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**Weighing Governance Options to Improve the Conservation and Management of
Biodiversity Beyond National Jurisdiction**

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Acronyms

ABNJ	Areas Beyond National Jurisdiction
CBD	Convention on Biological Diversity
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
FAO	Food and Agricultural Organization
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICJ	International Court of Justice
IMO	International Maritime Organization
ISA	International Seabed Authority
IUCN	International Union for the Conservation of Nature
IUU	Illegal, Unregulated and Unreported
MGR	Marine Genetic Resources
MPA	Marine Protected Area
NEAFC	North East Atlantic Fisheries Commission
NGO	Non-Governmental Organizations
OSPAR	Oslo Paris Convention
RAC	Regional Activity Center
RCU	Regional Coordination Unit
RFMO	Regional Fisheries Management Organization
RSC	Regional Seas Conventions
SEA	Strategic Environmental Assessment
SEAFO	South-East Atlantic Fisheries Organization
SIOFA	South Indian Ocean Fisheries Agreement
SPRPMFO	South-Pacific Regional Fisheries Management Organizations
TAC	Total Allowable Catch
UN	United Nations
UNCLOS	United Nations Convention of the Law of the Sea
UNICPOLOS	United Nations Open-Ended Informal Consultative Process on Oceans and the Law of the Sea
UNEP	United Nations Environment Program
UNFSA	United Nations Fish Stocks Agreement
UNGA	United Nations General Assembly
VME	Vulnerable Marine Ecosystem
VMS	Voluntary Monitoring System
WCPFC	Western Central Pacific Fisheries Commission
WTO	World Trade Organization

Executive Summary

In the past decades the intensity of human activity in marine areas beyond national jurisdiction (ABNJ) has greatly increased, impacting areas and resources that were previously either unknown or inaccessible. These advances have opened up the oceans' resources to humanity, but have also rendered marine biodiversity and the ocean ecosystem vulnerable to anthropogenic damage. The threat of damage is especially serious in ABNJ, where no one state has authority and where there are several regulatory and implementation gaps that allow destructive activities to go unchecked.

In this paper, we review the institutions with authority in the high seas and summarize the gaps in the international legal and regulatory regimes as well as the implementation gaps that persist even where the governance and regulatory authority is clear and fully encompassing.

The bulk of our report is devoted to examining the implications and effectiveness of four strategies to address these gaps and conserve ocean biodiversity. First, we consider working to improve the status quo rather than attempting to create new regulations, frameworks or institutions. This has considerable potential, as the operative mechanisms for biodiversity conservation have not been implemented to the fullest extent possible. Better implementation of the existing framework should lead to noticeable improvements in biodiversity conservation, but our global rate of consumption may ultimately prove unsustainable. We must therefore turn to new mechanisms and institutions in order to attain a sustainable path.

Second, we look at the potential of regional fisheries management organizations (RFMOs), Regional Seas Conventions (RSCs) and other regional bodies to conserve marine biodiversity. The regional regime sets catch limits of fish stock, establishes protected areas and provides for measures to combat illegal fishing. To achieve these goals regional organizations cooperate and share information among their member states and each other. However geographical gaps remain, and the ecosystem and precautionary approaches have not been applied and implemented amply. Some of these shortcomings could be improved via expanding the mandates of RFMOs and RSCs, supporting the ecosystem and precautionary approach, establishing a regular review process and strengthening compliance and enforcement. The regional approach offers an existing

framework that can be improved at high cost and effort. It is likely to remain an incomplete and fragmented option that is more likely to work in combination with other regimes.

A third option is to develop a new United Nations Convention on the Law of the Sea (UNCLOS) implementing agreement on biodiversity conservation and sustainable development, which could provide for more specific guidelines with regard to UNCLOS general obligations. If the implementing agreement was widely accepted and ratified, then the binding nature of this instrument would increase the legitimacy of actions undertaken for conservation and provide a common understanding of international goals and obligations that encourage international cooperation and coordination. However, this option would also require a great deal of political effort by the international community in order to overcome the challenging negotiations and longer time horizons than less binding but more flexible conservation mechanisms.

