example, countries may be able to share knowledge and best practices through Regional Seas Programs. We expect that the Regular Process of Global Assessment of the Marine Environment also working through regional workshops will build capacity where needed. IUCN is working with partners through the Global Ocean Biodiversity Initiative (GOBI) to help countries and regional and global organizations to develop and use data, tools, and methodologies to identify ecologically significant areas in the oceans. The initial focus of GOBI is on areas beyond national jurisdiction.[5]

IUCN in collaboration with partners including the FAO, UNDP, the GEF and others organized a six-week research expedition to gather data and species from the water column above six seamounts in areas beyond national jurisdiction in the southwest Indian Ocean. The work will directly feed into conservation and management recommendations for the area and inform future management of deep-sea ecosystems in the high seas globally. Expedition scientists from developing and developed countries working together collected pelagic specimens and at a workshop held at the South African Institute for Aquatic Biodiversity identified more than 200 species of fish and 74 species of squid. A second workshop is planned for later this month in Grahamstown, South Africa to consider options to improve the governance framework for high seas of the Indian Ocean and a second cruise later this year will examine benthic fauna with the help of a remotely operated vehicle. More information can be found on line[6].

**Agenda Item 5(e): Environmental impact assessments**

Noting the growing number of uses and activities in the sea while needing to avoid unjustifiable interference with other legitimate uses of the sea, it is urgent to move to a system of ecosystem-based management that includes environmental assessments. The need for an ecosystem approach to ocean management was highlighted to my delegation and other participants at a workshop organized in January 2011 jointly by the Nature Conservancy and IUCN on the management of deep-sea fisheries. A concern expressed there on the part of fisheries managers was the expectation that they apply the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas to assess and avoid significant adverse impacts to vulnerable marine ecosystems in areas beyond national jurisdiction, but that other activities could still occur that would destroy these same ecosystems.

There is a requirement for assessments in the United Nations Convention on the Law of the Sea. Article 206 requires States to assess the potential effects of planned activities under their

[4] http://www.imo.org/OurWork/Environment/SpecialProgrammesAndInitiatives/Pages/London-Convention-and-Protocol.aspx
[5] Further information on the Initiative, including the partners and work plan, is available at http://gobi.org.
[6] Further information is available at the project website at www.iucn.org/marine/seamounts, the cruise blog at http://seamounts2009.blogspot.com/ and a diary on BBC Earth News at http://news.bbc.co.uk/earth/hi/earth_news/newsid_8363000/8363108.stm.

jurisdiction or control that may cause substantial pollution of or significant and harmful changes to the marine environment. Pollution is defined under the Convention to include the introduction of substances or energy into the marine environment. As noise is energy, planned activities with the potential to cause noise that may cause significant or harmful changes to the marine environment are also to be assessed. The London Convention and Protocol on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter also include obligations that Parties assess the need for and the potential impacts of any planned dumping activities allowed under the Convention and the Protocol, including the assessment of potential adverse environmental effects and alternatives[7]. The Protocol specifies that the assessment also consider human health risks and exclusion of future uses of the area. A number of the regional oceans conventions reflect the UNCLOS provisions on assessment.

The United Nations Convention on the Law of the Sea includes a duty to cooperate to conserve and manage the living resources of the high seas. For those Party to the United Nations Fish Stocks Agreement under Article 5 there is an obligation to "assess the impacts of fishing, other human activities and environmental factors on target stocks and species belonging to the same ecosystem or associated with or dependent upon the target stocks". Through United Nations General Assembly Resolutions 61/105 and 64/72 States agreed to require assessments of whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems, and to ensure that if so assessed the activities are managed to prevent such impacts or not authorized to proceed. The FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas provide guidance on how to conduct these assessments.

