

# **Governance Principles Relevant to Marine Biodiversity in Areas Beyond National Jurisdiction**

## **Submission to the Chair**

February 25, 2016  
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## **Introduction and Executive Summary**

The Chair of the Preparatory Committee, H.E. Mr. Eden Charles of Trinidad and Tobago, in a letter dated 18 December 2015, invited submissions of views to him on the elements of a draft text 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. This is a submission by the Greenpeace International delegation.

This paper outlines governance principles relevant to the proposed an international legally-binding instrument under the 1982 Law of the Sea Convention (UNCLOS)<sup>1</sup> on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. It describes the proposed principles, and in an Annex provides excerpts from key international instruments and agreements as precedents for the application of the principle in multilateral instruments. It also sets out ways the principles may be operationalized in the international instrument. It is hoped that this paper stimulates discussion on some of the fundamental operating and governance principles that may be needed to translate specific operational objectives of any new agreement into established practice.

The basis for negotiation is set out in UNGA resolution 69/292,<sup>2</sup> whereby the General Assembly “*Decides to develop an international legally-binding instrument under the Convention on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction... [N]egotiations shall address the topics identified in the package agreed in 2011, namely the conservation and sustainable use of marine biological diversity of 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, environmental impact assessments and capacity-building and the transfer of marine technology.*” The often-used acronym “BBNJ” is sometimes used in this paper to describe the above process relevant to marine biodiversity beyond areas of national jurisdiction.

Principles, it has been noted, systematize relevant rules within the legal system, while rules further elaborate principles and set out specific measures concerning the rights and obligations of States.<sup>3</sup> Principles set out normative frameworks for integrating various legal, economic, social and political considerations into specific fields of international law and they provide guidance for the interpretation and application of relevant rules.<sup>4</sup> In multinational environmental agreements, principles set out some critical ways in which the objective of the agreement will be achieved and provide context for the rules which are elaborated in the agreement.

Principles can be set forth either in the Preamble or the body of an agreement. A number of agreements contain articles (usually at the start of the agreement) setting out principles. Notable is the UN Fish Stocks Agreement’s article 5, which provides that in order to conserve and manage straddling fish stocks and highly migratory fish stocks, coastal States and States fishing on the high seas shall, in giving effect to their duty to cooperate in accordance with the Convention, perform 11 stated activities described as general principles. The UN Framework Convention on Climate Change (UNFCCC) has a lengthy article on principles.<sup>5</sup> It provides that Parties shall be guided by a number of

principles to achieve the objectives of the Convention. These include that the Parties should protect the climate system, take precautionary measures, and promote sustainable development. The International Union for the Conservation of Nature (IUCN)<sup>6</sup> has identified ten principles for high seas governance: They are:

1. Respect for the law of the sea, in particular the UN Convention on the Law of the Sea and related instruments
2. Protection and preservation of biological diversity in ABNJ
3. International Cooperation
4. Science-based approach to management
5. Precautionary approach
6. Ecosystem approach
7. Sustainable and equitable use
8. Accountability
9. Transparency
10. State Responsibility

Further explanation on their legal background and rationale is available in a Policy Brief on Governance Principles prepared by IUCN.<sup>7</sup> Applicable principles relevant to marine biodiversity in areas beyond national jurisdiction are considered in this paper.

This paper looks briefly at the genesis and the background of these principles and suggests some ways of operationalizing them. In the attached Annex, this paper references agreed texts as examples of how these principles have been expressed in various international instruments and multilateral environmental agreements. It is designed to provide a resource for negotiators and a possible basis for further investigation.

## **Recommended Principles**

Following this review, it is proposed that the recommended principles to guide States Parties in implementing any new international instrument on the conservation and sustainable use of marine biodiversity in ABNJ should include:

- Protection and restoration of the health, productivity and resilience of oceans and marine ecosystems, and maintenance of their biodiversity, in areas beyond national jurisdiction.
- The sustainable and equitable use of marine life for the benefit of present and future generations.
- Ongoing co-operation between and among States to achieve the purposes of the Agreement.
- Use of the best available scientific information.
- Stewardship of the global marine environment for present and future generations.
- The precautionary principle.
- Ecosystem based management.
- Good environmental governance, including access to information, public participation and access to review procedures.
- The polluter pays principle.
- Respect for the law of the sea.

## **1. Protection and restoration of the health, productivity and resilience of oceans and marine ecosystems, and maintenance and restoration of their biodiversity, in areas beyond national jurisdiction**

The rate of species extinction has reached unprecedented levels.<sup>8</sup> This carries with it unpredictable consequences for humankind and for all life on earth.<sup>9</sup> The protection or conservation of biological diversity represents one of the most pressing challenges of international environmental law. A wide range of international environmental law agreements have come into effect in recent times that are concerned with the protection and preservation of biological diversity. Most notable is the Convention on Biological Diversity, which represents a profound transformation in traditional international legal approaches to nature conservation. Professor David Freestone describes article 192 as introducing a major new principle – an obligation on all States to protect and preserve the marine environment.<sup>10</sup> He also cites the article 194(5) obligation to protect rare or fragile ecosystems. The obligation to cooperate in article 197 supplements these obligations, and regional seas agreements (such as CCAMLR, OSPAR and the Madrid Protocol) give substance to the duty.

Since UNCLOS was negotiated, the ecosystem approach, ecosystem based management and the importance of ecosystem integrity have increased importance as science has progressed and impacts on the ecosystem have multiplied.<sup>11</sup> States including Ecuador,<sup>12</sup> the Philippines,<sup>13</sup> and Colombia<sup>14</sup> enshrine ecological integrity in their constitutions. At Rio+20, the international community called on States to restore the health and integrity of the Earth's ecosystem<sup>15</sup> and committed to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity.<sup>16</sup> To that should be added the restoration of biodiversity.

*Suggestion for the new instrument:* While protection and preservation of the marine environment is already a requirement under article 192 of UNCLOS, the new instrument will add a specific layer about protection and preservation and restoration of biodiversity as well as the marine environment, and should include obligations to maintain and restore ecosystem integrity.

A principle could be framed as:

1. Protection and preservation of the marine environment (UNCLOS formulation);
2. Protection and preservation of biodiversity; or
3. Protection, preservation and restoration of biodiversity and the marine environment and the maintenance and restoration of ecosystem integrity in areas beyond national jurisdiction.

Option 3 is the preferred option, being the most comprehensive and appropriate in the context of the negotiations set out in resolution 69/292.

## **2. Ongoing cooperation between and among States to achieve the purposes of this Agreement**

It is well established that States have a duty of international cooperation. The 1970 UNGA Declaration of Principles of International Law<sup>17</sup> declared that all States have the duty to cooperate with one another in accordance with the Charter. Twenty years later, the Rio Declaration Principle 7 stated that States shall “cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth’s ecosystem”.<sup>18</sup> ITLOS held in the *MOX Plant* case that “the duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law.”<sup>19</sup>

With respect to marine biodiversity, article 117 of UNCLOS provides that all States have the duty to take or cooperate with other states in taking, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas.

*Suggestion for the new instrument:* Cooperation is at the heart of the international instrument. Cooperation between States for the conservation of biodiversity, cooperation by States in their work in international organizations and cooperation between international organizations, accountability and transparency all go hand in hand.

## **3. Use of the best available scientific information**

Effective management of any natural resource is dependent upon sufficient knowledge about ecosystems. Scientific research is crucial to understanding the environment. Decision-makers need to understand the science underlying environmental issues before making decisions. Science helps us to better understand problems as well as solutions.<sup>20</sup> UNCLOS in article 119.1(a) requires States to base fisheries conservation and management measures on “the best scientific evidence available”, and the Fish Stocks Agreement repeats this in article 5(b). In implementing the precautionary approach, States are required to improve decision-making for fishery resource conservation and management by obtaining and sharing the best scientific information available and implementing improved techniques for dealing with risk and uncertainty,<sup>21</sup> as well as determine, on the basis of the best scientific information available, stock-specific reference points and the action to be taken if they are exceeded.<sup>22</sup> Emergency measures are to be based on the best scientific evidence available.<sup>23</sup>

*Suggestion for the new instrument:* Using the best available science is an important principle for all aspects of the new international instrument, including the conservation and sustainable use of marine genetic resources, and is obviously closely related to the transfer of technology and capacity building, to ensure that the best science is available when needed.

#### **4. Stewardship of the global marine environment for present and future generations**

The principle of State responsibility holds that States must be held responsible for a breach of an international obligation.<sup>24</sup> The principles of State responsibility determine when an obligation has been breached and the legal consequences of that breach. The International Law Commission's Draft Articles on the Responsibility of States for Internationally Wrongful Acts in August 2001<sup>25</sup> are founded on the principle that States can be held responsible for acts that are attributable to them as well as for internationally wrongful acts. However, related to State responsibility is the concept of shared responsibility. Shared responsibility by States incorporates the recognition that States are not only responsible for activity within their own jurisdictions but also carry a shared responsibility for the global commons, particularly the high seas and seabed Area. The principle of States acting as trustees on behalf of all humankind is not new, but is a core part of the set of responsibilities placed on States acting through the International Seabed Authority for the Area under UNCLOS. Put simply, States have a common responsibility, particularly for areas outside national jurisdiction that are thought of as global commons for example the oceans and the atmosphere. It has been reflected in the UNFCCC, UNCLOS and the CBD.

Stewardship is closely tied to the public trust doctrine, which holds that certain natural resources are held by the sovereign in trust and on behalf of all the citizens because of their unique characteristics and central importance, and are not subject to ownership by either the state or a private actor.<sup>26</sup> For example, through the concept of a public trusteeship, a stewardship doctrine has been incorporated into South African natural resources law.<sup>27</sup> At Rio+20, States in *The Future We Want* recognized their responsibility as ocean stewards in stating that “*We therefore commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities having an impact on the marine environment, to deliver on all three dimensions of sustainable development.*”<sup>28</sup>

Ancient Roman law declared that “By the law of nature these things are common to mankind—the air, running water, the sea, and consequently the shores of the sea.”<sup>29</sup> India has incorporated the public trust doctrine, with the Supreme Court of India holding that “[t]he State is the trustee of all natural resources which are by nature meant for public use and enjoyment,” including the seashore, and that the State as a trustee is under a legal duty to protect the natural resources.<sup>30</sup> Elements of the public trust doctrine can be found in international instruments.<sup>31</sup> The principle of trusteeship for current and future generations is also contained in UNCLOS. The common heritage concept as expressed in UNCLOS has been described as “a form of international trusteeship,”<sup>32</sup> and as “one of the most developed applications of trusteeship or fiduciary relationship in an environmental context.”<sup>33</sup>

Professor Freestone cites Principle 21<sup>34</sup> of the Stockholm Declaration and Principle 2<sup>35</sup> of the Rio Declaration as reflecting a proactive obligation for a form of stewardship role in

protecting the resources in areas beyond national jurisdiction.<sup>36</sup> While Freestone cites the 1995 FAO Code of Conduct for Responsible Fisheries and 1993 FAO Compliance Agreement as evincing an obligation of responsibility, he concludes that the strongest form is actually in the Moon Treaty.<sup>37</sup> While Article VI of the Moon Treaty does impose responsibility for operators, non-governmental entities and the like, and requiring continuing supervision, the concept of stewardship requires further elaboration in the 21<sup>st</sup> century.