Finally, UN General Assembly (UNGA) can adopt resolutions that could address specific governance or regulatory gaps. We look specifically at three potential types of resolutions. The first, a declaration of principles of good ocean governance could clarify that the international community recognizes such environmental tenets as the ecosystem approach and the precautionary principle as inherent to good oceans governance. The second would require States to perform environmental impact assessments before all activities that might have a deleterious effect on the marine environment. The third would address specific sectors that operate in the high seas (fishing, shipping, etc.) with a view to increase transparency, reporting and accountability. While all of these resolutions could significantly increase ABNJ biodiversity conservation, they would all also require a good deal of effort to craft and enact. UNGA resolutions are not binding, so in order to create a meaningful document, unanimity is required. And achieving unanimity involves costly expenditures of political and resource capital.

Each of the strategies we examine has potential to increase biodiversity conservation, but faces significant obstacles to success. Although a comprehensive implementation agreement would have the most impact of all of the strategies we examine (assuming it is properly implemented), it is also the least likely to be enacted in the next few years. Consequently, short-term improvements in the status quo and in regional regimes combined with ad hoc medium-term UNGA resolutions should be implemented as preparations and negotiations on an eventual

implementation agreement continue. A combination of short- and long-term efforts will need to be undertaken to slow the trend to resource exhaustion.

Regardless of the specifics of the eventual strategy to protect marine ABNJ, it is clear we cannot afford to postpone further action. Whether through better implementing the status quo, devoting attention to RFMOs, drafting a new implementation agreement or UNGA resolutions, increased attention, time and resources must be devoted to protecting one of our richest sources of biodiversity.

Introduction

The advancement of scientific discoveries and the development of new and more sophisticated technologies have increased the interests of governments and industries in the high seas and their biodiversity. In the past decades the intensity of human activity in areas beyond national jurisdiction (ABNJ) has greatly increased, impacting areas and resources that were previously either unknown or inaccessible. Commercial activities continue to expand more rapidly than scientific knowledge and understanding of the deep oceans environment. The ramifications of these activities are potentially significant, and to a large extent unknown.

The international community is increasingly becoming aware of the importance of conservation and sustainable use practices, but the different priorities, means and understanding of states pose problems with regard to the application of these principles. This is particularly true in ABNJ, where efforts to address these problems are often hampered by a number of factors such as the lack of a clear discipline, the varying degrees of commitment by states, weak or non-existent enforcement mechanisms, minimal oversight, fragmented and uncoordinated management, and rule-makings that fail to reflect commonly accepted conservation principles.

The following report analyzes four governance options with regard to biodiversity conservation and sustainable use of resources in ABNJ. The purpose of this analysis is to better inform policy makers as to the implications of each alternative. This study will evaluate: ways to improve the status quo without the passage of a new agreement or the creation of any additional bodies (Study Case 1); the strengthening of RFMOs and RSCs (Study Case 2); the adoption of a new implementing agreement to the United Nations Convention of the Law of the Sea (UNCLOS) (Study Case 3); and the development of new United Nations General Assembly (UNGA) resolutions (Study Case 4).

These four options are the most likely strategies the international community will pursue to attempt to improve the sustainability of activities in ABNJ. Each option entails different costs (resource, time, etc) and different potential payoffs. If the international community chooses to try to improve implementation of the existing status quo framework, it will require a lot of effort to but will not require the creation of new agreements or institutions. There are also limits

associated with the potential for improvement from working in the status quo, however. In order for the strategy to improve RFMO and RSC management and governance to be successful, additional organizations will need to be created or the scope of existing bodies will need to be expanded, especially in ABNJ, requiring increased collaboration among regional neighbors. And to maximize their potential, RFMOs and RSCs will need to increase collaboration and communication with each other as well.

