The Relationship between an International Regime on ABS and the ATS and UNCLOS

1. Introduction

This Study has been commissioned in accordance with paragraph 13(c) of CBD COP Decision IX/12, to examine how the international regime under the CBD could be mutually supportive of the activities of, and co-exist with, the Antarctic Treaty System (ATS) and the United Nations Convention on the Law of the Sea (UNCLOS). It examines the relationship between the ATS and UNCLOS and the developing international regime on access and benefit sharing of the CBD (the International Regime on ABS) and identifies possible options for their future co-existence and co-operation.

As the ATS and UNCLOS are separate regimes with different relationships with the International Regime on ABS this Study will deal with each one separately. Sections 2-4 will consider the ATS and Sections 5-7 will consider UNCLOS.

2. Overview of ABS International Regime and the Antarctic Treaty System

This Section provides a factual overview of how the ATS has addressed ABS issues and builds upon the information provided by the Executive Secretary in 'Overview of Recent Developments at the International Level Relating to Access and Benefit Sharing' (document UNEP/CBD/WG-ABS/5/4/Add.1, 30 August 2007). It will start with a brief overview of the key provisions of the ATS and then briefly update developments since August 2007.

2.1 Key Provisions of the ATS

The ATS does not directly regulate the use of genetic resources *per se*. Nevertheless, the ATS does contain provisions relevant to the International Regime on ABS in the Antarctic Treaty, its Protocol on Environmental Protection (Madrid Protocol) and the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR).

Article VI of the Antarctic Treaty provides that the "provisions of the present Treaty shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area".

The Antarctic Treaty stipulates that Antarctica shall be used for peaceful purposes only (Article 1) and provides for freedom of scientific investigations (Article II). It advocates the promotion of international co-operation in this regard. Article III (a)-(c) outlines the specific measures that Parties agree to pursue to this end. Accordingly, Contracting Parties agree that, to the greatest extent feasible and practicable,

> a. information regarding plans for scientific programs in Antarctica shall be exchanged to permit maximum economy of and efficiency of operations;
> b. scientific personnel shall be exchanged in Antarctica between expeditions and stations;

c. scientific observations and results from Antarctica shall be exchanged and made freely available.

All Parties to the ATS are Parties to the CBD, except for the United States of America which is a Party to the ATS but not the CBD.

The 1991 Madrid Protocol, which entered into force in January 1998, aims to comprehensively protect the Antarctic environment and dependent and associated ecosystems. It designates Antarctica as a natural reserve, devoted to peace and science, and prohibits any activities relating to mineral resources, other than scientific research.

The Protocol sets out a series of environmental principles which, *inter alia*, stipulate that activities in the Treaty Area are to be planned and conducted so as to limit adverse environmental impacts, avoid detrimental changes in the distribution, abundance or productivity of species or populations of species of fauna and flora, 'accord priority to scientific research and to preserve the value of Antarctica as an area for the conduct of such research'.

The Protocol includes provisions on environmental impact assessment, outlined in Annex I. Thus, prior assessments of the environmental impacts of activities planned pursuant to scientific research programmes, tourism and all other governmental and non-governmental activates must be carried out. Collection of any genetic resources from Antarctic is covered by these provisions and thus must undergo a prior assessment. The Protocol is silent about how any commercial benefits from relevant activities might be used.

These provisions have been implemented by all Parties to the Protocol in their domestic legislation, which in many cases have more stringent environment controls, also require disclosure of specific details about the purpose of the activity and the use of the genetic material and any information or knowledge gained from the activity. There is also usually a requirement to prepare periodic reports and publish the results of the activity. These requirements are imposed on foreign persons who require assistance from any Party to the Protocol (i.e transport, accommodation, kitting, etc). Many of the claimant states require that all persons, including foreigners not legally covered by the domestic legislative requirements, also comply with these requirements if they are to undertake activities within the area of the claim, even though the legality of such provisions is open to question in international law. The extent that the relevant domestic legislation contains detailed provisions about the use of commercial benefits arising from these activities varies. Some Parties refer in a general manner to the domestic ABS provisions (ie Australia). Some Parties do not (ie USA). In practice, the relevant authorities have negotiated ad hoc arrangements when granting the permit to access Antarctic genetic resources that address the use of commercial benefits. No significant commercial benefits have arisen from the use of genetic resources from Antarctica yet.