*Suggestion for the new instrument:* State responsibility is a well-accepted principle of international law, and thus its restatement as a principle may not add much to the new instrument. The principle may be better translated (updated or elaborated) in terms of stewardship, to bring in broader accountability, broader stakeholder participation, and corporate responsibility. There is a strong argument for introducing elements of stewardship or the public trust doctrine into the discussion around an agreement on biodiversity of the high seas. Stewardship and conservation of the high seas and seabed are the common concern of all, and the deep seabed is already subject to the principle of the common heritage of mankind.

## **5. Precautionary principle**

Since the mid-1980s, the precautionary principle or approach has been used in numerous international agreements, and there has been extensive support for it in State practice and judicial opinion.<sup>38</sup> Its implementation into numerous documents has seen it evolve into an important legal principle in international environmental law.

The Rio Declaration's Principle 15 is the standard formulation, and provides that "[i]n order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." The precautionary approach or principle has featured since the Rio Declaration in virtually all international environmental treaties and policy declarations, particularly relating to the marine environment and resources.<sup>39</sup>

ITLOS observed in its Advisory Opinion<sup>40</sup> that the precautionary approach has been incorporated into a growing number of international treaties and other instruments, many of which reflect Principle 15 of the Rio Declaration. The International Court of Justice (ICJ) held in *Pulp Mills on the River Uruguay*<sup>41</sup> that "a precautionary approach may be relevant in the interpretation and application of the provisions of the Statute", "... (i.e., the environmental bilateral treaty whose interpretation was the main bone of contention between the parties)." The ICJ in *Gabčíkovo-Nagymaros*<sup>42</sup> observed that: "The Court is mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage."

The Fish Stocks Agreement devotes an article to the precautionary approach, as well as an Annex, and requires States to apply the precautionary approach in accordance with article 6.

There has been some debate over the years in different venues over the use of the precautionary “principle” versus “approach”. The difference, however, is more than semantic: a principle can be objective, mandatory and enforceable, whereas an approach may be seen as more subjective.<sup>43</sup> For these reasons, the precautionary principle is the preferred formulation.

*Suggestion for the new instrument:* The new instrument should consider an article devoted to the precautionary principle and its implementation, and include as a principle that States and international organizations shall always apply the precautionary principle when considering the conservation and management of marine biodiversity in areas beyond national jurisdiction in order to protect the living marine resources and preserve the marine environment.

## **6. Ecosystem approach and ecosystem based management**

An ecosystem approach, also known as ecosystem based management, focuses on the management of human activities in a way that considers the environment as a whole. The ecosystem approach emphasizes an holistic, participatory and integrated approach as contrasted to the more narrowly focused biological and usually single species-oriented approach. It aims to manage human interactions with ecosystems and all associated organisms, rather than only individual species. The focus of management is maintaining the natural structure and function of ecosystems, including the biodiversity and productivity of natural systems and identified important species.

The development of the ecosystem approach can be traced to the 1972 UN Conference on Human Environment, but international institutional development has been slow. Development accelerated in the 1990s, and, in particular, the 1992 Rio Declaration and Agenda 21, the FAO Code of Conduct and the 1995 UN Fish Stocks Agreement were important cornerstones in the development of the approach. This decade, the institutional development of the ecosystem approach can be traced to the 2000 CBD Decision V/6, which laid down principles for guidance in applying the ecosystem approach, and the 2001 Reykjavik Declaration, which recognised the importance of interactions between fishery resources and all components of the ecosystem, and the need to conserve marine environments. The Johannesburg Programme of Implementation (JPOI) in the same year called for the application of the ecosystem approach by 2010.<sup>44</sup> The ecosystem approach is now well established in oceans management in a number of international policy documents and binding agreements. The first convention to adopt the ecosystem approach was CCAMLR.<sup>45</sup> It adopted the ecosystem approach in 1995 and has since elaborated it, and continues to promote and implement it, including in the Jakarta Mandate and IMCAM. Practice within the CITES Convention takes account of the ecosystem approach. Parties under the 1971 Ramsar Convention have endorsed the ecosystem approach. The 1979 CMS or Bonn Convention does take into account ecosystems in assessing conservation status and thus considers migratory species in their ecosystem context, and there are a number of references to the importance of ecology and sound ecological principles.

*Suggestion for the new instrument:* It is important to manage marine conservation under uncertainty. Climate change and ocean acidification and other stressors mean that the

ocean is rapidly changing so that its challenges may outrun the international community's ability to manage them, where scientific uncertainty is still manifest.

Ecosystem based management, coordination between sectoral agencies and cross-sectoral and integrated management all have an important role to play in addressing challenges in the face of scientific uncertainty. The ecosystem approach is therefore an important principle of the international instrument. Its definition needs to be addressed: the SPRFMO Convention has one definition. As with the precautionary principle, clarity would be improved by formulating the principle in terms of ecosystem based management. The principle could read that States and international organizations should apply ecosystem based management widely to the conservation and management of marine biodiversity through an integrated approach under which decisions in relation to the conservation and management of marine biodiversity are considered in the context of the functioning of the wider marine ecosystems in which they occur to ensure the long-term conservation and sustainable use of those resources and in so doing, safeguard those marine ecosystems.

## **7. Sustainable and equitable use of marine life for the benefit of present and future generations**

Sustainability has been the fundamental ethic behind environmental law and thinking for centuries across the globe including in Western societies. It conveys the idea that the continued existence of the natural world and its life forms, and the ability of the natural world to regenerate itself through its own natural evolution, has intrinsic value.

Sustainability acknowledges that humanity is dependent on nature and the need to live within the earth's ecological limitations. We can only have the continuity of human societies and nature if ecological systems are sustained. The 1987 Brundtland Commission on Environment and Development<sup>46</sup> was among the early international instruments focusing on sustainable development. The Rio Declaration picked it up in Principle 4, which states that in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it. The International Court of Justice described sustainable development as the "need to reconcile economic development with protection of the environment".<sup>47</sup>

*Suggestion for the new instrument:* In the context of the negotiation of the new instrument, sustainable development, sustainable use of resources and equitable use should be mainstreamed into the instrument.

## **8. Good environmental governance, including transparency through access to information, public participation, and access to review procedures**

Public participation is a fundamental legal principle in environmental management and decision-making. It is inherent to any democratic process as it allows for transparent decision-making that takes into account an array of knowledge and values that exist

within a relevant audience. Access to information is a prerequisite for meaningful public participation in decision-making.<sup>48</sup>

An early recognition of public participation was in 1948 in Article 19 of the Universal Declaration of Human Rights, which enshrined the right to freedom of opinion and expression. In 1972, the Stockholm Declaration of the United Nations Conference on Human Environment in Principle 19 reinforced the role of individuals and communities in the protection and improvement of the environment. Today public participation is most widely recognized in international law in Principle 10 of the Rio Declaration, which establishes three pillars that are considered to form a ‘right to participation.’ The three pillars are access to information, public participation and access to justice. Further solidifying this commitment to public participation in international law is a number of conventions, the most notable being the Aarhus Convention, including its Almaty Guidelines.

*Suggestion for the new instrument:* Transparency and stakeholder participation will be key to include both in the objectives (in that the seabed in the Area is the common heritage of mankind, and the high seas more broadly is public domain), and in translating the objectives into meaningful action with broad stakeholder participation and buy-in. The new instrument should include review procedures such as those found in the Aarhus Compliance Committee,<sup>49</sup> which allows for substantial participation by civil society.

## **9. The Polluter Pays Principle**

The OECD embraced the polluter pays principle in 1972, and Principle 16 of the Rio Declaration endorsed the approach that the polluter should, in principle, bear the cost of pollution. The Polluter pays principle can cover pollution prevention and control measures, liability and clean-up costs for environmental damage.

*Suggestion for the new instrument:* The principle can be the basis for costs of environmental impact assessments, pollution prevention and control in ABNJ, liability and redress or clean-up costs in ABNJ.

## **10. Respect for the Law of the Sea / Conditional Freedom for the Seas**

This principle is sometimes referred to as conditional freedom of the seas. David Freestone<sup>50</sup> has suggested conditional freedom of the seas as a principle.

Article 87 of UNCLOS provides a list of the freedoms of the seas, but also provides that the freedom of the high seas “is to be exercised under the conditions laid down by this Convention and the other rules of international law”. These include conditions already provided in UNCLOS (such as Articles 87.1 and 2, 88, 116, 117, 192, 194.5), as well as more recent conditions, such as those in the Fish Stocks Agreement, and those that may be provided in an international instrument. Of immediate relevance to BBNJ is that duties include obligations to take measures for their own nationals for the conservation of the living resources of the high seas in article 117, obligations to cooperate with other states in conservation and management of those resources in article 118 and the obligation to base those measures on the best scientific evidence available, environmental and

economic factors and “generally recommended international minimum standards” in article 119.

*Suggestion for the new instrument:* An explicit reference to the conditional freedom of the seas, giving equal weight to the rights and responsibilities of States in undertaking activities in the high seas would provide an important legal basis for future mechanisms, including those related to monitoring and compliance.

## **11. Other Possible Principles**

### **11.1. States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of areas beyond the limits of national jurisdiction.**

Principle 2 of the Rio Declaration declared that States have the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

*Suggestion for the new instrument:* In the context of the international instrument, the principle can be stated that States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of areas beyond the limits of national jurisdiction.

## **Operationalizing the Principles**

As noted earlier, principles set out some critical ways in which the objective of the agreement will be achieved and provide context for the rules which are elaborated in the new instrument. Some examples of ways the principles may be operationalized are set out below. Further details can be found in the IUCN Paper IV on possible elements to consider.<sup>51</sup>

Paragraph 2 of UNGA resolution 69/292 sets out elements of the “package”:

*“Decides that negotiations shall address the topics identified in the package agreed in 2011, namely the conservation and sustainable use of marine biological diversity of 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, environmental impact assessments and capacity-building and the transfer of marine technology;”*

The following represents some examples in which the principles can be operationalized to put in place the elements of the package.

- *The protection of the marine environment and the restoration and maintenance of ecosystem integrity in areas beyond national jurisdiction including marine biodiversity in such areas.*

The objective of the agreement could be the conservation and sustainable use of marine biodiversity in ABNJ. Area-based management tools, including marine protected areas and reserves, environmental impact assessments and capacity-building and the transfer of

marine technology, are all ways in which this principle can be effected. Provisions could include:

- a framework for cooperation between member States
- establishment of a system of effectively and equitably managed ecologically representative and well-connected marine protected areas, including marine reserves in ABNJ,
- a framework for prior environmental impact assessment (EIA) of activities where they may have significant adverse effects on the marine environment or marine biodiversity of ABNJ, and the ability for conditions to be imposed on the proposed activity to avoid significant adverse effects or to prevent the proponents from proceeding where significant adverse effects will be unavoidable.
- provisions can put into place requirements for strategic environmental assessments (SEA) of plans and programmes under their jurisdiction or control where they may have significant adverse effects on the marine environment or marine biodiversity of ABNJ.

Provisions whereby parties will cooperate to take into account cumulative impacts and limit competing activities which could lead to the degradation of the marine environment or marine biodiversity could also contribute to putting this principle into effect.

- *The sustainable and equitable use of marine life for the benefit of present and future generations.*

The foregoing provisions would contribute to the operationalization of this principle. In addition, the package element, “marine genetic resources, including questions on the sharing of benefits”, would include provisions about access to marine genetic resources together with a comprehensive set of benefit sharing provisions for a multilateral system.