An implementation agreement has the potential to be a game-changing mechanism, altering the very framework of governance and regulation of activities in ABNJ. Because of its potential influence, though, the challenges associated with creating such an agreement, and convincing enough States to accept it that it will be significant, are greater than with any of the other options. Working through UNGA resolutions provides an opportunity to take on discrete components that would likely be part of an implementation agreement. Because the scope would be dramatically curtailed for each resolution, the necessary effort would be proportionally less as well. Still, inasmuch as UNGA resolutions would represent further international commitments (albeit non-binding ones), States will surely haggle over the phrasing and reach of each resolution, requiring relatively large resource commitments.

The four options will be described and assessed regarding possible consequences, costs, feasibility and effectiveness of improving conservation and sustainable use of marine resources in the high seas in more detail in the sections that follow.

1. Governance of areas beyond national jurisdiction

The concept of state sovereignty has evolved and adapted over the last few centuries, especially since the creation of the United Nations, as states have voluntarily imposed restrictions on their own sovereignty. Restrictions to sovereignty apply to Antarctica, outer space, the high seas and the seabed, areas which are not intrinsic parts or properties of nation-states, in which resources are scarce and may be appropriated by those states that are technologically more advanced.¹

¹ Jonathan Galloway, *Limits to Sovereignty: Antarctica, Outer Space and the Seabed Proceedings of the Forty-First Colloquium on the Law of Outer Space*, Proceedings of the Forty-First Colloquium on the Law of Outer Space,

Before the late 1960s, technological developments did not allow for extensive uses of resources on the deep seabed or in outer space. These areas were left without a specific regulation, effectively granting states absolute freedom. The inequality that resulted from such freedom, coupled with the divide in capacity between developed and developing countries triggered heavy criticism by the latter. In the '50s and '60s, as international law of the sea and outer space was codified through the United Nations, developing countries succeeded in formulating the principle of “common heritage of mankind” regarding the seabed and outer space. This introduced a principle of solidarity and of environmental protection for the benefit of future generations.² This principle has different interpretations, but there is general acceptance of the elements on which it is based.³

1.1 The high seas

About 60% of the ocean space lies in ABNJ. Beyond the 12-mile territorial sea and the 200 mile exclusive economic zone (EEZ), the governance situation involves resources or actors that are primarily mobile. These resources include migratory fish or passage of ships registered to individual nation-states that cross international boundaries in their travels, as well as some sedentary species.⁴

The main governance framework concerning the high seas is the United Nations Convention on the Law of the Sea (UNCLOS), which is regarded as the framework agreement that delimits ocean areas and details state rights and duties in the high seas and the “Area.”⁵ UNCLOS covers

International Institute of Space Law of the International Astronautical Federation, Melbourne, Australia, 28 September – 2 October 1998, 80.

² Stephan Hobe, “Common Heritage of Mankind – An Outdated Concept in International Space Law?” Proceedings of the Forty-First Colloquium on the Law of Outer Space, International Institute of Space Law of the International Astronautical Federation, 28 September – 2 October 1998, Melbourne, Australia, 271-277.

³ The Common Heritage of Mankind is a recognized and codified principle in international law, stating that certain areas belong to mankind as a whole and should be held at trust for future generations and protected from exploitation carried out in the interest of individuals, nation states or corporations. Kemal Baslar, *The Concept of the Common Heritage of Mankind in International Law*, Martinus Nijhoff Publishers, 1998, 88-89.

⁴ Michael K. Orbach, “Beyond the Freedom of the Seas, Ocean Policy for the Third Millennium,” Fourth Annual Roger Revelle Commemorative Lecture National Academy of Sciences Auditorium, Washington, DC, 2002.