The FAO Guidelines provide a model as they include the following description of significant adverse impacts with respect to the deep sea:

> 17. Significant adverse impacts are those that compromise ecosystem integrity (i.e. ecosystem structure or function) in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades the long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types. Impacts should be evaluated individually, in combination and cumulatively.
> 18. When determining the scale and significance of an impact, the following six factors should be considered:
> i. the intensity or severity of the impact at the specific site being affected;
> ii. the spatial extent of the impact relative to the availability of the habitat type affected;
> iii. the sensitivity/vulnerability of the ecosystem to the impact;
> iv. the ability of an ecosystem to recover from harm, and the rate of such recovery;
> v. the extent to which ecosystem functions may be altered by the impact; and
> vi. the timing and duration of the impact relative to the period in which a species needs the habitat during one or more of its life history
> stages.
> 19. Temporary impacts are those that are limited in duration and that allow the particular ecosystem to recover over an acceptable time frame. Such time frames should be decided on a case-by-case basis and should be in the order of 5-20 years, taking into account the specific features of the populations and ecosystems.
> 20. In determining whether an impact is temporary, both the duration and the frequency at which an impact is repeated should be considered. If the interval between the expected disturbance of a habitat is shorter than the recovery time, the impact should be considered more than temporary. In circumstances of limited information, States and RFMO/As should apply the precautionary approach in their determinations regarding the nature and duration of impacts.

[7] http://www.imo.org/OurWork/Environment/SpecialProgrammesAndInitiatives/Pages/London-Convention-and-Protocol.aspx

Through the International Seabed Authority's Mining Code, prior assessment is also required. The Mining Code refers to the comprehensive set of rules, regulations and procedures issued by the International Seabed Authority to regulate prospecting, exploration and exploitation of marine minerals in the Area. Though not as yet complete, the Code already includes requirements for prior environmental assessment. For example, the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area include as part of Regulation 18 "Data and information to be submitted for approval of the plan of work for exploration":

> After the Council has designated the reserved area, the applicant, if it has not already done so, shall submit, with a view to receiving approval of the plan of work for exploration in the form of a contract, the following information:
> (a) a general description and a schedule of the proposed exploration programme, including the programme of activities for the immediate five-year period, such as studies to be undertaken in respect of the environmental, technical, economic and other appropriate factors that must be taken into account in exploration;
> (b) a description of the programme for oceanographic and environmental baseline studies in accordance with these Regulations and any environmental rules, regulations and procedures established by the Authority that would enable an assessment of the potential environmental impact of the proposed exploration activities, taking into account any recommendations issued by the Legal and Technical Commission;
> (c) a preliminary assessment of the possible impact of the proposed exploration activities on the marine environment;
> (d) a description of proposed measures for the prevention, reduction and control of pollution and other hazards, as well as possible impacts, to the marine environment;…[8]

Another model for application of environmental impact assessment beyond national jurisdiction is found in Article 8 and Annex I of the Protocol on Environmental Protection to the Antarctic Treaty which entered into force in 1998; 34 States are now Parties to the Protocol. Thus, a number of States have had over a decade of experience with environmental impact assessment for areas beyond national jurisdiction.

During the 8th Session of the ICP in 2007, IUCN provided a presentation on environmental impact assessment beyond national jurisdiction, including information on practice in Antarctica[9]. The Antarctic Treaty Secretariat includes on its website a database that as of April 2010 contained information on 814 environmental impact assessment documents, including a number of actual environmental impact assessment as PDF files.[10]

Further information can be drawn from Report of the CBD Expert Workshop on Scientific and Technical Aspects Relevant to Environmental Impact Assessment in Marine Areas beyond National Jurisdiction which can be found on the CBD website.[11] Work continues under the auspices of the CBD to develop guidelines.

UNEP has also issued goals and principles on environmental impact assessment. These include that States (including competent authorities) should not undertake or authorize activities without prior consideration of environmental effects. Where the extent, nature or location of a proposed activity is such that likely to significantly affect the environment, a comprehensive environmental impact assessment should be done. States should seek through bilateral, regional or multilateral arrangements to provide on reciprocal basis notification, exchange of information,

[8] http://www.isa.org.jm/files/documents/EN/Regs/MiningCode.pdf
[9] http://www.un.org/Depts/los/consultative_process/documents/8_abstract_cohen.pdf
[10] http://www.ats.aq/devAS/ep_eia_list.aspx?lang=e
[11] http://www.cbd.int/doc/?meeting=EWEIAMA-01

and consultation on potential environmental effects of activities under their control or jurisdiction which are likely to significantly affect other States or areas beyond national jurisdiction. When information provided as part of an EIA indicates that the environment within another State likely to be significantly affected, the State should notify potentially affected States of proposed activity; transmit relevant information from EIA, and when agreed, enter into timely consultations. Before a decision is made on an activity, government agencies, members of the public, experts in relevant disciplines and interested groups should be allowed appropriate opportunity to comment on the EIA. The decision on any proposed activity subject to an EIA should be in writing, state the reasons therefore, and include the provisions, if any, to prevent, reduce or mitigate damage to the environment. This decision should be made available to interested persons or groups.[12]