The ATS system also includes the 1992 CCAMLR, whose objective is the conservation of Antarctic marine living resources, applies to 'the Antarctic marine living resources of the area south of 60° South latitude and to the Antarctic marine living resources of the area between that latitude and the Antarctic Convergence

which form part of the Antarctic marine ecosystem'. Pursuant to Article 2, any harvesting shall be regulated so as to prevent the decrease in size of harvested populations to levels below their maximum sustainable yield as well as of non-target species and the marine ecosystem as a whole. Article 7 establishes a Commission, whose activities include the formulation, adoption and revision of conservation measures on the basis of the best scientific evidence available. CCAMLR is silent about how any commercial benefits from relevant activities might be used.

The 1988 Convention on the Regulation of Antarctic Mineral Resources Activities (CRAMRA), although never likely to enter into force, is often referred to as useful precedent for ABS. CRAMRA provided for a detailed permitting system to govern all aspects of mining in Antarctica. The permitting system was designed to protect the environment, respect other legitimate uses, promote opportunities for fair and effective participation of all Parties and to take into account the interests of the international community as a whole. CRAMRA encourages international participation by interested Parties, particularly from developing countries. CRAMRA allowed for levies to be imposed on operators to cover the costs of administering the Convention and to "promote scientific research in Antarctica, particularly that related to Antarctic environment and Antarctic resources, and a wide spread of participation in such research by all Parties, in particular developing country Parties". CRAMRA also contained detailed provisions designed to ensure that data and information was made freely available to the greatest extent feasible.

2.2 Recent Developments

Biological prospecting has been considered by the ATCM since 1999. During this time, Parties have been interested in the free availability of scientific observations and results, options for sharing of benefits besides the free availability of scientific observations and results, the environmental impacts and the need to keep up with policy developments in other fora.

In 2007, the ATCM XXX established an informal open-ended web-based Intersessional Contact Group (ICG) to examine the issue of biological prospecting in the Antarctic Treaty Area, in particular, "to identify issues and current activities related to biological prospecting in the Antarctic Treaty Area with a view to assisting the ATCM in considering the matter, including, if appropriate, working modalities."

Since the CBD process was last updated about developments in the ATS in document UNEP/CBD/WG-ABS/5/4/Add.1 (30 August 2007) the most important developments within the ATS have been: the Report of the ICG, the XXXI ATCM, Kiev, Ukraine, 2-13 June 2008, the XXX Scientific Committee on Antarctic Research (SCAR) Meeting, July 13 - 16, 2008, Moscow, Russia, and the CCAMLR-XXVII, 27 October to 7 November 2008, Hobart, Australia.

2.2.1 The XXXI ATCM

The XXXI ATCM had before it WP4 Report of the ATCM Intersessional Contact Group to examine the issue of Biological Prospecting in the Antarctic Treaty Area (The Netherlands) and WP 11 An update on biological prospecting in Antarctica,

including the development of the Antarctic Biological Prospecting Database (Belgium).

The Meeting supported the need for the ATCM to continue to monitor the issue. Parties noted that it was important to have information on ABS type activities being carried out in the Antarctic Treaty areas. It was noted that there were already instruments and institutions in place which could be relevant to the issue of biological prospecting. These included Articles II and III of the Treaty, the Committee for Environmental Protection (CEP) and CCAMLR regarding marine species. Some Parties expressed the view that some biological prospecting activities may be potentially inconsistent with these Articles. Other Parties expressed the view that biological prospecting was a legitimate activity under the Antarctic Treaty and related instruments. Many Parties highlighted the value of an analysis of any gaps in the existing instruments which needed to be supplemented, while other Parties suggested that it was premature to undertake that analysis.

In addition, many Parties highlighted the value of a review of the Antarctic biological prospecting database (see www.bioprospector.org) and the development of working definitions relating to biological prospecting in the Antarctic Treaty area. Other Parties preferred that SCAR's views be sought prior to further work. The Meeting invited SCAR to prepare a paper for ATCM XXXII, at which time the biological prospecting issue would be discussed further. SCAR agreed to provide a paper at ATCM XXXII in response to the following questions:-

1. review the most recent published research that may involve biological prospecting in the Antarctic Treaty region and provide an assessment of these efforts from discovery to development to commercialisation to product use, based on fundamental scientific principles.
2. provide a survey of ongoing biological prospecting research being undertaken within the SCAR community.

2.2.2 XXX SCAR

Delegates agreed to provide a paper for the XXXII ATCM on bioprospecting. The deadline for working papers to be submitted to the Antarctic Treaty Secretariat is 20 February 2009. A questionnaire was recently sent to SCAR National Committee Representatives requesting a reply by 22 November 2008.

