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## Conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction

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### Abstract

International management instruments at global and regional levels are essentials to the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction. Legal framework provided by the United Nations Convention on the Law of the Sea (UNCLOS) and other existing international, regional and sectorial agreements must be implemented in a holistic and coherent governance to secure sustainable development for all States, especially developing States, and assure a healthy marine environment to present and future generations, not only within national jurisdictions, but also in areas beyond national jurisdiction.

### Introduction

The Area Beyond National Jurisdiction (ABNJ) represents approximately 64% of the ocean's surface, including the high seas and the deep seabed located beyond the limits of States' continental shelves.<sup>3</sup> The marine resources of this area are of paramount importance in the ecological, economic and social context to the countries. Many human activities as, for example, scientific research, mineral extraction, fishing, shipping and offshore energy exploitation are developed in the ABNJ.

The international community is extremely worried by the fact that the intensification of these activities, along with global warming and ocean acidification, are putting environmental health at risk, threatening the biodiversity.

The United Nations Convention on the Law of the Sea (UNCLOS) regulates not only the areas within the national jurisdiction, but also the areas beyond national jurisdiction, including the so called "Area" and the "High Seas".

According to article 1.1 (1) of the United Nations Convention on the Law of the Sea (UNCLOS), "Area" means the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction.

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<sup>3</sup> Dennis Soden, Brent R. Steel, *Handbook of Global Environmental Policy and Administration*, CRC Press, 16 de jul. de 1999, p. 665.

The UNCLOS provides that the Area and its resources are the common heritage of mankind and so that, no State shall claim or exercise sovereignty or sovereign rights over it.<sup>4</sup> Also, this convention established the International Seabed Authority (The Authority), responsible for organize, carry out and control the activities developed in the Area.<sup>5</sup>

The protection of the marine environment was one of the UNCLOS preoccupations. Article 145 provides that the Authority shall adopt appropriate rules, regulations and procedures to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area. However, the UNCLOS has not clearly established effective instruments to reach these goals, leaving the responsibility for this task to the International Seabed Authority.

With regard to the High Seas, article 87 of the UNCLOS provides that “1. *The high seas are open to all States, whether coastal or land-locked. Freedom of the high seas is exercised under the conditions laid down by this Convention and by other rules of international law. It comprises, inter alia, both for coastal and land-locked States:*

*(a) freedom of navigation;*

*(b) freedom of overflight;*

*(c) freedom to lay submarine cables and pipelines, subject to Part VI;*

*(d) freedom to construct artificial islands and other installations permitted under international law, subject to Part VI;*

*(e) freedom of fishing, subject to the conditions laid down in section 2;*

*(f) freedom of scientific research, subject to Parts VI and XIII.*

*2. These freedoms shall be exercised by all States with due regard for the interests of other States in their exercise of the freedom of the high seas, and also with due regard for the rights under this Convention with respect to activities in the Area”.*

Thereafter, the exploration and exploitation of the marine resources in the High Seas and the Area must be in accordance with the UNCLOS. Nevertheless, given the omissions on the current international framework, an Ad Hoc Open-ended Informal Working Group (BBNJ WG) was established in 2004 by the adoption of Resolution 59/24 to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction:

(a) To survey the past and present activities of the United Nations and other relevant international organizations with regard to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction;

(b) To examine the scientific, technical, economic, legal, environmental, socio-economic and other aspects of these issues;

(c) To identify key issues and questions where more detailed background studies would facilitate consideration by States of these issues;

(d) To indicate, where appropriate, 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.

During the United Nations Conference on Sustainable Development organized in Rio de Janeiro in 2012 (RIO +20), Heads of State and Government recognized in the document entitled “The future we want”<sup>6</sup>, the “importance of the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction”.

On 19 June 2015, the United Nations General Assembly adopted the Resolution 69/292 concerning the development of an international legally-binding instrument under the United Nations Convention on

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<sup>4</sup> UNCLOS, articles 136 and 137.

<sup>5</sup> UNCLOS, article 153 (1).