As noted above, UNEP has also published in 2004 "Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach" by Hussein Abaza, Ron Bisset and Barry Sadler. The report, while noting that EIA and SEA are developing quickly also notes the fundamentals of EIA and SEA remain good practice; thus the report can be expected to remain relevant. The report cites a number of examples of how countries around the world have developed their practice, thus serving as a useful source of information[13].

Under the United Nations Economic Commission for Europe, States have developed the Espoo Convention on Environmental Impact Assessment in a Transboundary Context. This Convention provides that Parties are to prepare and share environmental impact assessments for certain proposed activities, several of which have a marine dimension including offshore hydrocarbon production, large-diameter oil and gas pipelines and certain port facilities, likely to cause a significant adverse transboundary impact. The assessment is to include at a minimum the following:

(a) A description of the proposed activity and its purpose;
(b) A description, where appropriate, of reasonable alternatives (for example, locational or technological) to the proposed activity and also the no-action alternative;
(c) A description of the environment likely to be significantly affected by the proposed activity and its alternatives;
(d) A description of the potential environmental impact of the proposed activity and its alternatives and an estimation of its significance;
(e) A description of mitigation measures to keep adverse environmental impact to a minimum;
(f) An explicit indication of predictive methods and underlying assumptions as well as the relevant environmental data used;
(g) An identification of gaps in knowledge and uncertainties encountered in compiling the required information;
(h) Where appropriate, an outline for monitoring and management programmes and any plans for post-project analysis; and
(i) A non-technical summary including a visual presentation as appropriate (maps, graphs, etc.).

Currently, assessment obligations with respect of the sea are fractured; they do not always include assessment of other legitimate activities in the same area. As described above, some focus on the potential effects of fishing activities, others on pollution, some on the potential effects of mining. They do not capture the effects of cumulative impacts that will harm the marine environment. *To rationalize these obligations, States should move forward with agreement to require environmental impact assessments and strategic environmental assessments, including of cumulative impacts, of human activities with a potential for significant*

[12] http://www-penelope.drec.unilim.fr/penelope/library/Libs/Int_nal/unep/unep.htm
See also http://www.unep.ch/etu/publications/EIA_2ed/EIA_E_top2_hd.PDF

[13] http://www.unep.ch/etb/publications/EnvImpAss/textONUBr.pdf

*adverse impacts on the marine environment, living marine resources and biodiversity in areas beyond national jurisdiction.*

**Agenda Item 5(f): Area-based management tools, in particular marine protected areas**

Looking again at concerns about unjustifiable interference with other legitimate uses of the sea and noting the growing and potentially conflicting uses and activities in the sea, ecosystem-based management or an ecosystem approach to oceans management points to the need for the management of ocean space across sectoral lines. Marine spatial planning is a concept that has been explored more broadly within areas subject to national jurisdiction and is also relevant to areas beyond national jurisdiction. The UNESCO Intergovernmental Oceanographic Organization web site describes marine spatial planning as "a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process."[14] Thus, marine spatial planning is supportive of the three pillars of sustainable development. To protect marine biodiversity beyond national jurisdiction, the implementation of marine spatial planning should be considered. Such planning would ensure, for example, that an area protected from significant adverse impacts of bottom fishing would also be protected from damage by mining or cable laying, for example.

Thus, such planning could ensure the availability of areas for various uses, including fishing, mining, oil and gas exploration, cable laying. As scientific knowledge underpins our understanding of the natural world, areas reserved for science should also be established. Such planning would also include Marine Protected Areas, including networks of such protected areas as agreed at the World Summit on Sustainable Development in 2002.