2.2.3 CCAMLR-XXVII

Bioprospecting was considered under Item 15 "Cooperation with ATS". IUCN submitted a document entitled "Paper on Biological prospecting in the southern Ocean, a role for CCAMLR". A number of Parties called for the CCAMLR to take up the issue of bioprospecting more actively.

2.3 Upcoming events

ABS will be considered at a number of meetings, including:-

- Informal Meeting on Biological Prospecting in the Antarctic Treaty Area in Preparation for ATCM XXXII, Netherlands, 3-5 February 2009;
- ATCM XXXII, 6-17 April 2009, Baltimore;

- Xth SCAR International Biology Symposium, 26 - 31 July 2009, Hokkaido, Japan. The theme is Antarctic Biology in the 21st Century - Advances in and beyond IPY;
- Antarctic Treaty Summit: Science-Policy Interactions in International Governance, Washington DC, USA, November 30 - December 3, 2009; and
- XXXI SCAR (Buenos Aires, late August or September, 2010).

The purpose of the Informal Meeting on Biological Prospecting in the Antarctic Treaty Area in Preparation for ATCM XXXII is to consider the issues raised by biological prospecting in the Antarctic Treaty Area, with a view to assisting ATCPs prepare co-sponsored Working Papers in order to support a more informed, structured and focused discussion at the ATCM XXXII. The informal meeting will provide an opportunity to; develop a comparative analysis of existing international instruments related to biological prospecting; review the Antarctic Biological Prospecting Database and undertake a gap analysis of the ATS.

2.4 Summary

Most Parties to the ATS have stated repeatedly that the existing provisions of the ATS adequately address the environment effects of using genetic resources.

Nevertheless Parties have identified a number of important issues that the ATS does not clearly address. These include:-

- Definitions of bioprospecting, pure research, applied research
- What are the effects of patenting as well as other forms of legal protection (in particular trade secrets) with regard to the free exchange of scientific information in this area. Is there evidence, for example, that the exchange of scientific information is being particularly adversely affected? If so, are there ways to improve this, without inhibiting scientific research?
- What are the legal issues relating to the ownership and protection of these resources?
- Is benefit sharing feasible and if so with whom? Is it possible to have a regime that promotes scientific research as well as ensures benefits sharing? Is experience elsewhere relevant to the ATS?

The fact that many Parties have repeatedly raised these issues in the ATCM illustrates that many Parties feel that the ATS does not adequately address the use of genetic resources in Antarctica.

3. Analysis of relationship between the international regime on ABS and the ATS

This Section highlights the relationship between the regimes, in particular any overlaps and gaps and identify any potential legal and/or policy challenges.

The territorial status of Antarctica and jurisdictional scope of the ATS is complex and with many differing viewpoints. Through Article VI of the Antarctic Treaty the ATS has competence in area south of 60° South Latitude. The complexity of the legal status of the Antarctic Treaty area raises questions about ownership and sovereignty over the genetic resources in the area. It is worth noting that the issue of "biological

prospecting" has been included on the agenda of the last six meetings of the ATCM, without specific comment about the competency of the ATS to consider these issues.

The jurisdictional scope of the CBD is outlined in Article 4 which provides that "the provisions of this Convention apply, in relation to each Contracting Party: (a) In the case of components of biological diversity, in areas within the limits of its national jurisdiction; and (b) In the case of processes and activities, regardless of where their effects occur, carried out under its jurisdictional control, within the area of its national jurisdiction or beyond the limits of national jurisdiction". Article 5 of the CBD stipulates that each "Contracting Party shall, as far as possible and as appropriate, cooperate with other Contracting Parties, directly or, where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biological diversity".

Article 5 has been used by Parties to recognise the competence of regional efforts to apply the provisions of the CBD and UNCLOS for regulating the use of marine genetic resources from the high seas and deep seabed.

No provisions or decisions of the ATS relating to the use of genetic resources are contradictory to the CBD. Nor has the COP taken any decisions that directly relate to the relationship between the International Regime on ABS and the ATS.

The COP has previously recognised the competency of the ATS to address matters of relevance to the CBD but within the Antarctic Treaty area. For example, in decision VIII/27, the COP encouraged "Parties and other Governments to raise the issue of invasive alien species at the ATCM and to support the development of measures to address threats of invasive alien species in the Antarctic Treaty area" and encouraged "Parties to the Antarctic Treaty to consider improving the controls contemplated under the 1991 Protocol on Environmental Protection to the Antarctic Treaty". The ATCM has responded to this call and is currently reviewing its measures governing alien species in the Antarctic Treaty Area.