<sup>6</sup> United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, from 20 to 22 June 2012.

the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ agreement).

It was decided that this international legally-binding instrument should address the omissions concerning the use of marine genetic resources (a); area-based management tools (b), including marine protected areas (i), environment impact assessment (ii), capacity building and marine technology transfer (iii).

#### **a) Marine genetic resources - MGR**

The Convention on Biological Diversity - CBD, opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio “Earth Summit”) entered into force on 29 December 1993. Its preamble states the “*intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components*”, and also that “*conservation and sustainable use of biological diversity is of critical importance for meeting the food, health and other needs of the growing world population, for which purpose access to and sharing of both genetic resources and technologies are essential*”.

The CBD has three main objectives: the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising from the utilisation of genetic resources.<sup>7</sup>

According to the article 2 of the CBD “*Genetic resources means genetic material of actual or potential value*” and “*Genetic material means any material of plant, animal, microbial or other origin containing functional units of heredity*”.

However, there is no internationally agreed definition of marine genetic resource – MGR<sup>8</sup>. Thus, the definition of marine genetic resource - MGR could include biological specimens collected for scientific research and products derived from marine biodiversity including genes, proteins and natural products.<sup>9</sup>

Established by the Conference of the Parties at its fifth meeting, in May 2000, in Nairobi, Kenya, the Ad Hoc Open-ended Working Group on Access and Benefit-sharing had the responsibility to develop guidelines and other approaches to assist Parties and stakeholders with the implementation of the access and benefit-sharing (ABS) provisions of the Convention.

At the seventh meeting of the Conference of the Parties, in Kuala Lumpur, 2004, the Ad Hoc Open-ended Working Group on Access and Benefit-sharing was then tasked with the elaboration and negotiation of an international regime on access to genetic resources and benefit-sharing in order to effectively implement articles 15 (Access to Genetic Resources)<sup>10</sup> and 8 (j) (Traditional Knowledge)<sup>11</sup> of the Convention and its three objectives.

At the tenth meeting of the Conference of the Parties on 29 October 2010, in Nagoya, Japan, 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 was adopted. The Nagoya

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<sup>7</sup> Convention on Biological Diversity - CBD, article 1.

<sup>8</sup> The term “MGR” refers to biological resources, as opposed to mineral resources.

<sup>9</sup> See DOSI Deep-sea Genetic Resources Working Group DRAFT Discussion Paper 20/02/2016.

<sup>10</sup> CBD, article 15. Access to Genetic Resources 1. Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation.

<sup>11</sup> CBD, article 8. In-situ Conservation. Each Contracting Party shall, as far as possible and as appropriate: (j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

Protocol is a supplementary agreement to the Convention on Biological Diversity and provides a transparent legal framework for the access and the use of genetic resources.

According to article 1 of the Nagoya Protocol, “*The objective of this Protocol is the fair and equitable sharing of the benefits arising from the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding, thereby contributing to the conservation of biological diversity and the sustainable use of its components*”.

The Nagoya Protocol recalls that the fair and equitable sharing of benefits arising from the utilization of genetic resources is one of three core objectives of the Convention on Biological Diversity.

Notwithstanding the developments of the international legal framework, the access to marine genetic resource is only regulated when it takes place within national jurisdiction, but not in areas beyond national jurisdiction (ABNJ). At the same time, sharing benefits from the utilization of marine genetic resources accessed in ABNJ is a critical issue to be considered in the ongoing international discussions about possible way forward on the conservation and sustainable use of marine biodiversity in ABNJ, including the need for greening the blue economy.<sup>12</sup>

The Ad Hoc Open-ended Informal Working Group (BBNJ WG), at its fourth meeting from 31 May to 3 June 2011, made, amongst others, the following recommendations:

(a) A process be initiated, by the General Assembly, with a view to ensuring that the legal framework for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction effectively addresses those issues by identifying gaps and ways forward, including through the implementation of existing instruments and the possible development of a multilateral agreement under the United Nations Convention on the Law of the Sea;

(b) This process address the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction, in particular, together and as a whole, marine genetic resources, including questions on the sharing of benefits, measures such as area-based management tools, including marine protected areas, and environmental impact assessments, capacity-building and the transfer of marine technology.