- *Ongoing cooperation between and among States to achieve the purposes of the Agreement*

Cooperation is likely to be at the heart of the agreement. The agreement could include a duty to cooperate on a global and regional basis for the conservation and sustainable use of marine biodiversity in ABNJ, as well as provide for co-operation at the sub-regional scale, emphasizing the importance of cooperation at all scales. Other provisions can include provisions for cooperation between and within relevant organizations, such as the International Maritime Organization (IMO) and regional fisheries management organizations.

- *Use of the best available scientific information.*

Provisions could include use of best available scientific information, the possible establishment of an independent scientific committee, the sharing of scientific information, and to promote and conduct scientific research and develop appropriate technologies in support of conservation and management of marine biodiversity and its components in ABNJ.

- *Stewardship of the global marine environment for present and future generations.*

This principle can be implemented through a principle for State responsibility for activities in ABNJ, for damage caused to ABNJ, for responsibility for the fulfillment of international obligations concerning the protection and preservation of the marine

environment in ABNJ, and for compensation and redress. It can also be implemented through affirmation that States are responsible for conserving biological diversity in ABNJ, are responsible for safeguarding marine biodiversity in ABNJ for future generations, and that States have responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of areas beyond the limits of national jurisdiction.

- *The precautionary principle*

Provisions could include an overarching obligation to apply the precautionary principle, the precautionary principle being integrated and incorporated in relevant provisions, as well as provisions for interim and precautionary measures in marine protected areas including marine reserves, possibly including requirements to refrain from authorizing or permitting activities or expanding existing activities that undermine the objectives of an MPA pending establishment and emergency measures. The precautionary approach should guide the assessment and control of any activities that have potential adverse effects. It is crucial that the precautionary principle be applied consistently.

- *Ecosystem based management*

Similar to the precautionary approach, ecosystem based management provisions can be incorporated in relevant provisions, as well as being provided for in an overarching provision. Provision can be made to establish a system of ecologically representative and well-connected marine protected areas including marine reserves and to adopt other area-based management measures where special measures need to be taken to conserve marine biological diversity in ABNJ.

- *Good environmental governance, including transparency, through access to information, public participation and access to review procedures.*

Transparency can be included in a stand-alone provision, requiring transparency in the decision making process and other activities of global, regional and sub-regional organisations with mandates relevant to the agreement, and requiring that States shall cooperate through the organisations they are members of to improve transparency and the exchange/flow of information among the different relevant organisations and between the agreement and civil society. Other provisions can provide for public participation in decisions on activities in ABNJ, for public participation in and review of strategic environmental assessments and environmental impact assessments, for information to be provided to stakeholders and for stakeholder participation in compliance, review and dispute resolution processes.

## **Annex: Principles Reflected in International Conventions and Instruments**

### **1. Protection and restoration of the health, productivity and resilience of oceans and marine ecosystems, and maintenance and restoration of their biodiversity, in areas beyond national jurisdiction**

#### **UNCLOS<sup>52</sup>**

##### Article 192 General Obligation

States have the obligation to protect and preserve the marine environment.

##### Article 193 Sovereign Right of States to Exploit their Natural Resources

States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.

##### Article 145 Protection of the Marine Environment

Necessary measures shall be taken in accordance with this Convention with respect to activities in the Area to ensure effective protection for the marine environment from harmful effects which may arise from such activities. To this end the Authority shall adopt appropriate rules, regulations and procedures for inter alia:

- (a) the prevention, reduction and control of pollution and other hazards to the marine environment, including the coastline, and of interference with the ecological balance of the marine environment, particular attention being paid to the need for protection from harmful effects of such activities as drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities;
- (b) the protection and conservation of the natural resources of the Area and the prevention of damage to the flora and fauna of the marine environment.

#### **Stockholm Declaration<sup>53</sup>**

##### Principle 4

Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperiled by a combination of adverse factors. Nature conservation, including wildlife, must therefore receive importance in planning for economic development.

#### **World Charter for Nature<sup>54</sup>**

##### I. General Principles

2. The genetic viability on the earth shall not be compromised; the population levels of all life forms, wild and domesticated, must be at least sufficient for their survival, and to this end necessary habitats shall be safeguarded.

3. All areas of the earth, both land and sea, shall be subject to these principles of conservation; special protection shall be given to unique areas, to representative samples of all the different types of ecosystems and to the habitats of rare or endangered species.

**The Future We Want (Rio+20)**

40. We call for holistic and integrated approaches to sustainable development which will guide humanity to live in harmony with nature and lead to efforts to restore the health and integrity of the Earth's ecosystem.

158. We recognize that oceans, seas and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical to sustaining it and that international law, as reflected in United Nations Convention on the Law of the Sea (UNCLOS), provides the legal framework for the conservation and the sustainable use of the oceans and their resources. We stress the importance of the conservation and sustainable use of the oceans and seas and of their resources for sustainable development, including through the contributions to poverty eradication, sustained economic growth, food security, creation of sustainable livelihoods and decent work, while at the same time protecting biodiversity and the marine environment and addressing the impacts of climate change. We therefore commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities impacting on the marine environment, to deliver on all three dimensions of sustainable development.

162. We recognize the importance of the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction.

...

**CCAMLR<sup>55</sup>**

Preamble – The Contracting Parties, recognizing the prime responsibilities of the Antarctic Treaty Consultative Parties for the protection and preservation of the Antarctic environment and, in particular, their responsibilities under Article IX, paragraph 1(f) of the Antarctic Treaty in respect of the preservation and conservation of living resources in Antarctica;

**CBD<sup>56</sup>**

Preamble

Affirming that the conservation of biological diversity is a common concern of humankind,

Reaffirming also that States are responsible for conserving their biological diversity and for using their biological resources in a sustainable manner,

Article 1. Objectives

The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of 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.

**Article 6. General Measures for Conservation and Sustainable Use**

Each Contracting Party shall, in accordance with its particular conditions and capabilities:

(a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and

(b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

**Convention on Migratory Species (CMS) <sup>57</sup>**

**Article II Fundamental Principles**

1. The Parties acknowledge the importance of migratory species being conserved and of Range States agreeing to take action to this end whenever possible and appropriate, paying special attention to migratory species the conservation status of which is unfavourable, and taking individually or in co-operation appropriate and necessary steps to conserve such species and their habitat.

2. The Parties acknowledge the need to take action to avoid any migratory species becoming endangered.

3. In particular, the Parties:

- a) should promote, co-operate in and support research relating to migratory species;
- b) shall endeavor to provide immediate protection for migratory species included in Appendix I; and
- c) shall endeavor to conclude Agreements covering the conservation and management of migratory species included in Appendix II.

**2. Ongoing co-operation between and among States to achieve the purposes of this Agreement**

**UNCLOS**

**Article 118 Co-operation of States in the conservation and management of living resources**

States shall co-operate with each other in the conservation and management of living resources in the areas of the high seas. States whose nationals exploit identical living resources, or different living resources in the same area, shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources

concerned. They shall, as appropriate, cooperate to establish subregional or regional fisheries organizations to this end.

Article 123 Co-operation of States bordering enclosed or semi-enclosed seas

States bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavor, directly or through an appropriate regional organization:

- (a) to co-ordinate the management, conservation, exploration and exploitation of the living resources of the sea;
- (b) to co-ordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;
- (c) to co-ordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;
- (d) to invite, as appropriate, other interested States or international organizations to co-operate with them in furtherance of the provisions of this article.

Article 143 Marine Scientific Research

3. States Parties may carry out marine scientific research in the Area.

States Parties shall promote international co-operation in marine scientific research in the Area by:

- (a) participating in international programmes and encouraging co-operation in marine scientific research by personnel of different countries and of the Authority; [...]

Article 150 Policies relating to activities in the Area

Activities in the Area shall, as specifically provided for in this Part, be carried out in such a manner as to foster healthy development of the world economy and balanced growth of international trade, and to promote international cooperation for the over-all development of all countries, especially developing States, and with a view to ensuring: [...]

Article 266 Promotion of the development and transfer of marine technology

1. 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. [...]

Article 278 Co-operation among international organizations

The competent international organizations referred to in this Part and in Part XIII shall take all appropriate measures to ensure, either directly or in close cooperation among themselves, the effective discharge of their functions and responsibilities under this Part.

**Rio Declaration**<sup>58</sup>

Principle 7

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the

international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

As well as principles: 5, 9, 12, 13, 14, 24, 27

**CBD<sup>59</sup>**

Article 5. Cooperation

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.

Art 13

The contracting parties shall

(b) Cooperate, as appropriate, with other States and international organizations in developing educational and public awareness programmes, with respect to conservation and sustainable use of biological diversity.

**SPRFMO Convention<sup>60</sup>**

Article 3

1. In giving effect to the objective of this Convention and carrying out decision making under this Convention, the Contracting Parties, the Commission and subsidiary bodies established under Article 6 paragraph 2 and Article 9 paragraph 1 shall:

(a) apply, in particular, the following principles:

(v) cooperation and coordination among Contracting Parties shall be promoted to ensure that conservation and management measures adopted by the Commission and conservation and management measures applied in respect of the same fishery resources in areas under national jurisdiction are compatible;

**Fish Stocks Agreement<sup>61</sup>**

The States Parties to this Agreement,

Resolve to improve cooperation between States to that end,

Article 8 Cooperation for conservation and management

1. Coastal States and States fishing on the high seas shall, in accordance with the Convention, pursue cooperation in relation to straddling fish stocks and highly migratory fish stocks either directly or through appropriate sub-regional or regional fisheries management organizations or arrangements, taking into account the specific characteristics of the sub-region or region, to ensure effective conservation and management of such stocks.

2. States shall enter into consultations in good faith and without delay, particularly where there is evidence that the straddling fish stocks and highly migratory fish stocks concerned may be under threat of over-exploitation or where a new fishery is being developed for such stocks. To this end, consultations may be initiated at the request of any interested State with a view to establishing appropriate arrangements to ensure conservation and management of the stocks. Pending agreement on such arrangements,

States shall observe the provisions of this Agreement and shall act in good faith and with due regard to the rights, interests and duties of other States.

3. Where a sub-regional or regional fisheries management organization or arrangement has the competence to establish conservation and management measures for particular straddling fish stocks or highly migratory fish stocks, States fishing for the stocks on the high seas and relevant coastal States shall give effect to their duty to cooperate by becoming members of such organization or participants in such arrangement, or by agreeing to apply the conservation and management measures established by such organization or arrangement. States having a real interest in the fisheries concerned may become members of such organization or participants in such arrangement. The terms of participation in such organization or arrangement shall not preclude such States from membership or participation; nor shall they be applied in a manner which discriminates against any State or group of States having a real interest in the fisheries concerned.

4. Only those States which are members of such an organization or participants in such an arrangement, or which agree to apply the conservation and management measures established by such organization or arrangement, shall have access to the fishery resources to which those measures apply.

5. Where there is no sub-regional or regional fisheries management organization or arrangement to establish conservation and management measures for a particular straddling fish stock or highly migratory fish stock, relevant coastal States and States fishing on the high seas for such stock in the sub-region or region shall cooperate to establish such an organization or enter into other appropriate arrangements to ensure conservation and management of such stock and shall participate in the work of the organization or arrangement.