4. Options for addressing the relationship between the ABS IR and the ATS

This Section considers how an International Regime on ABS could be developed to be in harmony and be mutually supportive of the mandates of and coexist with the ATS.

Decision VII/19 of the COP included the "Antarctic Treaty" as a "relevant elements of existing instruments and processes" to be considered by the Ad Hoc Open-ended Working Group on Access and Benefit-sharing for inclusion in the international regime.

Regarding the potential scope of the International Regime on ABS currently contained in Annex 1 of decision IX/12, there are three references to the Antarctic Treaty Area: two in Option 1 and one in Option 3. They are:-

1. The first reference in Option 1 states in paragraph 3, "The international regime on access and benefit-sharing does not apply to …. (f) [Genetic resources located in the Antarctic Treaty Area.]";

2. The next reference in Paragraph 5, "[In the further elaboration and negotiation of the international regime on access and benefit-sharing [special] [due] [consideration] will given to] …. (g) [Genetic resources located in the Antarctic Treaty Area.]]"; and
3. The final reference is in Option 3 which states in Paragraph 4, "Special consideration will be given to …. Genetic resources located in the Antarctic Treaty area".

Thus, decision IX/12, provides three options:-

1. Exclude Antarctic Genetic Resources from the International Regime on ABS (i.e. option number 1 above);
2. Include Antarctic Genetic Resources in the International Regime on ABS (i.e. one of the implications of putting the square brackets round option number 2 above); and
3. Give "due" or "special" consideration to Antarctic Genetic Resources (i.e. options number 2 and 3 above).

Some brief comments about each option follow. Essentially though there are reasons for and against each option. The relative merits of each option will depend on the exact nature of the International Regime on ABS.

1. Option 1: Exclude Antarctic Genetic Resources

The ATCM has included the issue of biological prospecting on its agenda for its next meeting in April 2009 and has been considering the issues since 1999.

The ATCM has responded to a previous request from the COP regarding measures on alien species.

The ATCM and ATS Parties have previously responded to other international standards and regimes that are relevant to the Treaty Area by adopting similar measures within the ATS. For example, the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), were incorporated into the ATS, through inclusion in Annex IV, "Prevention of Marine Pollution" to the Madrid Protocol.

The ATS is one of several regional initiatives that are addressing ABS issues (i.e. ASEAN, ANDEAN and AU).

2. Option 2: Include Antarctic Genetic Resources

It could ensure a uniform standard was developed for the use of genetic resources from Antarctic throughout the world.

For Parties not involved in the ATS it would provide a mechanism to ensure that their views are considered in any measures that the ATS may develop regarding ABS.

It could address some of the possible ABS gaps in the ATS, especially relating to benefit sharing and ownership.

As Article 15 of the CBD recognises the sovereign rights of States over their natural resources and decisions of the COP on ABS issue to date are founded on this basic premise, some Parties to the ATS have expressed concern about the implications of the CBD including the use of Antarctic Genetic Resources within the International Regime on Article IV of the Antarctic Treaty and its provision that no acts or activities "shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica".

The United States of America is not a Party to the CBD, but is a Party to the ATS.

3. Option 3: Due or special consideration for Antarctica Genetic Resources

Due or special consideration is not currently elaborated or defined in decision IX/12.

There exist a wide variety of CBD precedents for due and special consideration. An example of due or special consideration of direct relevance is the rules governing the use of plant genetic resources for food and agriculture.

Also the COP has called upon various international organisations and instruments to implement various provisions of the CBD and decisions of the COP. The best known example of this is the various COP decisions calling upon the FAO, the Commission and the ITPGRFA, to implement the provisions of the CBD in relation to plant genetic resources for food and agriculture. Another well known example is the designation by the COP of the Ramsar Convention as lead implementing partner on Wetlands for the CBD and various calls on the Ramsar Convention to implement and develop a variety of provisions of the CBD, most recently on harmonised national reporting. A broader example is the call in decision VIII/4, Section D, paragraph 1, where the COP invited "relevant forums to address and/or continue their work on disclosure requirements in intellectual-property-rights applications taking into account the need to ensure that this work is supportive of and does not run counter to the objectives of the Convention, in accordance with Article 16, paragraph 5".

As mentioned before the COP has already called upon the ATS to develop measures regarding alien invasive species.

Developments in the International Regime on ABS could provide important precedents for some of the outstanding issues identified by Parties to the ATS such as:-

- Definitions of bioprospecting, pure research, applied research;
- What are the effects of patenting as well as other forms of legal protection (in particular trade secrets) with regard to the free exchange of scientific information in this area. Is there evidence, for example, that the exchange of scientific information is being particularly adversely affected? If so, are there ways to improve this, without inhibiting scientific research?
- Is benefit sharing feasible and if so with whom? Is it possible to have a regime that promotes scientific research as well as ensures benefits sharing? Is experience elsewhere relevant to the ATS? and
- Elaborate the meaning of sovereignty over natural resources.