Though far from the goal adopted by Parties to the Convention on Biodiversity (CBD) in 2003 to protect 10% of the ocean by 2012, the CBD Parties have reaffirmed the importance of this target and agreed to enhance efforts so as to meet the 10% target by 2020. To facilitate progress, the CBD Parties have adopted scientific criteria and guidelines for the identification of ecologically or biologically significant areas in the open ocean and deep sea, and have initiated a series of regional and sub-regional workshops with States and relevant organizations to describe them. CBD decision X/29 of the Tenth Conference of Parties in October 2010 in Nagoya, Japan further:

> 32. Encourages Parties, other Governments and competent international organizations to cooperate, as appropriate, collectively or on a regional or subregional basis, to identify and adopt, according to their competence, appropriate measures for conservation and sustainable use in relation to ecologically or biologically significant areas, and in accordance with international law, including the United Nations Convention on the Law of the Sea, including by establishing representative networks of marine protected areas in accordance with international law and based on best scientific information available, and to inform the relevant processes within the United Nations General Assembly;

The Global Ocean Biodiversity Initiative or GOBI (www.GOBI.org), an international scientific partnership of over twenty organizations and institutions, seeks to help countries and regional and global organizations to develop and use data, tools, and methodologies to identify ecologically significant areas in the oceans, with an initial focus on areas beyond national jurisdiction.

[14] http://www.unesco-ioc-marinesp.be/

As we noted last year, area-based management tools already exist in areas beyond national jurisdiction. These have been established by Regional Fisheries Management Organizations (RFMOs) and through the International Maritime Organization (IMO). There is under consideration at the International Seabed Authority the establishment of a network of "Areas of Particular Environmental Interest". Such action would assist the Authority with implementation of Articles 145, 162, 165 and 192 of the Convention on the Law of the Sea and 1994 Agreement to take measures to protect and preserve the marine environment.[15] Article 165(e) for example, requires the Legal and Technical Commission to "make recommendations to the Council on the protection of the marine environment, taking into account the views of recognized experts in that field". Article 145 requires the taking of "necessary measures" to ensure effective protection for the marine environment from the harmful effects which may arise from deep seabed mining.[16]

*To accelerate action, the United Nations General Assembly could include in a resolution language calling for States and competent international and regional organizations to collaborate, based on the CBD and FAO criteria and associated guidance/guidelines, to identify and protect vulnerable, significant and representative marine ecosystems in areas beyond national jurisdiction. Such areas should be managed to prevent significant adverse impacts. A subset should be identified as components of a global system of marine protected areas and highly protected marine reserves. A global arrangement, process or agreement, building on regional experience, could enhance cooperation, coordination and coherency of efforts.*

*Regional Examples*

Though progress has been slow at a global level, work has been done at the regional level. For example, three coastal States in the Mediterranean agreed among themselves to establish the Pelagos Sanctuary of 87,000 $km^2$ to protect cetaceans found there. States that are Party to the OSPAR Convention have agreed to establish in the North Atlantic six marine protected areas covering a total area of 285 000 $km^2$. In the Southern Ocean, States that are Party to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) have established the South Orkneys Marine Protected Area with an area of almost 94,000 $km^2$. Efforts are already underway within the three regions to move beyond individual sites to establish representative networks or systems of protected areas.[17]

IUCN has been active to assist certain regional processes. For example, the NRDC and IUCN together organized in November 2010 a workshop on Areas of Ecological and Biological Significance or Vulnerability in the Arctic Marine Environment. Some of the areas identified are within national jurisdiction; others are beyond. The report of this workshop is now available online.[18]

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[15] M. Lodge, Current Legal Developments: the International Seabed Authority, (2011), *The International Journal of Marine and Coastal Law*, 26

[16] Ibid.

[17] Gjerde, KM, von Nordheim, H, Durussel, C. (2011) 'Progress towards the development of a global network of Marine Protected Areas (MPAs) in Progress in Marine Conservation in Europe 2009 Proceedings of the Symposium, Stralsund, Germany, 2nd - 6th November 2009 Compiled by von Nordheim, H., Krause, JC and K. Maschner, BfN-Skripten 287: http://www.bfn.de/habitatmare/de/publikationen-progress-in-marine-conservation-in-europe-2009.php

[18] http://data.iucn.org/dbtw-wpd/edocs/Rep-2011-001.pdf

In the southern Indian Ocean, IUCN in collaboration with the FAO and other partners and within the framework of a GEF Seamounts project has engaged in a project to study marine biodiversity found in association with seamounts. Project goals include strengthening the knowledge base for and implementing an ecosystem-approach to marine fisheries in developing countries and addressing barriers to sustainable fisheries management and marine biodiversity conservation in the high seas, including a lack of scientific knowledge about seamount ecosystems and their relationship with fisheries resources, a lack of comprehensive and effective governance frameworks for marine biodiversity in the high seas and a difficulty of managing offshore fish stocks.