6. Any State intending to propose that action be taken by an intergovernmental organization having competence with respect to living resources should, where such action would have a significant effect on conservation and management measures already established by a competent subregional or regional fisheries management organization or arrangement, consult through that organization or arrangement with its members or participants. To the extent practicable, such consultation should take place prior to the submission of the proposal to the intergovernmental organization.

#### Article 13

States shall cooperate to strengthen existing sub-regional and regional fisheries management organizations and arrangements in order to improve their effectiveness in establishing and implementing conservation and management measures for straddling fish stocks and highly migratory fish stocks.

#### **CCAMLR<sup>62</sup>**

##### Preamble – The Contracting Parties

Believing that the conservation of Antarctic marine living resources calls for international co-operation with due regard for the provisions of the Antarctic Treaty and with the active involvement of all States engaged in research or harvesting activities in Antarctic waters;

### **Stockholm POPs Convention<sup>63</sup>**

#### Article 11

1. The Parties shall, within their capabilities, at the national and international levels, encourage and/or undertake appropriate research, development, monitoring and cooperation pertaining to persistent organic pollutants and, where relevant, to their alternatives and to candidate persistent organic pollutants, including on their:

2. In undertaking action under paragraph 1, the Parties shall, within their capabilities:

(f) Encourage and/or undertake cooperation with regard to storage and maintenance of information generated from research, development and monitoring.

### **Stockholm Declaration<sup>64</sup>**

#### Principle 24

International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit by all countries, big and small, on an equal footing.

Cooperation through multilateral or bilateral arrangements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interests of all States.

### **ITLOS in *MOX Plant Case*<sup>65</sup>**

82. Considering, however, that the duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law and that rights arise therefrom which the Tribunal may consider appropriate to preserve under article 290 of the Convention/

## **3. Use of the best available scientific information**

### **UNCLOS**

#### Article 119 Conservation of the Living Resources of the High Seas

1. In determining the allowable catch and establishing other conservation measures for the living resources in the high seas, States shall:

(a) take measures which are designed, on the best scientific evidence available to the States concerned, to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global;

### **JPOI**

109. Improve policy and decision-making at all levels through, inter alia, improved collaboration between natural and social scientists, and between scientists and policy makers, including through urgent actions at all levels to: (f) Promote and improve

science-based decision-making and reaffirm the precautionary approach as set out in principle 15 of the Rio Declaration on Environment and Development, which states: [...]

### **The Future We Want**

160. We recognize the importance of building the capacity of developing countries to be able to benefit from the conservation and sustainable use of the oceans and seas and their resources and, in this regard, we emphasize the need for cooperation in marine scientific research to implement the provisions of UNCLOS and the outcomes of the major summits on sustainable development, as well as for the transfer of technology, taking into account the Intergovernmental Oceanographic Commission (IOC) Guidelines for the transfer of marine technology.

### **CCAMLR<sup>66</sup>**

#### Article XV

1. The Scientific Committee shall provide a forum for consultation and co-operation concerning the collection, study and exchange of information with respect to the marine living resources to which this Convention applies. It shall encourage and promote co-operation in the field of scientific research in order to extend knowledge of the marine living resources of the Antarctic marine ecosystem.

### **Fish Stocks Agreement<sup>67</sup>**

#### Article 5 - General principles

In order to conserve and manage straddling fish stocks and highly migratory fish stocks, coastal States and States fishing on the high seas shall, in giving effect to their duty to cooperate in accordance with the Convention:

- (b) ensure that such measures are based on the best scientific evidence available and are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global;
- (k) promote and conduct scientific research and develop appropriate technologies in support of fishery conservation and management; and

#### Article 6 – Application of the Precautionary Approach

3. In implementing the precautionary approach, States shall:

- (a) improve decision-making for fishery resource conservation and management by obtaining and sharing the best scientific information available and implementing improved techniques for dealing with risk and uncertainty;
- (b) apply the guidelines set out in Annex II and determine, on the basis of the best scientific information available, stock-specific reference points and the action to be taken if they are exceeded;

Article 14 - Collection and provision of information and cooperation in scientific research

1. States shall ensure that fishing vessels flying their flag provide such information as may be necessary in order to fulfil their obligations under this Agreement. To this end, States shall in accordance with Annex I:

- (a) collect and exchange scientific, technical and statistical data with respect to fisheries for straddling fish stocks and highly migratory fish stocks;
- (b) ensure that data are collected in sufficient detail to facilitate effective stock assessment and are provided in a timely manner to fulfil the requirements of subregional or regional fisheries management organizations or arrangements; and
- (c) take appropriate measures to verify the accuracy of such data.

2. States shall cooperate, either directly or through subregional or regional fisheries management organizations or arrangements:

- (a) to agree on the specification of data and the format in which they are to be provided to such organizations or arrangements, taking into account the nature of the stocks and the fisheries for those stocks; and
- (b) to develop and share analytical techniques and stock assessment methodologies to improve measures for the conservation and management of straddling fish stocks and highly migratory fish stocks.

3. Consistent with Part XIII of the Convention, States shall cooperate, either directly or through competent international organizations, to strengthen scientific research capacity in the field of fisheries and promote scientific research related to the conservation and management of straddling fish stocks and highly migratory fish stocks for the benefit of all. To this end, a State or the competent international organization conducting such research beyond areas under national jurisdiction shall actively promote the publication and dissemination to any interested States of the results of that research and information relating to its objectives and methods and, to the extent practicable, shall facilitate the participation of scientists from those States in such research.

### **SPRFMO Convention<sup>68</sup>**

#### Article 3

1. In giving effect to the objective of this Convention and carrying out decision making under this Convention, the Contracting Parties, the Commission and subsidiary bodies established under Article 6 paragraph 2 and Article 9 paragraph 1 shall:

(a) apply, in particular, the following principles:

(v) decisions shall be based on the best scientific and technical information available and the advice of all relevant subsidiary bodies;

### **SPAW Protocol<sup>69</sup>**

#### Article 20 Scientific, technical and management research

1. The Parties shall encourage and develop scientific and technical research relating to the aims of this Protocol. They shall also encourage and develop research into the sustainable use of specially protected areas and the management of protected species.

2. The Parties shall consult, when necessary, among themselves and with competent international organisations with a view to identifying, planning and undertaking scientific and technical research and monitoring programmes necessary for the identification and

monitoring of protected areas and species and assessing the effectiveness of measures taken to implement management and recovery plans.

3. The Parties shall exchange, directly or through the Centre, scientific and technical information concerning current and planned research and monitoring programmes and the results thereof. They shall, to the fullest extent possible, coordinate their research and monitoring programmes, and endeavour jointly to define or standardise their procedures.

4. In technical and scientific research, the Parties shall give priority to SPAMIs and species appearing in the annexes to this Protocol.

#### **4. Stewardship of the global marine environment for present and future generations**

UNCLOS<sup>70</sup>

##### **State Responsibility**

Article 139 Responsibility to ensure compliance and liability for damage

1. States Parties shall have the responsibility to ensure that activities in the Area, whether carried out by States Parties, or state enterprises or natural or juridical persons which possess the nationality of States Parties or are effectively controlled by them or their nationals, shall be carried out in conformity with this Part. The same responsibility applies to international organizations for activities in the Area carried out by such organizations.

2. Without prejudice to the rules of international law and Annex III, article 22, damage caused by the failure of a State Party or international organization to carry out its responsibilities under this Part shall entail liability; States Parties or international organizations acting together shall bear joint and several liability. A State Party shall not however be liable for damage caused by any failure to comply with this Part by a person whom it has sponsored under article 153, paragraph 2(b), if the State Party has taken all necessary and appropriate measures to secure effective compliance under article 153, paragraph 4, and Annex III, article 4, paragraph 4.

Section 9. Responsibility and Liability

Article 235 Responsibility and liability

1. States are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law.

2. States shall ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief in respect of damage caused by pollution of the marine environment by natural or juridical persons under their jurisdiction.

3. With the objective of assuring prompt and adequate compensation in respect of all damage caused by pollution of the marine environment, States shall cooperate in the implementation of existing international law and the further development of international law relating to responsibility and liability for the assessment of and compensation for damage and the settlement of related disputes, as well as, where appropriate,

development of criteria and procedures for payment of adequate compensation, such as compulsory insurance or compensation funds.

### **Common Heritage**

#### Article 136 Common Heritage of Mankind

The Area and its resources are the common heritage of mankind<sup>71</sup>

#### Article 137 Legal Status of The Area and its Resources

1. No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or natural or juridical person appropriate any part thereof. No such claim or exercise of sovereignty or sovereign rights nor such appropriation shall be recognized.
2. All rights in the resources of the Area are vested in mankind as a whole on whose behalf the Authority shall act. These resources are not subject to alienation. The minerals recovered from the Area, however, may only be alienated in accordance with this Part and the rules, regulations and procedures of the Authority.
3. No State or natural or juridical person shall claim, acquire or exercise rights with respect to the minerals recovered from the Area except in accordance with this Part. Otherwise, no such claim, acquisition or exercise of such rights shall be recognized.

#### Article 140 Benefit of Mankind

1. Activities in the Area shall, as specifically provided for in this Part, be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States, whether coastal or land-locked, and taking into particular consideration the interests and needs of developing States and of peoples who have not attained full independence or other self-governing status recognized by the United Nations in accordance with General Assembly resolution 1514 (XV) and other relevant General Assembly resolutions.
2. The Authority shall provide for the equitable sharing of financial and other economic benefits derived from activities in the Area through any appropriate mechanism on a non-discriminatory basis, in accordance with article 160, paragraph 2 (f) (i).

### **Rio Declaration<sup>72</sup>**

Principle 2. States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 7. States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. [...]

### **The Future We Want (Rio+20)**

[...] We therefore commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in

accordance with international law, of activities impacting on the marine environment, to deliver on all three dimensions of sustainable development.

### **UNFCCC<sup>73</sup>**

The Parties to this Convention,

Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions,

Recalling also that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

#### **Article 3 Principles**

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

### **Paris Agreement<sup>74</sup>**

Noting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of “climate justice”, when taking action to address climate change,

### **CBD<sup>75</sup>**

Preamble

Affirming that the conservation of biological diversity is a common concern of humankind,

Reaffirming also that States are responsible for conserving their biological diversity and for using their biological resources in a sustainable manner,

Article 3. Principle States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

### **Fish Stocks Agreement<sup>76</sup>**

PART XI Responsibility and Liability

Article 35 Responsibility and Liability

States Parties are liable in accordance with international law for damage or loss attributable to them in regard to this Agreement.

**Stockholm POPs Convention**<sup>77</sup>

Reaffirming that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

**Aarhus Convention**<sup>78</sup>

Preamble: Aiming thereby to further the accountability of and transparency in decision-making and to strengthen public support for decisions on the environment.

**Whaling Convention**<sup>79</sup>

Preamble: the interest of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks.”<sup>80</sup>

**The World Heritage Convention**<sup>81</sup>

Article 4

Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.

## **5. Precautionary principle**

**Rio Declaration**<sup>82</sup>

Principle 15

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

**UNFCCC**<sup>83</sup>

Article 3 Principles

In their actions to achieve the objective of the Convention and to implement its provisions, the Parties shall be guided, inter alia, by the following:

3. The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account

different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.

### **Fish Stocks Agreement**<sup>84</sup>

#### Article 6 Application of the precautionary approach

1. States shall apply the precautionary approach widely to conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks in order to protect the living marine resources and preserve the marine environment.

2. States shall be more cautious when information is uncertain, unreliable or inadequate. The absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.