5. Overview of International Regime on ABS and UNCLOS

This Section provides a factual overview of the key provisions of UNCLOS and then briefly updates developments since August 2007.

5.1 Key Provisions of UNCLOS

UNCLOS aims to establish "a legal order for the seas and oceans which will facilitate international communication, and will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment." UNCLOS was adopted in 1982 and entered into force on 16 November 1994.

In order to achieve its objectives, UNCLOS sets out the rights and obligations of Parties on the basis of maritime zones, both within and beyond national jurisdiction, delineated according to distance from coastline. States have sovereignty over their internal waters, territorial seas and archipelagic waters, and sovereign rights over the resources in their EEZ and continental shelf. States are required to cooperate to manage marine areas beyond the limits of national jurisdiction. These areas are divided into "the high seas" (the water column beyond the EEZ, or beyond the territorial sea where no EEZ has been declared) and "the Area" (the sea-bed and ocean floor and subsoil thereof beyond the limits of national jurisdiction).

UNCLOS is supplemented and elaborated by two implementing agreements: the 1994 Agreement relating to Implementation of Part XI of the UNCLOS of 10 December 1982 ("the "1994 Part XI Agreement"), and the 1995 Agreement for the Implementation of the Provisions of the UNCLOS of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (the "United Nations Fish Stocks Agreement").

A number of institutions have been created under UNCLOS for its implementation. These include the International Tribunal for the Law of the Sea, the Commission on the Limits of the Continental Shelf, and the International Seabed Authority. In addition, the United Nations General Assembly (UNGA) each year debates the issue of ocean affairs and the law of the sea. To facilitate this annual review and debate, the UNGA established in 1999 the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (the Consultative Process), and in 2007, 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.

5.2 Recent Developments

As indicated in document UNEP/CBD/WG-ABS/5/4/Add.1, issues relating to marine genetic resources beyond national jurisdiction are being discussed in the context of the United Nations General Assembly, in particular, the Ad-hoc Open-ended Informal Working Group established by the General Assembly to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (the UNGA Working Group). Furthermore, the issues have also been discussed at the fifth and eighth meetings of the United Nations Open-ended

Informal Consultative Process on Oceans and the Law of the Sea (the Consultative Process) and the Meeting of the State Parties to the United Nations Convention on the Law of the Sea (MSP). The following provides a summary of recent developments since August 2007.

5.2.1 The Consultative Process

At its eighth meeting in June 2007 the Consultative Process focused on marine genetic resources (MGRs). The outcome of this meeting was reported previously. The UN General Assembly took note of the report of the Consultative Process, and called upon States to further consider this issue in the context of the mandate of the Ad Hoc Open-ended Informal Working Group, with a view to making further progress on this issue.

5.2.2 The Working Group

Both the first and the second meetings of the Working Group considered the issue of MGR beyond the limits of national jurisdiction. The results of the first meeting of this Working Group are contained in document UNEP/CBD/WG-ABS/5/4/Add.1.

The second meeting of the Working Group took place in 2008. The joint statement of the Co-Chairpersons summarized the key issues relating to genetic resources, *inter alia*, as follows:-

- The importance of promoting scientific research on marine genetic resources was recognized in the light of its benefits in terms of expanding knowledge of the biodiversity of the oceans, as well as in discovering new substances of benefit to the livelihood and well-being of humankind.
- Some delegations suggested a number of areas for further research. They included the relationship between marine genetic resources and other resources; the level of activity actually occurring in respect of marine genetic resources in areas beyond national jurisdiction and the costs and risks involved; the marine biotechnology development process and the benefits arising from the commercialization of marine genetic resources; and the mapping of species and areas of potential interest for biotechnological application with a view to identifying appropriate measures for conservation and sustainable use.
- The need for capacity-building for developing countries to participate in, and to benefit from, activities related to marine genetic resources beyond areas of national jurisdiction was underlined, as was the need to enhance the sharing of scientific information and results. In that regard, reference was made to the usefulness of the International Seabed Authority Endowment Fund.
- UNCLOS was recognized as the legal framework for all activities in the oceans and seas, including in respect of genetic resources beyond areas of national jurisdiction. In that regard, divergent views were expressed on the relevant legal regime on marine genetic resources beyond areas of national jurisdiction, in particular whether those marine genetic resources were part of the common heritage of mankind and therefore fell under the regime for the Area, or were part of the regime for the high seas.
- Notwithstanding the above, some delegations were of the view that an elaborated regime was needed within the framework of the UNCLOS in relation to marine

genetic resources beyond areas of national jurisdiction. In response, other delegations stated that a new international regime was not warranted.