⁵ The definition of the Area according to UNCLOS is: *Article 1: Use of terms and scope - 1*. For the purposes of this Convention: (1) "Area" means the seabed and ocean floor and subsoil thereof, beyond the limits of national

most activities which impact marine biodiversity, including emerging activities such as bio-prospecting, noise pollution and introduction of alien species, and provides a binding dispute settlement mechanism.⁶ In addition to UNCLOS, several other agreements provide more specific rules, for example, covering migratory and straddling fish stocks and environmental pollution from shipping practices.⁷ Finally there are various voluntary conventions, agreements and codes of practice under the International Maritime Organization (IMO) or the UN Food and Agriculture Organization (FAO) (such as the Code of Conduct for Responsible Fisheries) to which countries can adhere. The Convention on Biological Diversity (CBD) is an international legal instrument established in 1992 and signed by 168 countries that aims to achieve conservation of biodiversity, sustainable use of the components of biodiversity and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

UNCLOS establishes the obligations of states to take, or to cooperate with other States in taking measures for the conservation of the living resources of the high seas, and to protect and preserve the marine environment.⁸ Conservation includes biodiversity as well as the protection and preservation of marine environment. Biodiversity has many definitions, but for the purpose of this paper we will adopt the definition given by the CBD, which states that biodiversity refers to the variability among living organisms from all sources.⁹ Concerning oceans in ABNJ, this definition encompasses all organisms in marine habitats, ecosystems.

jurisdiction; (2) "Authority" means the International Seabed Authority; (3) "activities in the Area" means all activities of exploration for, and exploitation of, the resources of the Area; UNCLOS, Section 11, *Article 136, Common heritage of mankind*, "The Area and its resources are the common heritage of mankind."

⁶ Greenpeace International, "Black Holes in Deep Ocean Space: Closing the Voids in High Seas Biodiversity Protection," November 16, 2005.

⁷ David A. Balton and Holly R. Koehler, "Reviewing the United Nations Fish Stocks Treaty," *Sustainable Development Law and Policy* Vol. VII (1), Fall 2006.

⁸ UNCLOS, Part VII, Article 117.

⁹ CBD, Text of the Convention of Biological Diversity, Article 2. Use of Terms, <http://www.cbd.int/convention/articles.shtml?a=cbd-02>

1.2 Governance and Implementation Shortcomings

UNCLOS and other existing agreements provide the fundamental framework for ocean governance. Unfortunately, several holes remain in UNCLOS governance, as well as in the implementation of the existing agreements. The identified shortcomings include:

- Lack of incentives to reduce consumption to sustainable levels and discourage overfishing;
- RFMO and RSC coverage is incomplete and not all RFMOS apply modern conservation tools such as the precautionary principle and the ecosystem approach;¹⁰
- Absence of a common interpretation by all States of existing obligations, leading to confusion and disagreement over the actions States must take to comply with those obligations;
- Sectoral and geographic fragmentation of conservation efforts by the international community;¹¹
- Insufficient political will of States to make the necessary political and economic sacrifices to implement more stringent and aggressive oversight and regulations, which contributes to the slow decision-making process at the international level;
- Lack of sufficient common understanding and consensus on conservation principles to ensure that modern conservation principles are reflected in all global and regional instruments that apply to ABNJ;¹²
- Lack of a regular process for evaluating the impact of activities on marine biodiversity or ecosystems in ABNJ nor is there a mechanism to hold States accountable for significant harm caused by activities under their control;¹³

¹⁰ Julien Rochette, *Towards a New Governance of High Seas Biodiversity*, Report of the International Seminar held in Monaco, on March 20-21, 2008, Institute for Sustainable Development and International Relations, Idées pour le Débat, No. 08, Paris, 2008.

¹¹ Kristina M. Gjerde et al., *Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*, IUCN, Gland, Switzerland, x + 20, 2008.

¹² Gjerde et al., *Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*.

¹³ Robin Warner, "Securing A Sustainable Future for the Oceans Beyond National Jurisdiction," Australian National Centre for Ocean Resources and Security, presented at the Global Forum on Oceans, Coasts and Islands, 2005.

- Lack of compliance and enforcement mechanisms at the global or regional levels;
- Lack of full participation of countries in the existing regimes and insufficient implementation and enforcement of the regulations, amplifying the other governance shortcomings.