3. In implementing the precautionary approach, States shall:

(a) improve decision-making for fishery resource conservation and management by obtaining and sharing the best scientific information available and implementing improved techniques for dealing with risk and uncertainty;

(b) apply the guidelines set out in Annex II and determine, on the basis of the best scientific information available, stock-specific reference points and the action to be taken if they are exceeded;

(c) take into account, inter alia, uncertainties relating to the size and productivity of the stocks, reference points, stock condition in relation to such reference points, levels and distribution of fishing mortality and the impact of fishing activities on non-target and associated or dependent species, as well as existing and predicted oceanic, environmental and socio-economic conditions; and

(d) develop data collection and research programmes to assess the impact of fishing on non-target and associated or dependent species and their environment, and adopt plans which are necessary to ensure the conservation of such species and to protect habitats of special concern.

4. States shall take measures to ensure that, when reference points are approached, they will not be exceeded. In the event that they are exceeded, States shall, without delay, take the action determined under paragraph 3 (b) to restore the stocks.

5. Where the status of target stocks or non-target or associated or dependent species is of concern, States shall subject such stocks and species to enhanced monitoring in order to review their status and the efficacy of conservation and management measures. They shall revise those measures regularly in the light of new information.

6. For new or exploratory fisheries, States shall adopt as soon as possible cautious conservation and management measures, including, inter alia, catch limits and effort limits. Such measures shall remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the long-term sustainability of the stocks, whereupon conservation and management measures based on that assessment shall be implemented. The latter measures shall, if appropriate, allow for the gradual development of the fisheries.

7. If a natural phenomenon has a significant adverse impact on the status of straddling fish stocks or highly migratory fish stocks, States shall adopt conservation and management measures on an emergency basis to ensure that fishing activity does not exacerbate such adverse impact. States shall also adopt such measures on an emergency basis where fishing activity presents a serious threat to the sustainability of such stocks. Measures taken on an emergency basis shall be temporary and shall be based on the best scientific evidence available.

**SPRFMO Convention<sup>85</sup>**

Article 3

1. In giving effect to the objective of this Convention and carrying out decision making under this Convention, the Contracting Parties, the Commission and subsidiary bodies established under Article 6 paragraph 2 and Article 9 paragraph 1 shall :

(b) apply the precautionary approach and an ecosystem approach in accordance with paragraph 2.

2 (a) The precautionary approach as described in the 1995 Agreement and the Code of Conduct shall be applied widely to the conservation and management of fishery resources in order to protect those resources and to preserve the marine ecosystems in which they occur, and in particular the Contracting Parties, the Commission and subsidiary bodies shall:

- (i) be more cautious when information is uncertain, unreliable, or inadequate;
- (ii) not use the absence of adequate scientific information as a reason for postponing or failing to take conservation and management measures;  
and
- (iii) take account of best international practices regarding the application of the precautionary approach, including Annex II of the 1995 Agreement and the Code of Conduct.

**FAO Code of Conduct**

7.5 Precautionary approach<sup>85</sup>

7.5.1 States should apply the precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment. The absence of adequate scientific information should not be used as a reason for postponing or failing to take conservation and management measures.

7.5.2 In implementing the precautionary approach, States should take into account, inter alia, uncertainties relating to the size and productivity of the stocks, reference points, stock condition in relation to such reference points, levels and distribution of fishing mortality and the impact of fishing activities, including discards, on non-target and associated or dependent species, as well as environmental and socio-economic conditions.

7.5.3 States and subregional or regional fisheries management organizations and arrangements should, on the basis of the best scientific evidence available, *inter alia*, determine:

- a. stock specific target reference points, and, at the same time, the action to be taken if they are exceeded; and
- b. stock-specific limit reference points, and, at the same time, the action to be taken if they are exceeded; when a limit reference point is approached, measures should be taken to ensure that it will not be exceeded.

7.5.4 In the case of new or exploratory fisheries, States should adopt as soon as possible cautious conservation and management measures, including, *inter alia*, catch limits and effort limits. Such measures should remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the long-term sustainability of the stocks, whereupon conservation and management measures based on that assessment should be implemented. The latter measures should, if appropriate, allow for the gradual development of the fisheries.

7.5.5 If a natural phenomenon has a significant adverse impact on the status of living aquatic resources, States should adopt conservation and management measures on an emergency basis to ensure that fishing activity does not exacerbate such adverse impact. States should also adopt such measures on an emergency basis where fishing activity presents a serious threat to the sustainability of such resources. Measures taken on an emergency basis should be temporary and should be based on the best scientific evidence available.

#### **Stockholm POPs Convention<sup>86</sup>**

##### Article 1 – Objective

Mindful of the precautionary approach as set forth in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Convention is to protect human health and the environment from persistent organic pollutants.

#### **CBD<sup>87</sup>**

##### Preamble

Noting also that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.

#### **Helsinki Convention<sup>88</sup>**

##### Article 3 Fundamental principles and obligations

2. The Contracting Parties shall apply the precautionary principle, *i.e.*, to take preventive measures when there is reason to assume that substances or energy introduced, directly or indirectly, into the marine environment may create hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate

uses of the sea even when there is no conclusive evidence of a causal relationship between inputs and their alleged effects.

**OSPAR Convention**<sup>89</sup>

Article 2

2. The Contracting Parties shall apply:

(a) the precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects;

**Biosafety Protocol**<sup>90</sup>

Article 1 Objective

In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements.

Article 10 Decision Procedure

6. Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate, with regard to the import of the living modified organism in question as referred to in paragraph 3 above, in order to avoid or minimize such potential adverse effects

Article 11 Procedure for Living Modified Organisms Intended for Direct Use as Food or Feed, or for Processing

8. Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate, with regard to the import of that living modified organism intended for direct use as food or feed, or for processing, in order to avoid or minimize such potential adverse effects.

## **6. Ecosystem approach and ecosystem based management**

**UNCLOS**<sup>91</sup>

Article 192 General obligation

States have the obligation to protect and preserve the marine environment.

Article 194 Measures to prevent, reduce and control pollution of the marine environment

The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.

#### **CCAMLR<sup>92</sup>**

Article 2(3) of the Convention:

Requires the maintenance of the ecological relationships between all the organisms concerned in the Antarctic ecosystem.

Provides that the Antarctic marine ecosystem is to be preserved from irreversible changes and reflects the precautionary principle.

#### **CBD<sup>93</sup>**

Defines the ecosystem approach as ‘a strategy for integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way’ – COP 5 Decisions V/6.

#### **Fish Stocks Agreement<sup>94</sup>**

The States Parties to this Agreement,

Conscious of the need to avoid adverse impacts on the marine environment, preserve biodiversity, maintain the integrity of marine ecosystems and minimize the risk of long-term or irreversible effects of fishing operations,

Article 5 – General Principles

(d) 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;

(e) adopt, where necessary, conservation and management measures for species belonging to the same ecosystem or associated with or dependent upon the target stocks, with a view to maintaining or restoring populations of such species above levels at which their reproduction may become seriously threatened;

(f) minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, (hereinafter referred to as non-target species) and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques;

(g) protect biodiversity in the marine environment;

(h) take measures to prevent or eliminate overfishing and excess fishing capacity and to ensure that levels of fishing effort do not exceed those commensurate with the sustainable use of fishery resources;

(i) take into account the interests of artisanal and subsistence fishers;

(j) collect and share, in a timely manner, complete and accurate data concerning fishing activities on, inter alia, vessel position, catch of target and non-target species and fishing

effort, as set out in Annex I, as well as information from national and international research programmes;

(k) promote and conduct scientific research and develop appropriate technologies in support of fishery conservation and management; and

(l) implement and enforce conservation and management measures through effective monitoring, control and surveillance.

**SPRFMO Convention<sup>95</sup>**

Article 3

1. In giving effect to the objective of this Convention and carrying out decision making under this Convention, the Contracting Parties, the Commission and subsidiary bodies established under Article 6 paragraph 2 and Article 9 paragraph 1 shall:

(b) apply the precautionary approach and an ecosystem approach in accordance with paragraph 2.

2 (b) An ecosystem approach shall be applied widely to the conservation and management of fishery resources through an integrated approach under which decisions in relation to the management of fishery resources are considered in the context of the functioning of the wider marine ecosystems in which they occur to ensure the long-term conservation and sustainable use of those resources and in so doing, safeguard those marine ecosystems.

## **7. Sustainable and equitable use of marine life for the benefit of present and future generations**

**Stockholm Declaration<sup>96</sup>**

Principle 2

The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

Principle 3

The capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved.

**World Charter for Nature<sup>97</sup>**

Annex

Aware that: (a) Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients,

I. General Principles

4. Ecosystems and organisms, as well as the land, marine and atmospheric resources that are utilized by man, shall be managed to achieve and maintain optimum sustainable productivity, but not in such a way as to endanger the integrity of those other ecosystems or species with which they coexist.

## **Rio Declaration**

### Principle 4

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

## **CCAMLR<sup>98</sup>**

### Article II

3. Any harvesting and associated activities in the area to which this Convention applies shall be conducted in accordance with the provisions of this Convention and with the following principles of conservation:

- (a) prevention of decrease in the size of any harvested population to levels below those which ensure its stable recruitment. For this purpose its size should not be allowed to fall below a level close to that which ensures the greatest net annual increment;
- (b) maintenance of the ecological relationships between harvested, dependent and related populations of Antarctic marine living resources and the restoration of depleted populations to the levels defined in sub-paragraph (a) above; and
- (c) prevention of changes or minimisation of the risk of changes in the marine ecosystem which are not potentially reversible over two or three decades, taking into account the state of available knowledge of the direct and indirect impact of harvesting, the effect of the introduction of alien species, the effects of associated activities on the marine ecosystem and of the effects of environmental changes, with the aim of making possible the sustained conservation of Antarctic marine living resources.

## **FAO Code of Conduct**

### 7.2 Management objectives

7.2.1 Recognizing that long-term sustainable use of fisheries resources is the overriding objective of conservation and management, States and subregional or regional fisheries management organizations and arrangements should, inter alia, adopt appropriate measures, based on the best scientific evidence available, which are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing countries.

7.2.2 Such measures should provide inter alia that:

- a. excess fishing capacity is avoided and exploitation of the stocks remains economically viable;
- b. the economic conditions under which fishing industries operate promote responsible fisheries;
- c. the interests of fishers, including those engaged in subsistence, small-scale and artisanal fisheries, are taken into account;
- d. biodiversity of aquatic habitats and ecosystems is conserved and endangered species are protected;

- e. depleted stocks are allowed to recover or, where appropriate, are actively restored;
- f. adverse environmental impacts on the resources from human activities are assessed and, where appropriate, corrected; and
- g. pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non- fish species, and impacts on associated or dependent species are minimized, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques.

#### **CBD<sup>99</sup>**

##### Article 10. Sustainable Use of Components of Biological Diversity

Each Contracting Party shall, as far as possible and as appropriate:

- (a) Integrate consideration of the conservation and sustainable use of biological resources into national decision-making;
- (b) Adopt measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity;
- (c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements;
- (d) Support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced; and
- (e) Encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable use of biological resources.