- In that context, some delegations proposed focusing on practical measures to enhance the conservation and sustainable use of marine genetic resources. It was proposed that such practical measures could address, among others, options for benefit-sharing. In that regard, several delegations expressed interest in considering a proposal to use the multilateral system developed under the International Treaty on Plant Genetic Resources for Food and Agriculture as a possible reference point for the discussions.
- Several delegations expressed support for the continuation of discussions on marine genetic resources beyond areas of national jurisdiction under the authority of the General Assembly and within the framework of UNCLOS. Reference was also made to the need to take into account the work under other relevant forums, such as the CBD, FAO, the World Intellectual Property Organization and the World Trade Organization.

5.2.3 The Meeting of the State Parties to UNCLOS (MSP)

At the seventeenth meeting (New York, 14-22 June 2007), in relation to the protection of the marine environment, it was pointed out that certain intrusive marine scientific research could negatively impact fragile ecosystems and resources of the deep sea, including marine genetic resources exploited for commercial purposes. Regarding marine genetic resources, some delegations stated that the regime for genetic resources was governed by UNCLOS and supported the idea that deep seabed genetic resources in areas beyond national jurisdiction were the common heritage of mankind. It was recalled that, regarding the regime established under UNCLOS, in Part XIII on marine scientific research, the distinction between scientific investigation, research and development, and exploitation of marine genetic resources, namely between pure and applied marine scientific research had never been accepted universally, since there was no perceivable difference in the activity or method.

At the eighteenth meeting, held in New York from 13 to 20 June 2008, the issue of marine genetic resources beyond areas of national jurisdiction, was briefly discussed. A delegation stated that the seabed, ocean floor and subsoil thereof and their resources in areas beyond national jurisdiction constituted the common heritage of mankind, and that there should be a fair and equitable distribution of the benefits arising from their use, whether for scientific or commercial purposes. A delegation stressed the need to assess the current existing framework and tools before engaging in discussions on a new regime for their management.

6. Analysis of relationship between the International Regime on ABS and UNCLOS

This Section highlights the relationship between the regimes, in particular any overlaps and gaps and identify any potential legal and/or policy challenges.

The general relationship between CBD and UNCLOS is outlined in Article 311 of UNCLOS and Article 22 of the CBD. Article 311 provides that UNCLOS shall not alter the rights and obligations of States Parties which arise from other agreements compatible with it and which do not affect the enjoyment by other States Parties of

their rights or the performance of their obligations under it. In a similar vein CBD Article 22 states that the provisions of the CBD shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity. Article 22 goes on to specify that Contracting Parties shall implement the CBD with respect to the marine environment consistently with the rights and obligations of States under the law of the sea. Collectively, these articles provide for consistency in implementation of the two conventions.

In its resolution 60/30, the General Assembly emphasized the universal and unified character of UNCLOS and reaffirmed that UNCLOS sets out the legal framework within which all activities in the oceans and seas must be carried out, and that its integrity needs to be maintained. This language is echoed in a number of decisions of the COP. In Decision VII/5 (Marine and coastal biological diversity) the COP invited Parties to raise their concerns regarding the issue of conservation and sustainable use of genetic resources of the deep seabed beyond limits of national jurisdiction at the next meeting of the General Assembly and further invited the General Assembly to further coordinate work relating to conservation and sustainable use of genetic resources of the deep seabed beyond the limits of national jurisdiction

In Decision VIII/22 (conservation and sustainable use of deep seabed genetic resources beyond the limits of national jurisdiction) the COP expressed its awareness of a preliminary range of options which Parties and other States, individually or in cooperation, may use for the protection of deep seabed genetic resources beyond national jurisdiction, including codes of conduct, guidelines and principles and marine protected areas. The COP also emphasized the need for "further work in developing all of these options and other options, in particular within the framework of the United Nations". The COP also recognized that UNCLOS "regulates activities in the marine areas beyond national jurisdiction".

Most recently, the COP in Decision IX/20 (marine and coastal biological diversity) reiterated the United Nations General Assembly's central role in addressing issues relating to the conservation and sustainable use of biodiversity in marine areas beyond national jurisdiction and recalled Resolution 60/30.