2. Weighing governance options to improve biodiversity conservation

The range of activities undertaken in the high seas combined with the fragmentation in sector-specific regulation, the limits of legal competence of international bodies and inconsistent participation of States to agreements, render implementation of modern conservation principles¹⁴ very challenging. Therefore, in 2004, the UN General Assembly (UNGA) called upon States to address conservation and resource management in their practices beyond areas of national jurisdiction.¹⁵ New resolutions have followed and a specialized working group to study biological diversity conservation and management in the high seas has been established under the auspices of UNGA.

The following sections will analyze different possible scenarios for addressing biodiversity conservation and sustainable use. The options explored are those that, in light of the discussions of the international marine community, seem the most likely to be considered as viable solutions, namely: the maintenance and improvement of the status quo, enhancement of regional agreements, a new UNCLOS implementing agreement, and an ad-hoc UNGA resolution. This study aims to explore the possible implications for each of these options in order to foster common understanding of the issues at stake.

2.1 Study Case 1: Status Quo

The current state of marine resource management is defined in layers starting with the United Nations Convention on Law of the Sea (UNCLOS) down to regional ecosystem management agreements by collective groups of nations. UNCLOS serves as the overarching global

¹⁴ “Modern conservation principles” refer to the ecosystem approach, the precautionary approach, transparency, accountability, inclusiveness, among other generally accepted conservation best practices.

¹⁵ United Nations General Assembly, Resolution, “59/24. Oceans and the Law of the Sea,” A/RES/59/24, February 4, 2005.

framework for ocean governance, representing the basis for a common definition of international language of governance including monitoring, sanctions and enforcement throughout member nations. However, UNCLOS' provisions are broad, open to interpretation, subject to rules and standards established through competent international organizations or conferences and there is no consensus on the legal concepts.¹⁶

The status quo also contains regionally based area management tools. Area based management approaches prove useful for adaptive States to implement effective management strategies with well-defined objectives. Existing area-based management tools and regional seas agreements protect ecologically significant or vulnerable areas. Additionally, the close proximity nature of these agreements enables States to adapt to State's specific needs. Lastly, developing countries benefit from shared information and experiences of developed countries. In the next section, regional agreements are addressed in detail.

Diminishing fish stocks, reduced marine biodiversity and increased ocean pollution all indicate that the actions taken so far have failed to put us on a path toward long-term sustainability. Existing provisions of the UN Convention of the Law of the Sea, combined with area based management tools and regional agreements are capable of increasing biodiversity conservation. However, in order to ensure long-term conservation of marine ecosystems, efforts under the current regime must be redoubled.

2.1.1 Impacts of the Status Quo

Since the mid-1930s, high seas fisheries and the exploitation of marine resources have not been operated in a sustainable nor economically efficient manner. The real costs of using this natural

¹⁶ Alf H. Hoel, "Political Uncertainty in International Fisheries Management," *Fisheries Research*, Vol. 37 (1-3), August 1998, 239-250, 239.

capital¹⁷ include the long-term impacts of reducing biodiversity, but these costs are very difficult to quantify and incorporate into operational costs.

In 2008, the World Bank and FAO estimated that sustained overfishing could cost the global economy over \$50 billion annually in net economic losses.¹⁸ These losses have increased annually since 1950 as technological advances have surged, contributing to overcapacity and spurring overfishing in deep sea areas.

The dramatic increase in the harvest of marine resources is driven by States' continued competition for finite marine resources. Moreover, the open access nature of the resources, together with lack of shared responsibility and monitoring exacerbates the problem. Additionally, the time horizon for accurately accounting for the value of marine living resources has been skewed towards the short-term, reducing the perceived total value of the entire ecosystem. The existing regulatory framework and its implementation are insufficient to address this overexploitation. Under this consumption path, most likely these resources ultimately will be exhausted. The graph below depicts the escalation of stock exploitation in coastal and deep sea fisheries.¹⁹