## **8. Good environmental governance, including transparency, through access to information, public participation, and access to review procedures**

#### **Universal Declaration of Human Rights<sup>100</sup>**

##### Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

#### **Stockholm Declaration<sup>101</sup>**

##### Preamble paragraph 7

To achieve (...) environmental goal will demand the acceptance of responsibility by citizens and communities and by enterprises and institutions at every level, all sharing equitably in common efforts. Individuals in all walks of life as well as organizations in many fields, by their values and the sum of their actions, will shape the world environment of the future.

Principle 1

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations. (Principle 1)

Principle 19

Education in environmental matters, for the younger generation as well as adults, giving due consideration to the underprivileged, is essential in order to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities in protecting and improving the environment in its full human dimension. It is also essential that mass media of communications avoid contributing to the deterioration of the environment, but, on the contrary, disseminates information of an educational nature on the need to protect and improve the environment in order to enable man to develop in every respect.

**Rio Declaration** <sup>102</sup>

Principle 10

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

**Aarhus Convention** <sup>103</sup>

Preamble:

Recognizing also that the public needs to be aware of the procedures for participation in environmental decision-making, have free access to them and know how to use them,  
Recognizing the desirability of transparency in all branches of government and inviting legislative bodies to implement the principles of this Convention in their proceedings

Article 3

1. Each Party shall take the necessary legislative, regulatory and other measures, including measures to achieve compatibility between the provisions implementing the information, public participation and access-to-justice provisions in this Convention, as well as proper enforcement measures, to establish and maintain a clear, transparent and consistent framework to implement the provisions of this Convention.

Article 5

2. Each Party shall ensure that, within the framework of national legislation, the way in which public authorities make environmental information available to the public is transparent and that environmental information is effectively accessible, inter alia, by:  
[...]

Article 6: Public participation in decision on specific activities

Article 7: Public participation concerning plans, programmes and policies relating to the environment

Article 9: Access to Justice

Article 10 – Public information, awareness and education

**Stockholm POPs Convention<sup>104</sup>**

Article 10 – Public information, awareness and education

1. Each Party shall, within its capabilities, promote and facilitate:

(b) Provision to the public of all available information on persistent organic pollutants, taking into account paragraph 5 of Article 9;

2. Each Party shall, within its capabilities, ensure that the public has access to the public information referred to in paragraph 1 and that the information is kept up-to-date.

**SPRFMO Convention<sup>105</sup>**

Article 3

In giving effect to the objective of this Convention and carrying out decision making under this Convention, the Contracting Parties, the Commission and subsidiary bodies established under Article 6 paragraph 2 and Article 9 paragraph 1 shall: (a) apply, in particular, the following principles; (i) conservation and management of fishery resources shall be conducted in a transparent, accountable and inclusive manner, taking into account best international practices;

**UN Fish Stocks Agreement<sup>106</sup>**

Article 12

1. States shall provide for transparency in the decision-making process and other activities of subregional and regional fisheries management organizations and arrangements.

**FAO Compliance Agreement<sup>107</sup> and FAO Code of Conduct**

**Code of Conduct**

6.13 States should, to the extent permitted by national laws and regulations, ensure that decision making processes are transparent and achieve timely solutions to urgent matters. States, in accordance with appropriate procedures, should facilitate consultation and the effective participation of industry, fishworkers, environmental and other interested organizations in decision making with respect to the development of laws and policies related to fisheries management, development, international lending and aid.

7.1.9 States and sub-regional or regional fisheries management organizations and arrangements should ensure transparency in the mechanisms for fisheries management and in the related decision-making process.

11.2.3 States should ensure that measures affecting international trade in fish and fishery products are transparent, based, when applicable, on scientific evidence, and are in accordance with internationally agreed rules.

11.3.1 Laws, regulations and administrative procedures applicable to international trade in fish and fishery products should be transparent, as simple as possible, comprehensible and, when appropriate, based on scientific evidence.

### **Paris Agreement<sup>108</sup>**

#### Article 7

1. Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.

## **9. The Polluter Pays Principle**

### **UNCLOS**

#### Article 235 Responsibility and Liability

2. States shall ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief in respect of damage caused by pollution of the marine environment by natural or juridical persons under their jurisdiction.

### **OSPAR Convention<sup>109</sup>**

#### Article 2 General Obligations

2. The Contracting Parties shall apply:

(b) the polluter pays principle, by virtue of which the costs of pollution prevention, control and reduction measures are to be borne by the polluter.

2(b)

### **OECD**

#### 1972 OECD Recommendation Guiding Principles Concerning the International Economic Aspects of Environmental Policies<sup>110</sup>

##### Introduction

1. The guiding principles described below concern mainly the international aspects of environmental policies with particular reference to their economic and trade implications. These principles do not cover, for instance, the particular problems which may arise during the transitional periods following the implementation of the principles, instruments for the implementation of the so-called "Polluter-Pays Principle", exceptions to this principle, transfrontier pollution, or possible problems related to developing countries.

##### A. Guiding Principles

a) Cost Allocation: the Polluter-Pays Principle

2. Environmental resources are in general limited and their use in production and consumption activities may lead to their deterioration. When the cost of this deterioration is not adequately taken into account in the price system, the market fails to reflect the scarcity of such resources both at the national and international levels. Public measures are thus necessary to reduce pollution and to reach a better allocation of resources by ensuring that prices of goods depending on the quality and/or quantity of environmental resources reflect more closely their relative scarcity and that economic agents concerned react accordingly.

3. In many circumstances, in order to ensure that the environment is in an acceptable state, the reduction of pollution beyond a certain level will not be practical or even necessary in view of the costs involved.

4. The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called "Polluter-Pays Principle". This principle means that the polluter should bear the expenses of carrying out the above-mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.

5. This Principle should be an objective of Member countries; however, there may be exceptions or special arrangements, particularly for the transitional periods, provided that they do not lead to significant distortions in international trade and investment.

**Rio Declaration**

Principle 16

National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

**Bucharest Convention<sup>111</sup>**

Article XVI Responsibility and Liability

1. Each Contracting Party shall adopt rules and regulations on the liability for damaged caused by natural or juridical persons to the marine environment of the Black Sea in areas where it exercises, in accordance with international law, its sovereignty, sovereign rights or jurisdiction.
2. The Contracting Parties shall ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief for damage caused by pollution of the marine environment of the Black Sea by natural or juridical persons under their jurisdiction.
3. The Contracting Parties shall cooperate in developing and harmonizing their laws, regulations and procedures relating to liability, assessment of and compensation for damage caused by pollution of the marine environment of the Black Sea, in

order to ensure the highest degree of deterrence and protection for the Black Sea as a whole.

**Helsinki Convention on the Protection of the Baltic Sea<sup>112</sup>**

Article 3 Fundamental Principles and obligations

4. The Contracting Parties shall apply the polluter-pays principle.

**10. Respect for the Law of the Sea/Conditional Freedom of the Seas**

**UNCLOS**

Article 87 Freedom of the High Seas

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.

Article 116 Right to Fish on the High Seas

All States have the right for their nationals to engage in fishing on the high seas subject to:

- (a) their treaty obligations;
- (b) the rights and duties as well as the interests of coastal States provided for, inter alia, in article 63, paragraph 2, and articles 64 to 67; and
- (c) the provisions of this section.

Article 117 Duty of States to Adopt with Respect to their Nationals Measures for the Conservation of the Living Resources of the High Seas

All States have the duty to take, or to co-operate with other States in taking, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas.

Article 118 Co-operation of States in the conservation and management of living resources

States shall co-operate with each other in the conservation and management of living resources in the areas of the high seas. States whose nationals exploit identical living resources, or different living resources in the same area, shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned. They shall, as appropriate, cooperate to establish subregional or regional fisheries organizations to this end.

Article 119 Conservation of the living resources of the high seas

1. In determining the allowable catch and establishing other conservation measures for the living resources in the high seas, States shall:

(a) take measures which are designed, on the best scientific evidence available to the States concerned, to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global;

(b) take into consideration the effects on species associated with or dependent upon harvested species with a view to maintaining or restoring populations of such associated or dependent species above levels at which their reproduction may become seriously threatened.

2. Available scientific information, catch and fishing effort statistics, and other data relevant to the conservation of fish stocks shall be contributed and exchanged on a regular basis through competent international organizations, whether subregional, regional or global, where appropriate and with participation by all States concerned.

3. States concerned shall ensure that conservation measures and their implementation do not discriminate in form or in fact against the fishermen of any State.

**UNFCCC**

Article 4.1.(d)

Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;

**Paris Agreement**

Article 5

1. Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests.

## **11. Other Possible Principles**

**11.1. States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of areas beyond the limits of national jurisdiction.**

### **UNCLOS**

#### **Article 194.2**

States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention.

#### **Trail Smelter Arbitration<sup>13</sup>**

[U]nder the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

#### **Stockholm Declaration**

##### **Principle 21**

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

#### **Rio Declaration**

##### **Principle 2**

States have the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

#### **ICJ Advisory Opinion on Nuclear Weapons<sup>14</sup>**

[T]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment

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<sup>1</sup> United Nations Convention on the Law of the Sea, signed December 10, 1982, 1833 U.N.T.S. 397 (UNCLOS). At [http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf).

<sup>2</sup> United Nations General Assembly Resolution 69/292, 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 1 May 2015. At <http://www.un.org/en/ga/69/resolutions.shtml>. All web references as at 16 February 2016.

<sup>3</sup> Yoshifumi Tanaka, Principles of International Marine Environmental Law, in R. Rayfuse, ed., *Research Handbook on International Marine Environmental Law* (2015) (pp 31-56).

<sup>4</sup> Tanaka, *op. cit.*

<sup>5</sup> UNFCCC, principles found in article 3:

In their actions to achieve the objective of the Convention and to implement its provisions, the Parties shall be guided, inter alia, by the following:

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.

Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

2. The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.

3. The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.

4. The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.

5. The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

<sup>6</sup> IUCN, Governance Principles, Paper IV of Policy Briefs on An International Instrument on Conservation and Sustainable Use of Biodiversity in Marine Areas beyond National Jurisdiction Exploring Different Elements to Consider: At [https://cmsdata.iucn.org/downloads/paper\\_iv\\_governance\\_principles.pdf](https://cmsdata.iucn.org/downloads/paper_iv_governance_principles.pdf); The full series of 13 IUCN Policy Briefs on Scope, Parameters and Feasibility are available at: [https://cmsdata.iucn.org/downloads/iucn\\_series\\_of\\_policy\\_briefs\\_on\\_scope\\_parameters\\_and\\_feasibility.pdf](https://cmsdata.iucn.org/downloads/iucn_series_of_policy_briefs_on_scope_parameters_and_feasibility.pdf).

<sup>7</sup> IUCN, An International Instrument on Conservation and Sustainable Use of Biodiversity in Marine Areas beyond National Jurisdiction. 2013. Paper IV Governance Principles. At [https://cmsdata.iucn.org/downloads/iucn\\_series\\_of\\_policy\\_briefs\\_on\\_scope\\_parameters\\_and\\_feasibility.pdf](https://cmsdata.iucn.org/downloads/iucn_series_of_policy_briefs_on_scope_parameters_and_feasibility.pdf).

<sup>8</sup> S.L.Pimm et al, The biodiversity of species and their rates of extinction distribution and protection.” 344 *Science* 2014. At [http://www.rpgroup.caltech.edu/courses/Evolution\\_GIST\\_2014/files\\_2014/articles/Science-2014-Pimm.pdf](http://www.rpgroup.caltech.edu/courses/Evolution_GIST_2014/files_2014/articles/Science-2014-Pimm.pdf).