The scope of the CBD and UNCLOS slightly differs. While UNCLOS applies to all activities carried out in the oceans and seas, CBD applies to components of biological diversity in areas within the limits of national jurisdiction of a Party; and to all processes and activities carried out under the jurisdiction or control of a Party within the area of its national jurisdiction or beyond the limits of national jurisdiction (Article 4 of CBD). Article 5 of the CBD requires its Contracting Parties to cooperate directly, or through competent international organizations, in respect of areas beyond national jurisdiction, for the conservation and sustainable use of biological diversity.

Unlike the CBD, which provides a definition for the term "genetic resources", UNCLOS does not specifically refer to "marine genetic resources", due to the fact that the concept was not used at the time of its adoption, However, it is often presumed that genetic resources are covered by the provisions of UNCLOS relevant to living resources.

Provisions relating to access to, and ownership of, living resources under UNCLOS depend on whether those resources are located within or beyond national jurisdiction, and if the latter, whether they are located in the high seas or the Area. Considering that there is ongoing debate regarding whether the CBD International Regime on ABS will extend into marine areas beyond the limits of national jurisdiction, all potentially relevant UNCLOS provisions are covered here.

Areas within national jurisdiction

Under both UNCLOS and CBD, coastal States have sovereignty over the natural resources found within their jurisdiction, and may adopt laws and regulations relating to the conservation and sustainable use of such resources. The rights and obligations of a coastal State differ depending on whether the resource is found within the EEZ or the extended continental shelf. According to Article 56 of UNCLOS, a coastal State has, in its EEZ, sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone. These rights apply to both sedentary[1] and free-swimming species, and while the State can exploit these species, it also has obligations to conserve them. According to Article 61, the coastal State has the obligation to prevent over-exploitation of the living resources in its EEZ and to restore populations of over-exploited species at levels that can produce the maximum sustainable yield.

On the continental shelf, however, these rights only extend to sedentary species. Therefore, if a coastal State's claim for an extended continental shelf beyond 200 nautical miles is accepted, it will have sovereign rights over all sedentary species in the area, but no jurisdiction over any free-swimming species in the superjacent waters. It should be noted here that most (though not all) commercial developments have originated from genetic resources obtained from sedentary species.

If the coastal State does not explore its continental or exploit its natural resources, no other States may undertake these activities without the express consent of the coastal State (Article 77). In contrast, the State is under obligation to give access to the surplus of the living resources in its EEZ to other States through agreements or other arrangements (Article 62).

Within their territorial sea, their EEZ and continental shelf, coastal States have the right to regulate, authorize and conduct marine scientific research (MSR). MSR has to comply with certain conditions that include: the provision of information on the nature and objectives of the project; the right for the coastal State to participate in the project and have access to all data and samples derived from the project as well as to assessment and interpretation of such data results; and making available internationally the research results. These provisions are complementary with the provisions of CBD Article 15.

The high seas

[1] Article 77(4) defines sedentary species as living organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

The high seas regime relevant to living resources can be found under Part VII of UNCLOS. On the high seas, States enjoy certain freedoms of the high seas, which include, *inter alia*, the freedom of fishing and of marine scientific research. These freedoms could presumably incorporate collection of marine genetic resources and organisms, and all States and competent international organizations are entitled to conduct marine scientific research in the water column beyond the limits of the exclusive economic zone 2/. The high seas freedoms must be exercised with regard to treaty obligations and measures for the conservation of resources, as well as with due regard for the interests of other States. 3/ Activities carried out on the high seas, including commercially-oriented research, are subject to flag State jurisdiction (i.e. the laws and regulations of the State under whose flag the vessel is operating).

The Area

The Area is subject to the regime set out under Part XI of UNCLOS, as modified by the 1994 Agreement on implementation of Part XI of UNCLOS. The Area is the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction. The Area and its resources are the common heritage of mankind. 4/

The regime of the Area only applies to "activities of exploration for, and exploitation of, the resources of the Area". These resources are defined as "solid, liquid or gaseous mineral resources *in situ* in the Area at or beneath the seabed, including polymetallic nodules." Thus, the regime for the management of resources of the Area applies exclusively to mineral resources, and commercially-oriented activities relating to genetic resources of the deep seabed are not envisaged as the subject of the regulatory framework established. The biological resources of the Area were not included in the international regime because they had just been discovered, and almost nothing was known about their nature, their extent or their value.