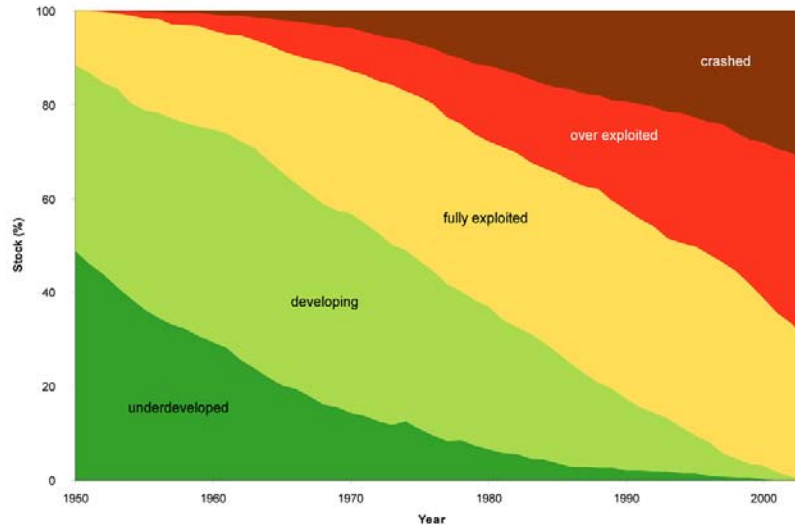
¹⁷ Pavan Sukhdev, *The Economics of Ecosystems and Biodiversity, an Interim Report*, European Communities, Cambridge, UK, 2008, 10.

¹⁸ World Bank 2009.

¹⁹ FAO 2003.

Stock Exploitation

Stock = (Family, Genus, Species) by FAO areas, max annual catch ≥ 1000 t and year count ≥ 5



Source: FAO/World Bank Stock Exploitation Analysis²⁰

2.1.2 Improving the status quo

Reducing subsidies: Utilizing the current regime structure, subsidy reduction schedules could help alleviate marine resource overexploitation. Reduced subsidies would steer operations in ABNJ towards greater sustainability by increasing operational costs to reflect the true costs.²¹ Trade arrangements that currently exist within the World Trade Organization (WTO) and the legal framework established under UNCLOS are capable of mediating negotiations to gradually raise the cost of operation in high seas fisheries. Reducing subsidies would naturally drive price inefficient and high cost fisheries out of the market. Reducing subsidies is the most significant economic lever available for States to openly address inefficient fishing operations. Done through existing trade arrangements, coordinated subsidy reduction can maintain individual nation's comparative trade relationships, while reducing the overexploitation of high seas resources through transparent market forces.

²⁰As reproduced in Sumalia & Pauly, 6.

²¹ Sukhdev 2008, 32.

For example, analysis shows that the two biggest factors enabling deep sea fishery operations are fuel subsidies and technology subsidies. Fuel costs represent as much as 60% of the total cost of landed catch in deep seas fisheries.²² Additionally, technology subsidies facilitate fleet manufacturing that would otherwise be too costly.

The economics and profitability studies demonstrate that overexploitation can be directly attributed to market inefficiencies.²³ Shifting subsidy focus from promoting overexploitation to conservation based subsidies would strengthen marine resource infrastructure, promote marine management, research, and enforcement mechanisms.

Soft Power Initiatives: Soft power initiatives, utilizing institutions and broadly agreed upon values as opposed to regulation to force non-proactive states into action, can greatly increase the effectiveness of existing measures. Soft power initiatives, such as developmental aid, best practices agreements, and non-binding commitments aimed at managing the global commons can be effective tools by developed member States. Soft power also encourages non-parties to adopt laws and regulations consistent with international regulatory initiatives, reducing activities that undermine effective conservation and management²⁴

States could also strengthen the existing regime by strengthening memoranda of understanding and agreements to protect against the fracturing of existing agreements as the fishing industry adjusts and responds to (and perhaps resists) new sustainability initiatives.

States' interactions in international trade bodies such as the World Trade Organization could account for subsidies as countervailing trade measures. Trade organizations are well established to improve transparency and accountability in subsidy reporting through WTO notification

²² Sumaila, 2008.