These recommendations were adopted by the United Nations General Assembly (UNGA) through Resolution 66/231 in 24 December 2011<sup>13</sup>. The UNGA recognizes in the Resolution 66/231 the abundance and diversity of marine genetic resources and their value in terms of the benefits, goods and services they can provide; and also the importance of research on marine genetic resources for the purpose of enhancing the scientific understanding, potential use and application, and enhanced management of marine ecosystems.

The General Assembly (UNGA) adopted Resolution 69/292 on 19 June 2015, concerning the development of an international legally-binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ agreement).

Without a new international legally-binding instrument, questions are unanswered, rising legal uncertainty, as for example, the legal status of marine genetic resource in ABNJ, difficulty in identifying commercial and non-commercial research, questions related to intellectual property rights. Also there is a gap in the international legal framework concerning the access and benefit sharing (ABS) of marine genetic resource beyond national jurisdiction, since the Convention on Biological Diversity and the Nagoya Protocol apply just to MGR within national jurisdiction.

It is extremely important to ensure the scientific capacity development and technology transfer, and also, achieve equitable and sustainable use of marine genetic resource.

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<sup>12</sup> Thomas Greiber. *In Common Pools of Genetic Resources: Equity and Innovation in International Biodiversity Law*. Routledge, 2013, p. 400.

<sup>13</sup> Annex of the Resolution 66/231.

## **b) Area-based management tools.**

The human's use of resources must be poised with the necessity of maintaining the ocean ecosystems' integrity for future generations, grounding the ecosystem approach on a holistic environmental management.

This idea is grounded in article 14 of the United Nations Sustainable Development Goals: "Conserve and sustainably use the oceans, seas and marine resources". "By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans".<sup>14</sup>

There is no universally accepted definition of area-based management tools (ABMT). Nonetheless, there is a worldwide accepted notion that managing human activities beyond national jurisdiction as, for example, exploration and exploitation of non-living resources, fishing, shipping and marine scientific research, is extremely important to ensure the conservation and sustainable use of marine biodiversity.

Area-based management tools are crucial to assure the human long-term sustainable use of the seas. The protection of some vital areas is really important to minimise the impacts of human activities at sea, but is not sufficient to solve the whole problem. Other tools must be carried out to the largely protection not only of the biodiversity but also the entire ecosystem process, and, at the same time, strengthen human's economic and social development.

In other words, area-based management tools was thought as essential to the protection and the preservation of the marine environment, to the conservation of marine biodiversity, to base-line research and to the regulation of human activities, in such a manner that the marine ecosystem will continue to sustain the legitimate uses of the sea and will continue to meet the needs of present and future generations.

There are already some tools that are meant to protect the marine ecosystem, as, for example, the MARPOL<sup>15</sup> Convention that established discharge standards in special areas, the OSPAR<sup>16</sup> Commission that developed Marine Protected Areas (MPAs) in ABNJ, IMO's Particularly Sensitive Sea Areas (PSSAs), Regional Fisheries Management Organisations (RFMO) temporal or spatial closed areas such as "Vulnerable Marine Ecosystems" (VMEs), ISA's<sup>17</sup> Areas of Particular Environmental Interest and Preservation Reference Zones.<sup>18</sup>

Nonetheless, there is no comprehensive legally binding framework on area-based management in ABNJ. This absence results in uncertainty to the States in order to provide clear guidance on their respective roles, cooperation and coordination. The States have no established obligation to comply with the area-based management tools and there are no mechanisms to stimulate regional actions.

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<sup>14</sup> Adopted by the countries to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Goal 14 targets: "By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics. By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism".

<sup>15</sup> The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978.

<sup>16</sup> The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) was open for signature at the Ministerial Meeting of the Oslo and Paris Commissions in Paris on 22 September 1992. It was adopted together with a Final Declaration and an Action Plan.