In 2009 a scientific sampling project undertaken by scientists from developing and developed countries collected pelagic species in this area using as its platform the Norwegian research vessel Dr Fridtjof Nansen. This investigation focused on pelagic ecosystem, fisheries and oceanography to improve the understanding of how seamounts interact with the pelagic realm around them. Studies included:

- Acoustic surveys to identify fish stocks and distribution;
- Acoustic and net studies of zooplankton, micronekton, nekton and fish;
- Pelagic trawls to assess the biodiversity of fish, crustaceans and other invertebrates;
- Genetic studies;
- Oceanographic measurements (water salinity and temperature, current speed and oxygen);
- Seabird surveys;
- Multibeam surveys to develop detailed bathymetric maps of the seafloor.

In 2010 a workshop was held at the South African Institute for Aquatic Biodiversity to identify more than 200 species of fish and 74 species of squid. A workshop is planned for later this month in Grahamstown, South Africa to consider options to improve the governance framework for high seas of the Indian Ocean. A second cruise is planned for late 2011 to examine the benthic fauna with the help of a remotely operated vehicle.

The Sargasso Sea Alliance is led by the Government of Bermuda in cooperation with the Government of the United Kingdom and includes a number of partners, including IUCN. The Alliance recognizes that the Sargasso Sea represents a unique pelagic ecosystem based on species of *Sargassum* that support a number of endemic, endangered and commercially important species. The area plays a critical role in the life cycle of American and European eels as well as of billfish, tuna and several species of turtle. The Alliance promotes international recognition of the importance of the Sargasso Sea ecosystem and widespread understanding of its value within the greater North Atlantic ecosystem and is working to ensure appropriate protection for this ecosystem, both in areas subject to the jurisdiction of Bermuda and waters beyond national jurisdiction.

As noted above, in the Southern Ocean work is progressing through the Commission for the Conservation of Antarctic Marine Living Resources and the Antarctic Treaty Consultative Meeting to establish a network of protected areas in the Southern Ocean. A key area for protection is the Ross Sea, which represents the only remaining large ocean region in which the ecosystem remains structured by natural, and not by human, forces. As temperatures warm around the world, it can be expected that the Ross Sea will represent a last refuge for southern polar species under threat.

*As we work to find common agreement for the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction at the global level, we should look at*

*and consider approaches that have been developed regionally. In this context, my delegation also welcomes regional workshops that are planned under the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-Economic Aspects as well as the Convention on Biological Diversity for the description of ecologically or biologically significant areas.*

**Agenda Item 5(g): Marine genetic resources**

We have followed with interest discussion of under which Part of the United Nations Convention on the Law of the Sea marine biodiversity beyond national jurisdiction and the marine genetic resources that underpin this biodiversity may fall. As the Convention serves as a constitution for the oceans, we believe it important to look to the Convention as a whole.

Part XII on the protection and preservation of the marine environment includes *inter alia* sections on cooperation, technical assistance, monitoring and environmental assessment, enforcement and responsibility and liability. On technical assistance, States either directly or through competent international organizations are to assist developing States with the training of their scientific and technical personnel, with facilitating their participation in relevant international programs, with supplying necessary equipment and facilities, with developing facilities for research, monitoring, educational and other programs and with providing appropriate assistance with the preparation of environmental assessments. These provisions on technical assistance are reinforced through Part XIV of the Convention.

Part XIII on marine scientific research provides *inter alia* that such research is to be exclusively for peaceful purposes, that such research is not to unjustifiably interfere with other legitimate uses of the sea and that such research is not to constitute the legal basis for any claim to any part of the marine environment or its resources. This Part also provides that States should promote the flow of scientific data and information, the transfer of knowledge and the strengthening of marine scientific research capabilities of developing States through *inter alia* education and training of their technical and scientific personnel.