<sup>9</sup> Malgosia Fitzmaurice, David M.Ong and Panos Merkourism, eds. *Research Handbook on International Environmental Law* (Cheltenham, Edward Elgar Publishing, 2010), p 519.

<sup>10</sup> David Freestone, “Modern Principles of High Seas Governance – The Legal Underpinnings,” *Environmental Law and Policy*. 2009. Page 45.

<sup>11</sup> Laura Westra, Klaus Bosselman, Colin Soskolne, *Globalisation and Ecological Integrity in Science and International Law* (2011).

<sup>12</sup> Constitution of the Republic of Ecuador, Articles 3, 4: “Art. 3. The State will motivate natural and juridical persons as well as collectives to protect nature; it will promote respect towards all the elements that form an ecosystem. Art. 4. The State will apply precaution and restriction measures in all the activities that can lead to the extinction of species, the destruction of the ecosystems or the permanent alteration of the natural cycles.” At <http://documents.routledge-interactive.s3.amazonaws.com/9781138832923/Republic-of-Ecuador-Constitution.pdf>.

<sup>13</sup> Philippines Constitution, Section 16. The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature. At [http://www.concourt.am/armenian/legal\\_resources/world\\_constitutions/constit/philipin/p\\_hilip-e.htm](http://www.concourt.am/armenian/legal_resources/world_constitutions/constit/philipin/p_hilip-e.htm).

<sup>14</sup> Colombia Constitution Article 79: “All persons have the right to enjoy a healthful environment. The law shall guarantee communitarian participation in decisions that may affect the environment. It is the duty of the state to protect the diversity and integrity of the environment, preserve areas of special ecological importance and promote education for the attainment of those ends.” In C. Abogados et al, *Doing Business in Colombia – 2<sup>nd</sup> ed.* (2011).

<sup>15</sup> *The Future We Want*, UNGA Res. 66/288, ¶ 158, U.N. Doc. A/RES/66/288 (Sept. 11, 2012), available at [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/66/288&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E). para. 40. We “call for holistic and integrated approaches to sustainable development which will

guide humanity to live in harmony with nature and lead to efforts to restore the health and integrity of the Earth's ecosystem.”

<sup>16</sup> *Ibid*, The Future We Want, para 158: “... We therefore commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities impacting on the marine environment, to deliver on all three dimensions of sustainable development”

<sup>17</sup> 2625 (XXV). Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations. UNGA doc. A/RES/25/2625. 29 October 1970. At <http://www.un-documents.net/a25r2625.htm>

<sup>18</sup> Rio Declaration on Environment and Development produced in Rio de Janeiro, Brazil in June 1992. (“Rio Declaration”) At <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163>

<sup>19</sup> *Mox Plant Case (Ireland v. United Kingdom)* Case No. 10, Order of 3 December 2001, para. 82.

<sup>20</sup> Timo Koivurova, *Introduction to International Environmental Law* (2014, Routledge), pp 55.

<sup>21</sup> FSA article 6.3(a).

<sup>22</sup> FSA article 6.3(b).

<sup>23</sup> FSA article 6.7.

<sup>24</sup> Jan Klabbers ‘International Law’ 2013 page 124.

<sup>25</sup> Draft articles on Responsibility of States for Internationally Wrongful Acts with commentary, Report of the International Law Commission on the work of its fifty-third session. United Nations 2008. At [http://legal.un.org/ilc/texts/instruments/english/commentaries/9\\_6\\_2001.pdf](http://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf).

<sup>26</sup> P. Kamari-Mbote, *The Use of the Public Trust Doctrine in Environmental Law*, 195 LEAD (2007) available at <http://www.lead-journal.org/content/07195.pdf>.

<sup>27</sup> TP Brady, “But most of it belongs to those yet to be born: The Public Trust Doctrine, NEPA and the Stewardship Ethic.” BC 17 *Envtl L. Rev* 633. 1990, cited in E. van der Schyff, “Unpacking the Public Trust Doctrine: A Journey into Foreign Territory.” 2010. 13 P.E.R./PELJ No. 5.

<sup>28</sup> *The Future We Want*, UNGA Res. 66/288, ¶ 158, U.N. Doc. A/RES/66/288 (Sept. 11, 2012), available at [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/66/288&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E).

<sup>29</sup> The Institutes of Justinian 1.2.1, 2.1.1 (Thomas C. Sandars trans., Callaghan & Co., 1876). However, throughout history, various societies have independently arrived at and protected the common right of their citizens to access the seashores and ocean resources. See generally Wilkinson, *Headwaters of the Public Trust*, *supra* note 14.

<sup>30</sup> *M.C. Mehta v. Kamal Nath* (1997) 1 S.C.C. 388 (India).

<sup>31</sup> Mary Turnipseed, Michael Blumm, Duncan Currie, Kristina Gjerde, Peter Sand, Mary Wood, Julie Berkman, Ryke Longest, Gail Osherenko, Stephen Roady, Raphael Sagarin,

Larry Crowder, “Using the Public Trust Doctrine to Achieve Ocean Stewardship”. *In Rule of Law for Nature: New Dimensions and Ideas in Environmental Law*. 2013. Pages 365 ff.

<sup>32</sup> Alan E. Boyle, *Remedying Harm to International Common Spaces and Resources: Compensation and Other Approaches*, in *HARM TO THE ENVIRONMENT: THE RIGHT TO COMPENSATION AND ASSESSMENT OF DAMAGES* 83, 84 (Peter Wetterstein ed., Oxford Univ. Press 1997).

<sup>33</sup> Catherine Redgwell, *Reforming the United Nations Trusteeship Council*, in *Reforming International Governance: From Institutional Limits to Innovative Reforms* 179 (W. Bradnee Chambers & Jessica F. Green eds., United Nations Univ. Press 2005); Patricia Birnie et al., *International Law and the Environment* 198 (Oxford Univ. Press 3d ed. 2009).

<sup>34</sup> Stockholm Declaration Principle 21. “States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”

<sup>35</sup> Rio Declaration Principle 2. States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

<sup>36</sup> Freestone, page 48. Citing 34 Sand, P.H. (2004). “Sovereignty Bounded: Public Trusteeship for Common Pool Resources?” *Global Environmental Politics*, 4: 47–71; Rayfuse, R. and Warner, R. (2008). “Securing a Sustainable Future for the Oceans beyond National Jurisdiction”. *IJMCL* 23: 399–422.

<sup>37</sup> 1979 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Celestial Bodies. Article VI: States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the Moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty.

<sup>38</sup> Malgosia Fitzmaurice, David M. Ong and Panos Merkourism, eds. *Research Handbook on International Environmental Law* (Cheltenham, Edward Elgar Publishing, 2010), p 203.

<sup>39</sup> David Freestone, page 46.

<sup>40</sup> ITLOS Seabed Dispute Chamber *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area (Advisory Opinion)* Case No.17, 1 February 2011.

<sup>41</sup> *ICJ Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, I.C.J. Reports 1997, 140. At <http://www.icj-cij.org/docket/index.php?p1=3&p2=3&case=92>.

<sup>42</sup> I.C.J., *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, I.C.J. Reports 2010, p. 14 (28 April 2010). Para 164. At <http://www.icj-cij.org/docket/index.php?p1=3&p2=1&k=88&case=135&code=au&p3=4>. (“Pulp Mills Case”).

<sup>43</sup> The precautionary *approach* was considered so important in the Fish Stocks Agreement that it merited an entire article as well as being incorporated as a principle in article 5. Since then, the International Court of Justice and International Tribunal for the Law of the Sea have recognized it. But it is too often overlooked that the widely embraced formulation in the Rio Declaration, Principle 15, is as a principle, which states that “In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities.” It is the application of the precautionary approach that is the principle: the precautionary principle is not merely an approach which may or may not be used. In the Fish Stocks Agreement, States “shall” apply the precautionary approach, and the Biodiversity Convention illustrates that the precautionary principle is more than an approach; it is noted in the preamble that “that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.” The Biosafety Protocol, which was concluded eight years later in 2000, goes further, stating in article 10 that lack of scientific certainty “shall not” prevent that Party from taking a decision.

<sup>44</sup> DEJ Currie, “Ecosystem-Based Management in Multilateral Environmental Agreements: Progress towards Adopting the Ecosystem Approach in the International Management of Living Marine Resources” (2007). At [http://assets.panda.org/downloads/wwf\\_ecosystem\\_paper\\_final\\_wlogo.pdf](http://assets.panda.org/downloads/wwf_ecosystem_paper_final_wlogo.pdf).

<sup>45</sup> Malgosia Fitzmaurice, David M. Ong and Panos Merkourism, eds., *Research Handbook on International Environmental Law* (Cheltenham, Edward Elgar Publishing, 2010), p 220.

<sup>46</sup> Report of the World Commission on Environment and Development: Our Common Future.

Transmitted to the General Assembly as an Annex to document A/42/427 - Development and International Co-operation: Environment At <http://www.un-documents.net/wced-ocf.htm>.

<sup>47</sup> ICJ, *Gabčíkovo-Nagymaros*, Para 140.

<sup>48</sup> The Status of the Right to Public Participation <http://yielaw.oxfordjournals.org/content/23/1/80.full.pdf+html>.

<sup>49</sup> See <http://www.unece.org/env/pp/cc.html>.

<sup>50</sup> David Freestone, “Modern Principles of High Seas Governance – The Legal Underpinnings,” *Environmental Law and Policy*. 2009. Pages 44 ff.

<sup>51</sup> IUCN, An International Instrument on Conservation and Sustainable Use of Biodiversity in Marine Areas beyond National Jurisdiction: Exploring Different Elements to Consider. Paper IV. At [https://www.iucn.org/about/work/programmes/environmental\\_law/elp\\_work/elp\\_work\\_is\\_sues/elp\\_work\\_biodiv/elc\\_marine\\_biodiversity/](https://www.iucn.org/about/work/programmes/environmental_law/elp_work/elp_work_is_sues/elp_work_biodiv/elc_marine_biodiversity/).

<sup>52</sup> United Nations Convention on the Law of the Sea, signed at Montego Bay, Jamaica, 10 December 1982, entered into force 16 November 1994. At

[http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf).

<sup>53</sup> Declaration of the United Nations Conference on the Human Environment. Adopted on 16 June 1972. At

<http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503>.

<sup>54</sup> World Charter for Nature United Nations 48th plenary meeting 28 October 1982. At

<http://www.un.org/documents/ga/res/37/a37r007.htm>.

<sup>55</sup> Convention on the Conservation of Antarctic Marine Living Resources, Opened for signature on 1 August 1980. Entered into force on 7 April 1982. Canberra, Australia. At <http://www.camlr.org/en/organisation/camlr-convention-text#IX>.

<sup>56</sup> Convention on Biological Diversity. Opened for signature in Rio de Janeiro on 5 June 1992. Entered into force 29 December 1993. At <http://www.cbd.int/>.

<sup>57</sup> The Bonn Convention on the Conservation of Migratory Species of Wild Animals.

Signed in 1979 in Bonn. At <http://www.cms.int/en/convention-text>.

<sup>58</sup> Rio Declaration.

<sup>59</sup> Convention on Biological Diversity. Opened for signature in Rio de Janeiro on 5 June 1992. Entered into force 29 December 1993. At <http://www.cbd.int/>.