<sup>17</sup> International Seabed Authority, established by the United Nations Convention on the Law of the Sea.

<sup>18</sup> See Suggested responses to questions on area based management tools (ABMTs), based on the document entitled, "Chair's indicative suggestions of clusters of issues and questions to assist further discussions in the informal working groups at the second session of the Preparatory Committee" in [http://www.un.org/depts/los/biodiversity/prepcom\\_files/area\\_based\\_management\\_tools.pdf](http://www.un.org/depts/los/biodiversity/prepcom_files/area_based_management_tools.pdf)

Some regions have adopted area-based management tools; however, there are still few regions that have taken these measures. Regional Seas programmes developed specific initiatives to conserve marine biodiversity in ABNJ, particularly through the creation of Marine Protected Areas (MPAs). Consequently, it was thought that an international legally-binding instrument should address the omissions concerning, between other things, area-based management tools, including marine protected areas, environmental impact assessments and capacity-building and the transfer of marine technology. But it is also extremely important to create marine spatial planning and conservation agreements and strength regional initiatives in order to improve conservation and sustainable use of marine biodiversity in ABNJ.

### **i) Marine protected areas (MPAs)**

There is not one unanimous legal definition of Marine Protected Areas (MPAs). Some international and regional<sup>19</sup> instruments define “protected areas” according to their own objectives.

The Convention on Biological Diversity defines “protected area” as “a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives”.<sup>20</sup>

The International Union for Conservation of Nature defines any protected area as “a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”.<sup>21</sup>

For OSPAR purposes, the term Marine Protected Area is defined in Recommendation 2003/3 implementing Annex V of OSPAR as “an area within the maritime area for which protective, conservation, restorative or precautionary measures, consistent with international law have been instituted for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment”.

In addition to the proposed definitions, “marine protected areas” must embrace the seabed, benthos, the water column, the water surface and the airspace above the sea surface. This whole area must be mapped and have boundaries that are legally defined. MPAs help to ensure a higher level of protection of a defined geographical area from environmental impacts of human activities, the conservation of endangered species and critical habitats. The MPAs would also provide reference areas for understanding the effects of human activities on the ocean.

The Ministerial Meeting of the OSPAR Commission adopted in 1998 the Annex V “On the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area” and an accompanying OSPAR Strategy, aiming the establishment of a network of marine protected areas to ensure the sustainable use, protection, and conservation of marine biological diversity and ecosystems – the OSPAR Network of Marine Protected Areas (“the OSPAR Network”). The work of the OSPAR Commission is guided by the ecosystem approach to an integrated management of human activities in the maritime area.<sup>22</sup>

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<sup>19</sup> See, for example, U.S. National Marine Sanctuary; Australia’s Great Barrier Reef Marine Park; Galápagos Marine Reserve.

<sup>20</sup> Convention on Biological Diversity, article 2. CBD, article 8. In-situ Conservation - Each Contracting Party shall, as far as possible and as appropriate: (a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity. (b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity: (c) Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use; (e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas.

<sup>21</sup> Jon Day et al., “Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas,” *Best Practice Protected Area Guidelines* Series No. 19 (2012), [https://cmsdata.iucn.org/downloads/iucn\\_categoriesmpa\\_eng.pdf](https://cmsdata.iucn.org/downloads/iucn_categoriesmpa_eng.pdf)

<sup>22</sup> In 2006, 81 sites were accepted by OSPAR but until now, actions by OSPAR Contracting Parties have been focused mainly on the establishment of MPAs in their territorial waters and Exclusive Economic Zones/200 nm zones, thus within their national jurisdiction. As of 2008, no Marine Protected Area (MPA) has been nominated in Areas Beyond National Jurisdiction (ABNJ), although 2008 did see a merged proposal for identifying the Mid

United Nations Conference on Sustainable Development organized in Rio de Janeiro in 2012 (RIO +20), stated in the document entitled “The future we want”, “the importance of area-based conservation measures, including marine protected areas, consistent with international law and based on best available scientific information, as a tool for conservation of biological diversity and sustainable use of its components”.