Regional examples with respect of bioprospecting also provide potential lessons for a global approach; though as none is fully developed, these may require further reflection. As was noted in reports from the Secretary-General, a definition of bioprospecting has not been agreed internationally:

> "It is difficult to differentiate scientific research from commercial activities involving genetic resources, commonly referred to as bioprospecting. In most cases, genetic resources are collected and analysed as part of scientific research projects, in the context of partnerships between scientific institutions and industry. It is only at a later stage that the knowledge, information and useful materials extracted from such resources enter a commercial phase. The difference between scientific research and bioprospecting therefore seems to lie in the use of knowledge and results of such activities, rather than in the practical nature of the activities themselves."[19]

And in a later report:

> "…While there is no universally agreed definition of bioprospecting, the term is generally understood, among researchers, as the search for biological compounds of actual or potential value to various applications, in particular commercial applications. This involves a series of value-adding processes, usually spanning several years, from biological inventories requiring accurate taxonomic identification of specimens, to the isolation and characterization of valuable active compounds. As a mere prospecting

[19] United Nations General Assembly document A/60/63/Add.1, para 202, 15 July 2005

> activity, bioprospecting is only the first step towards possible future exploitation and stops once the desired compound or specific property has been isolated and characterized…."[20]

The issue of bioprospecting in Antarctica has come before Parties to the Antarctic Treaty and two Resolutions have been adopted. The resolutions reaffirm for Antarctica the role of the Antarctic Treaty System, noting that the Protocol on Environmental Protection and CCAMLR address environmental aspects of scientific research and the collection of biological material and include reference to Article III(1)(c) of the Antarctic Treaty. Parties to the Antarctic Treaty have an obligation to provide advance notification of all expeditions organized in or by their ships or nationals or proceeding from their territory. From that obligation flows an obligation to conduct an environmental impact assessment procedure and "to the greatest extent feasible and practicable…scientific observations and results from Antarctica shall be exchanged and made freely available".[21]

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity can also provide ideas for a way forward. The Protocol recognizes that awareness of the economic value of ecosystems and biodiversity and the fair and equitable sharing of this economic value with custodians of biodiversity are key incentives for its conservation and sustainable use, that of its components, and acknowledges the potential role of access and benefit-sharing to contribute to the conservation and sustainable use of biodiversity, to poverty eradication and to environmental sustainability, thus supporting achievement of the Millennium Development Goals. The Protocol requires that Parties consider a global multilateral benefit-sharing mechanism to address the fair and equitable sharing of benefits derived from certain special situations.

The Protocol provides that Parties are to designate a checkpoint or checkpoints that would *inter alia* collect or receive information on the source of genetic resources and should be relevant to the use of such resources at any stage of research, development, innovation, pre-commercialization or commercialization. The Protocol is designed to provide greater legal certainty and transparency to providers and uses of genetic resources while providing incentives to conserve and use sustainably biodiversity. The Protocol notes that benefits from the use of genetic resources as well as subsequent applications and commercialization should be shared fairly and equitably. Such benefits may be monetary and non-monetary and an Annex to the Protocol provides an indicative list of such potential benefits.

For those countries that have established checkpoints under the Nagoya Protocol, these checkpoints could also collect information on marine genetic resources from areas beyond national jurisdiction at the stages of collection, research, development, innovation, pre-commercialization and commercialization. Countries that have not established checkpoints under the Nagoya Protocol could be urged to establish a similar system or to require information on the source of any genetic material as part of their patenting process.

The Annex to the Nagoya Protocol provides a list of both monetary and non-monetary benefits. A way forward in our discussion may be to break down our concerns into access and benefit sharing. Is access the problem or should our concern first focus on ensuring that all of humankind has the opportunity to share in the benefits from marine genetic resources? If the

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[20] United Nations General Assembly document A/62/66, para 150, 12 March 2007

[21] Article III(1)(c) of the Antarctic Treaty

latter, that is fair and equitable sharing of benefits, then let us look subsection by subsection at the indicative list included in the Annex on monetary and non-monetary benefits:

> Annex: Monetary and Non-Monetary Benefits
> 1. Monetary benefits may include, but not be limited to:
> (a) Access fees/fee per sample collected or otherwise acquired;
> (b) Up-front payments;
> (c) Milestone payments;
> (d) Payment of royalties;
> (e) Licence fees in case of commercialization;
> (f) Special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity;
> (g) Salaries and preferential terms where mutually agreed;
> (h) Research funding;
> (i) Joint ventures;
> (j) Joint ownership of relevant intellectual property rights.
> 2. Non-monetary benefits may include, but not be limited to:
> (a) Sharing of research and development results;
> (b) Collaboration, cooperation and contribution in scientific research and development programmes, particularly biotechnological research activities, where possible in the Party providing genetic resources;
> (c) Participation in product development;
> (d) Collaboration, cooperation and contribution in education and training;
> (e) Admittance to ex situ facilities of genetic resources and to databases;
> (f) Transfer to the provider of the genetic resources of knowledge and technology under fair and most favourable terms, including on concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilization of biological diversity;
> (g) Strengthening capacities for technology transfer;
> (h) Institutional capacity-building;
> (i) Human and material resources to strengthen the capacities for the administration and enforcement of access regulations;
> (j) Training related to genetic resources with the full participation of countries providing genetic resources, and where possible, in such countries;
> (k) Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies;
> (l) Contributions to the local economy;
> (m) Research directed towards priority needs, such as health and food security, taking into account domestic uses of genetic resources in the Party providing genetic resources;
> (n) Institutional and professional relationships that can arise from an access and benefit-sharing agreement and subsequent collaborative activities;
> (o) Food and livelihood security benefits;
> (p) Social recognition;
> (q) Joint ownership of relevant intellectual property rights.

The Nagoya Protocol includes references to collection, research, development, innovation, pre-commercialization and commercialization. For collection, potential harmful effects on the relevant ecosystem are of concern. These should be assessed through prior environmental impact assessment, and as necessary through monitoring. Part XIII of UNCLOS provides that research is not to constitute the legal basis for any claim to any part of the marine environment or its resources, thus in our view it would not be appropriate for Parties to UNCLOS to allow for the patenting of marine genetic resources that have been collected from areas beyond national jurisdiction. Moreover and as we noted during discussion at ICP 8, the World Intellectual Property Organization (WIPO) web site describes patents as to be issued for inventions that are practical, novel, inventive and patentable[22]. As existing life forms and their genomes are not of themselves new or novel or inventive, they should not be patentable.

[22] http://www.wipo.int/patentscope/en/patents_faq.html#inventions, as viewed on 21 June 2007.

Part XIII of UNCLOS also provides that States should promote the flow of scientific data and information and the transfer of knowledge. This could be accomplished through the publication of research results, especially electronically. Benefits from development and innovation could be addressed in part by the Part XIII and the transfer of knowledge and the strengthening of marine scientific research capabilities of developing States through *inter alia* education and training of their technical and scientific personnel.[23]

*Recognizing the economic value of ecosystems and biodiversity, and with the Nagoya Protocol as a model, consideration should be given to the establishment of a global multilateral benefit-sharing mechanism to address the fair and equitable sharing of benefits.*

**Conclusion**

We need to move forward to conserve, manage and sustainably and equitably use the marine biodiversity of areas beyond national jurisdiction. We need to make progress on identifying and agreeing on the relevant legal regime on marine genetic resources in areas beyond national jurisdiction in accordance with the Convention that will protect the rights of all States, including those that at present do not have the capacity to explore for and develop benefits from those resources. We need to make progress on the application of environmental impact assessments and strategic environmental assessments for activities likely to have significant adverse impacts on marine biodiversity. We need to make progress on marine spatial planning, including through the establishment of marine protected areas. We need progress on regional arrangements to identify ecologically and biologically significant areas and suitable protections for them. We may pursue through regional arrangements new approaches to governance that will promote the conservation and sustainable and equitable development of marine biodiversity in areas beyond national jurisdiction for all.

We also need to move forward on a global basis, noting that the United Nations General Assembly has a central role relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. Next year at the United Nations Conference on Sustainable Development in Rio de Janeiro we may wish to consider a global approach to apply an integrated cross-sectoral approach to the governance of marine areas beyond national jurisdiction.

Thank you, Mme/Mr. Co-Chair.

[23] See UNCLOS Articles 240, 241 and 244