<sup>60</sup> Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean. Auckland, New Zealand. Closed for signature on 31 January 2011. Entered into force on 24 August 2012. At <https://www.sprfmo.int/assets/Basic-Documents/Convention-and-Final-Act/Convention-web.pdf>.

<sup>61</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. New York, United States of America. Entered into force 21 December 2001. At [http://www.un.org/Depts/los/convention\\_agreements/convention\\_overview\\_fish\\_stocks.htm](http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm).

<sup>62</sup> Convention on the Conservation of Antarctic Marine Living Resources, Opened for signature on 1 August 1980. Entered into force on 7 April 1982. Canberra, Australia. At <http://www.camlr.org/en/organisation/camlr-convention-text#IX>.

<sup>63</sup> Stockholm Convention on Persistent Organic Pollutants. Stockholm, Sweden. Open for signature 22 May 2001, entered into force May 2004. At

<http://chm.pops.int/TheConvention/Overview/TextoftheConvention/tabid/2232/Default.aspx>.

<sup>64</sup> Declaration of the United Nations Conference on the Human Environment. Adopted on 16 June 1972. At

<http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503>.

<sup>65</sup> International Tribunal for the Law of the Sea, *The Mox Plant Case* (Ireland v United Kingdom) Case No. 10 3 December 2001. Paragraph 82. See also ITLOS in the *Land Reclamation Case* para 92.

<sup>66</sup> Convention on the Conservation of Antarctic Marine Living Resources, Opened for signature on 1 August 1980. Entered into force on 7 April 1982. Canberra, Australia. At <http://www.ccamlr.org/en/organisation/camlr-convention-text#IX>.

<sup>67</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

<sup>68</sup> Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean. Auckland, New Zealand. Closed for signature on 31 January 2011. Entered into force on 24 August 2012. At <https://www.sprfmo.int/assets/Basic-Documents/Convention-and-Final-Act/Convention-web.pdf>.

<sup>69</sup> Protocol concerning specially protected areas and biological diversity in the Mediterranean. Entered into force 12 December 1999. Barcelona, Spain. At <http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treatiesGeneralData.do?step=0&redirect=true&treatyId=598>.

<sup>70</sup> United Nations Convention on the Law of the Sea, signed at Montego Bay, Jamaica, 10 December 1982, entered into force 16 November 1994. At [http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf).

<sup>71</sup> Reaffirmed by G.A. Res. 48/263, U.N. Doc. A/Res/48/263 (July 28, 1994)) (Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea, July 28, 1994, 1836 U.N.T.S. 41).

<sup>72</sup> Rio Declaration on Environment and Development. Rio de Janeiro, Brazil, June 1992. At <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163>.

<sup>73</sup> United Nations Framework Convention on Climate Change. Opened for signature on 4 June 1992 in Rio de Janeiro, Brazil and entered into force on 21 March 1994. At [http://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/conveng.pdf](http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf).

<sup>74</sup> <http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>.

<sup>75</sup> Convention on Biological Diversity. Opened for signature in Rio de Janeiro on 5 June 1992. Entered into force 29 December 1993. At <http://www.cbd.int/>.

<sup>76</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. At [http://www.un.org/depts/los/convention\\_agreements/convention\\_overview\\_fish\\_stocks.htm](http://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm)

<sup>77</sup> Stockholm Convention on Persistent Organic Pollutants. Stockholm, Sweden. Open for signature 22 May 2001, entered into force May 2004. At <http://chm.pops.int/TheConvention/Overview/TextoftheConvention/tabid/2232/Default.aspx>.

<sup>78</sup> Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. Aarhus, Denmark. Opened for signature 25 June 1998, entered into force 30 October 2001. At <http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf> Status

at [https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg\\_no=xxvii-13&chapter=27&lang=en](https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg_no=xxvii-13&chapter=27&lang=en).

<sup>79</sup> 1946 International Convention for the Regulation of Whaling, at <https://iwc.int/convention/>

<sup>80</sup> International Convention for the Regulation of Whaling, Preamble, Dec. 2, 1946, 62 Stat. 1716, 161 U.N.T.S. 74.

<sup>81</sup> Convention Concerning the Protection of the World Cultural and Natural Heritage art. 4, Nov. 16, 1972, 27 U.S.T. 37, 1037 U.N.T.S. 151. At <http://whc.unesco.org/en/conventiontext/>.

<sup>82</sup> Rio Declaration on Environment and Development. Rio de Janeiro, Brazil. June 1992. At <http://www.unep.org/Documents/Multilingual/Default.asp?documentid=78&articleid=1163>.

<sup>83</sup> United Nations Framework Convention on Climate Change. Opened for signature on 4 June 1992 in Rio de Janeiro, Brazil and entered into force on 21 March 1994. At [http://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/conveng.pdf](http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf).

<sup>84</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. New York, United States of America. Entered into force 21 December 2001. At [http://www.un.org/Depts/los/convention\\_agreements/convention\\_overview\\_fish\\_stocks.htm](http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm).

<sup>85</sup> Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean. Auckland, New Zealand. Closed for signature on 31 January 2011. Entered into force on 24 August 2012. At <https://www.sprfmo.int/assets/Basic-Documents/Convention-and-Final-Act/Convention-web.pdf>.

<sup>86</sup> Stockholm Convention on Persistent Organic Pollutants. Stockholm, Sweden. Open for signature 22 May 2001, entered into force May 2004. At <http://chm.pops.int/TheConvention/Overview/TextoftheConvention/tabid/2232/Default.aspx>.

<sup>87</sup> Convention on Biological Diversity. Opened for signature in Rio de Janeiro on 5 June 1992. Entered into force 29 December 1993. At <http://www.cbd.int/>.

<sup>88</sup> Convention on the Protection of the Marine Environment of the Baltic Sea Area. Helsinki, Finland. Entered into force 17 January 2000. At [http://www.helcom.fi/PublishingImages/about-us/convention/Helsinki%20Convention\\_July%202014.pdf](http://www.helcom.fi/PublishingImages/about-us/convention/Helsinki%20Convention_July%202014.pdf).

<sup>89</sup> Convention for the Protection of the Marine Environment of the North-East Atlantic. Opened for signature in Paris, France on 22 September 1992 and entered into force on 25 March 1998. At <http://www.ospar.org/convention/text>.

<sup>90</sup> The Cartagena Protocol on Biosafety. Signed in Montreal, Canada in May 2000 and entered into force 11 September 2003. At <https://bch.cbd.int/protocol>.

<sup>91</sup> United Nations Convention on the Law of the Sea. Signed at Montego Bay, Jamaica, 10 December 1982, entered into force 16 November 1994. At [http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf).

<sup>92</sup> Convention on the Conservation of Antarctic Marine Living Resources, Opened for signature on 1 August 1980. Entered into force on 7 April 1982. Canberra, Australia. At <http://www.ccamlr.org/en/organisation/camlr-convention-text#IX>.

<sup>93</sup> Convention on Biological Diversity. Opened for signature in Rio de Janeiro on 5 June 1992. Entered into force 29 December 1993. At <http://www.cbd.int/>.

<sup>94</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. New York, United States of America. Entered into force 21 December 2001. At [http://www.un.org/Depts/los/convention\\_agreements/convention\\_overview\\_fish\\_stocks.htm](http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm).

<sup>95</sup> Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean. Auckland, New Zealand. Closed for signature on 31 January 2011. Entered into force on 24 August 2012. At <https://www.sprfmo.int/assets/Basic-Documents/Convention-and-Final-Act/Convention-web.pdf>.

<sup>96</sup> Declaration of the United Nations Conference on the Human Environment. Adopted on 16 June 1972. At <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503>.

<sup>97</sup> World Charter for Nature United Nations 48th plenary meeting 28 October 1982. At <http://www.un.org/documents/ga/res/37/a37r007.htm>.

<sup>98</sup> Convention on the Conservation of Antarctic Marine Living Resources, Canberra, 1980.

<sup>99</sup> Convention on Biological Diversity. Opened for signature in Rio de Janeiro on 5 June 1992. Entered into force 29 December 1993. At <http://www.cbd.int/>.

<sup>100</sup> Universal Declaration of Human Rights. 1948. Proclaimed by the United Nations General Assembly in Paris on 10 December 1948. General Assembly resolution 217 A. At <http://www.un.org/en/universal-declaration-human-rights/index.html> Article 19.

<sup>101</sup> Declaration of the United Nations Conference on the Human Environment (1972). United Nations [UN] UN Doc A/CONF.48/14/Rev.1, 3, UN Doc A/CONF.48/PC/6. At <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503> and <http://www.un-documents.net/aconf48-14r1.pdf>.

<sup>102</sup> Rio Declaration on Environment and Development produced in Rio de Janeiro, Brazil in June 1992. At <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163>.

<sup>103</sup> Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. Aarhus, Denmark. Opened for signature 25 June 1998, entered into force 30 October 2001. At <http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>. Status at [https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg\\_no=xxviii-13&chapter=27&lang=en](https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg_no=xxviii-13&chapter=27&lang=en).

<sup>104</sup> Stockholm Convention on Persistent Organic Pollutants. Stockholm, Sweden. Open for signature 22 May 2001, entered into force May 2004. At

<http://chm.pops.int/TheConvention/Overview/TextoftheConvention/tabid/2232/Default.aspx>.

<sup>105</sup> Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean. Auckland, New Zealand. Closed for signature on 31 January 2011. Entered into force on 24 August 2012. At <https://www.sprfmo.int/assets/Basic-Documents/Convention-and-Final-Act/Convention-web.pdf>.

<sup>106</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. New York, United States of America. Entered into force 21 December 2001. At [http://www.un.org/Depts/los/convention\\_agreements/convention\\_overview\\_fish\\_stocks.htm](http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm).

<sup>107</sup> Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas. Rome. Entered into force 24 April 2003. At <http://www.fao.org/docrep/meeting/003/x3130m/X3130E00.htm>.

<sup>108</sup> Paris Agreement, FCCC/CP/2015/L.9, signed at Paris, 12 December 2015. At <https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>.

<sup>109</sup> Convention for the Protection of the Marine Environment of the North-East Atlantic. Opened for signature in Paris, France on 22 September 1992 and entered into force on 25 March 1998. At <http://www.ospar.org/convention/text>.

<sup>110</sup> Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies. 26 May 1972 - C(72)128. At <http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentID=4&InstrumentPID=255&Lang=en&Book=False>.

<sup>111</sup> Convention on the Protection of the Black Sea Against Pollution. Signed at Bucharest 21 April 1992, entered into force 15 January 1994. At <http://www.blacksea-commission.org/convention-fulltext.asp>.

<sup>112</sup> Convention on the Protection of the Marine Environment of the Baltic Sea Area. Helsinki, 1992. Entered into force 17 January 2000. At [http://www.helcom.fi/documents/about%20us/convention%20and%20commitments/helsinki%20convention/1992\\_convention\\_1108.pdf](http://www.helcom.fi/documents/about%20us/convention%20and%20commitments/helsinki%20convention/1992_convention_1108.pdf).

<sup>113</sup> *Trail Smelter Case* (Canada v. USA), 3 Reports of International Arbitral Awards 1905, 1965.

<sup>114</sup> International Court of Justice, *Legality of the Threat or Use of Nuclear Weapons*, *Advisory Opinion of 8 July 1996*, [1996] ICJ. Reports 241-242, paragraph 29. At <http://www.icj-cij.org/docket/index.php?p1=3&p2=4&k=e1&p3=4&case=95>.