The MPAs are vital to the conservation of the marine biological diversity throughout a poised ecosystem. The management of sensitive areas beyond national jurisdiction along with regional and sectorial programs is indispensable to achieve long-term conservation of nature for present and future generations.

States must work together in order to provide an international legally binding agreement to manage ecological benefits to neighbouring ecosystems, building mechanisms to identify potential marine protected areas beyond national jurisdiction, cooperating with existing sectoral and regional organizations, monitoring, evaluating and reporting all activities developed in these areas.

## **ii) Environment impact assessment.**

Another management tool considered by the Resolution 69/292 of the United Nations General Assembly is the environmental impact assessment (EIA).

Environmental Impact Assessment may be defined as the process adopted for evaluating the likely environmental consequences that may be caused by a human activity. This process aims to analyse the impacts, beneficial and adverse, that the activity may cause, proposing conditions for its implementation and procedures that must be adopted for its execution.

Activities developed at sea have great potential to cause harm to the environment, given the adverse conditions of the marine environment. The prevention, mitigation and/or control of any environmental damage, drastically increase when the activity is developed in the ocean. The threatening that these activities may cause to the health of marine ecosystems and their biodiversity compel the States to take preventive measures to avoid any damage do the environment.

The Resolution 69/292 is in harmony with articles 204 (Monitoring of the risks or effects of pollution) and 206 (Assessment of potential effects of activities) of UNCLOS. The article 204 stipulates that “1. States shall, consistent with the rights of other States, endeavour, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyse, by recognized scientific methods, the risks or effects of pollution of the marine environment. 2. In particular, States shall keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment”.

Article 206 of UNCLOS establishes that “when States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205<sup>23</sup>”.

According to article 14 of the Convention on Biological Diversity, “each contracting party, as far as possible and as appropriate, shall (a) Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate. Allow for public participation in such procedures; (b) Introduce appropriate arrangements to ensure that the environmental consequences of its programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account; (c) Promote, on the basis of reciprocity,

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Atlantic Ridge/Charlie Gibbs Fracture Zone as a potential future MPA in ABNJ. OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic. Meeting of the OSPAR Commission Brussels (European Commission): 22-26 June 2009 (OSPAR 09/22/1-E, Annex 6).

<sup>23</sup> UNCLOS, article 205 (Publication of reports) - States shall publish reports of the results obtained pursuant to article 204 or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all States.

notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate.

Concerning the national jurisdictions, Environmental Impact Assessments procedures were adopted in many countries, forming part of environmental law and planning frameworks worldwide.

However, conducting effective Environmental Impact Assessments in areas beyond national jurisdiction is likewise crucial to the preservation of marine ecosystem in a holistic way.

UNCLOS and others international instruments<sup>24</sup> already established the obligation to conduct impact assessment. Under customary international law, the International Court of Justice held that “the obligation to protect and preserve [the marine environment] has to be interpreted in accordance with a practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource. Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the regime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works”.<sup>25</sup>

The Advisory opinion n. 17 of the ITLOS held that “under the Convention (UNCLOS) and related instruments, sponsoring States also have obligations with which they have to comply independently of their obligation to ensure a certain behaviour by the sponsored contractor. These obligations may be characterized as “direct obligations”. Among the most important of these direct obligations incumbent on sponsoring States are: the obligation to assist the Authority in the exercise of control over activities in the Area; the obligation to apply a precautionary approach; the obligation to apply best environmental practices; the obligation to take measures to ensure the provision of guarantees in the event of an emergency order by the Authority for protection of the marine environment; the obligation to ensure the availability of recourse for compensation in respect of damage caused by pollution; and the obligation to conduct environmental impact assessments”. According to this advisory opinion “The Court’s [ICJ] reasoning in a transboundary context may also apply to activities with an impact on the environment in an area beyond the limits of national jurisdiction; and the Court’s references to “shared resources” may also apply to resources that are the common heritage of mankind”.<sup>26</sup>