In the Area, all States and competent international organizations have the right to conduct marine scientific research, in conformity with the provisions of Part XI of UNCLOS, 5/ which provides that marine scientific research concerning the Area and its resources shall be carried out exclusively for peaceful purposes and for the benefit of mankind as a whole. 6/ The results of marine scientific research on the high seas and the Area are neither subject to proprietary rights nor confidentiality and should be made widely available to the general public. If the results of the research are used at any stage for commercial gains, the regime of marine scientific research would no longer apply and therefore such research would be deemed to have been a commercially-oriented activity, such as bioprospecting. It should be noted that UNCLOS does not provide a definition of marine scientific research, or a definition of "commercially-oriented activities", in particular "prospecting", and that there can be difficulties in distinguishing between the two categories of activities. There has been some debate, for example, whether patents and other intellectual property claims may run counter to UNCLOS Article 241 by constituting a claim to the marine environment or its resources.

2/ UNCLOS Article 257.
3/ UNCLOS Article 87.
4/ UNCLOS, preamble.
5/ UNCLOS, Article 256.
6/ UNCLOS, Article 143 (1).

UNCLOS requires States Parties that conduct marine scientific research in the Area to, *inter alia*, develop programmes, including through the ISA or other international organizations, for the benefit of developing States and technologically less developed States.7/ These provisions under part XIV of UNCLOS are particularly relevant to deep seabed activities, which require sophisticated and expensive technological equipment and skills. These technology transfer provisions, as well as the sharing of the results of marine scientific research, can be considered a non-monetary sharing of benefits arising from the utilization of resources of the Area.

7. Options for addressing the relationship between the International Regime on ABS and UNCLOS

Decision VII/19 of the COP included the "United Nations Convention on the Law of the Sea" as a "relevant elements of existing instruments and processes" to be considered by the Ad Hoc Open‑ended Working Group on Access and Benefit-sharing for inclusion in the international regime.

Regarding the potential the scope of the International Regime on ABS currently contained in Annex 1 of decision IX/12, there are three references of relevance to this Study: two in Option 1 and one in Option 3. They are:-

1. The first reference in Option 1 states in paragraph 3, "The international regime on access and benefit-sharing does not apply to …. (e) [Genetic resources, including marine genetic resources found in areas beyond national jurisdiction;]"
2. The next reference in Paragraph 5, "[In the further elaboration and negotiation of the international regime on access and benefit-sharing [special] [due] [consideration] will given to] …. (f) [Marine genetic resources found in areas beyond national jurisdiction;]"; and
3. The final reference is in Option 3 which states in Paragraph 4, "Special consideration will be given to …. Marine genetic resources found in areas beyond national jurisdiction".

The text contained in decision IX/12 does not specifically mention marine genetic resources found within national jurisdictions.

The text in decision IX/12 raises three possible approaches to the treatment of marine genetic resources found in areas beyond national jurisdiction. They are:-

1. Exclude these type of marine genetic resources from the International Regime on ABS (i.e. option number 1 above);
2. Include these type of marine genetic resources in the International Regime on ABS (i.e. one of the implications of putting the square brackets round option number 2 above); and
3. Give "due" or "special" consideration to these type of marine genetic resources (i.e. options number 2 and 3 above).

Many of the observations made in Section 5 about the options for the ATS are directly relevant for the various options for marine genetic resources found in areas beyond national jurisdictions. Essentially there are reasons for and against each option. The

7/ UNCLOS, Article 143(3)(b) and (c).

relative merits of each option will depend on the exact nature of the International Regime on ABS.

A particular point for marine genetic resources in areas beyond national jurisdiction is whether they are classified as common heritage of mankind. As highlighted in document UNEP/CBD/SBSTTA/8/INF/3/Rev.1 [the study of the relationship between the Convention and United Nations Convention on the Law of the Sea (UNCLOS) with regard to conservation and sustainable use of genetic resources of the deep seabed], there appears to be a lacuna in the legal regime for commercially-oriented activities, such as bioprospecting, relating to genetic resources of the deep seabed beyond national jurisdiction, including their conservation and sustainable use, because the regulation of such activities is not directly addressed. The Area and its resources are recognized with the status of common heritage of humankind. The regime flowing from this principle as set out under Part XI applies to mineral resources of the Area. The main features of the regime are those of: non-appropriation over the Area or its resources; international management through an international institution; peaceful use of the Area and its resources; and sharing with humankind of the benefits resulting from activities related to the Area or its resources.

As mentioned before states have expressed different views about whether marine genetic resources beyond national jurisdiction are the common heritage of mankind or not. It is worth noting in this context that even though the CBD recognises that biodiversity is a common concern of mankind, as far as its ABS provisions are concerned it establishes a more private type regime whereby it is for users and providers to determine what is equitable and how benefits should be managed.