Nonetheless, global coordination mechanisms are still lacking to manage environmental impact assessment for activities in areas beyond national jurisdiction. Thus, in order to improve ocean governance, the Implementing Agreement thought by Resolution 69/292 of the United Nations General Assembly must establish minimum requirements for an environmental impact assessment; designate what activities will require an EIA; provide for ongoing monitoring and enforcement to ensure that activities comply with the terms and conditions of approval; evaluate impacts and the effectiveness of mitigation measures; and, where required, to strengthen future EIAs and mitigation measures.<sup>27</sup>

### **iii) Capacity building and marine technology transfer.**

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<sup>24</sup> See, for example, Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) - the 'Espoo (EIA) Convention'.

<sup>25</sup> Argentina v. Uruguay - Pulp Mills [2010] ICJ Rep. 14, 83 paragraph 204 p. 60.

<sup>26</sup> Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area (request for advisory opinion submitted to the Seabed Disputes Chamber) List of cases: no. 17 Advisory opinion of 1 February 2011.

<sup>27</sup> See High Seas Environmental Impact Assessments. The importance of evaluation in areas beyond national jurisdiction. March 15, 2016. *Protecting Ocean Life on the High Seas. High Seas Environmental Impact Assessments* in <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2016/03/high-seas-environmental-impact-assessments>.



According to article 266 of the UNCLOS (Promotion of the development and transfer of marine technology), “States, directly or through competent international organizations, shall cooperate in accordance with their capabilities to promote actively the development and transfer of marine science and marine technology on fair and reasonable terms and conditions”.

These guiding principles and approaches foreseen by article 266 and many other articles of UNCLOS<sup>28</sup> are crucial to the development of the Implementing Agreement aimed by Resolution 69/292 of the United Nations General Assembly on the conservation and sustainable use of marine biodiversity in ABNJ.

The development and transfer of marine technology can be implemented by open access and dissemination of data, information and knowledge. States are obliged, under UNCLOS<sup>29</sup>, to promote acquisition, evaluation and dissemination of marine technological knowledge and facilitate access to such information and data.

According to article 276 (Establishment of regional centres) of UNCLOS “States, in coordination with the competent international organizations, the Authority and national marine scientific and technological research institutions, shall promote the establishment of regional marine scientific and technological research centres, particularly in developing States, in order to stimulate and advance the conduct of marine scientific research by developing States and foster the transfer of marine technology”.

It means the promotion of training and education<sup>30</sup>, exchange of scientists and experts<sup>31</sup>, conferences, seminars and symposia on scientific and technological subjects, in particular on policies and methods for the transfer of marine technology<sup>32</sup>.

The Implementing Agreement should recognize the needs of developing States, allowing them to strengthen marine scientific research capabilities through publication and dissemination of scientific data, information and transfer of knowledge in relation to the conservation and sustainable use of marine biodiversity in ABNJ.

Actually, all States have a key role in the achievement of the Implementing Agreement's objectives, playing a part and benefitting from the conservation and sustainable use of marine biodiversity in ABNJ.

The Implementing Agreement must be in accordance with existing provisions established under UNCLOS and other international agreements and also, it must provide more operational mechanisms to ensure an integrated approach on capacity building and technology transfer on marine biodiversity in ABNJ.

## **Conclusion**

The conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction is vital to present and future generations. Current regulations do not provide the necessary protection for the environment and legal certainty for States and private parties to develop their activities in ABNJ. Without the right tools to manage human activities in ABNJ, sustainable development would be compromised. The Implementing Agreement to the United Nations Convention on the Law of the Sea (UNCLOS) can effectively address these issues by identifying gaps and fulfil them with clear and binding rules for all parties.

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<sup>28</sup> See, for example, UNCLOS, Part XIV, Development and transfer of marine technology.

<sup>29</sup> See UNCLOS, articles 268 (a), 277.

<sup>30</sup> See UNCLOS, articles 268(d), 275(2), 277(a).

<sup>31</sup> See UNCLOS, article 269.

<sup>32</sup> See UNCLOS, articles 269(c), 277(d).