²³ Numerous universities such as the University of York, United Kingdom as well as University of British Columbia address the economic incentives that facilitate operations in areas beyond national jurisdiction.

²⁴ Sharelle Hart, *Elements of a Possible Implementation Agreement to UNCLOS for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*. IUCN, Gland Switzerland., 2008, 6.

requirements. Additionally, these mechanisms can address special concerns of developing countries, and recognize subsidies that improve fisheries management operations.²⁵

Regular review process: An immediate step States could take through the United Nations to improve biodiversity conservation would be to establish a transparent review process aimed at promoting improved implementation of existing agreements.²⁶ A regular review process could enhance coordination and assess progress by States and relevant regional and global organizations. Improved implementation of existing agreements would aid in sustaining marine biodiversity, and reduce the impacts of high seas bottom fishing vessels. Since 1999, the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS) has provided a mechanism to review and evaluate the effectiveness of UNCLOS on specific issues.²⁷ UNICPOLOS could be given responsibility for the regular review process by the UN General Assembly when UNICPOLOS is reauthorized.

States can facilitate the status quo through a regular review process for global reporting and assessment of the state of the marine environment, including socio-economic aspects. Transparent scientific collaboration coupled with non-binding policy advisory committees. Such a process can help to establish uniform scientific data that is broadly acceptable. Global marine assessments are a strong step directly supporting marine biodiversity and facilitating scientifically based decision making.

Regional frameworks: Regional frameworks serve as the second pillar of existing measures that can be leveraged in an effort to foster a sustainable ecosystem management regime. A detailed discussion of how regional framework can improve conservation of biodiversity and the marine environment follows in the next section.

²⁵ Sumalia and Pauly, 2006, 8.

²⁶ Deep Sea Conservation Coalition, “Progress Report on the Implementation of UNGA Assembly resolution 61/105 for the protection of vulnerable marine ecosystems from the impact of bottom fisheries on the high seas,” January 15, 2009, 1.

²⁷ United Nations Division for Ocean Affairs and the Law of the Sea, “United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea,” March 8, 2010.

2.1.3 Strengths of status quo

The current regime structure leverages power in the hands of sovereign states. The current system enables committed states to act without waiting for action by other States. Currently, some countries show both growing capacity and political will at the individual State levels to demonstrate tangible conservation results.

The current regime that it is in place now does not require a lengthy negotiation process. The regime has outlined measures to reduce depletion of marine biodiversity. However, it would need to be supplemented by mechanisms to increase the capacity of states to implement and to enforce internationally and regionally agreed rules.

UNCLOS has constituted the prevailing framework for maritime states with regard to enforcement of existing regulations. Consequently, UNCLOS is well established and maritime states are accustomed to acceptable practices and the freedoms availed to sovereign states. Proactive engagement by member states utilizing existing frameworks can, in the immediate term, take positive steps to improve conservation practices in ABNJ.

Additionally, the existing framework can provide common language regarding scientific evaluation of the status of marine resources that facilitates better planning and management for adopting an ecosystem approach. States could make better use of currently available international measures to protect specific areas and to reduce negative impacts of shipping, fisheries and dumping. Furthermore, current agreements can pave the way to expanded and effective ecosystem conservation.

The current regime demonstrates that there are multiple approaches that can be leveraged by States to address marine biodiversity conservation. If leveraged proactively, the status quo contains effective tools that are adaptable to the specific requirements of individual States. Additionally, these measures can be tailored to fit the States' domestic political concerns.

2.1.4 Weaknesses of the status quo

Though UNCLOS is an essentially universally accepted agreement reflecting many accepted principles, it may not adequately address the technological advancements that are negatively

impacting marine biodiversity. The remote nature of ABNJ waters makes enforcement difficult and expensive. Faced with economic constraints, States cannot carry the burden of monitoring and enforcement in an ad hoc manner.

The challenges facing areas beyond national jurisdiction are derived in large part from poor implementation of a convoluted structure. UNCLOS and the Fish Stocks Agreement have proven insufficient for protection of migratory and straddling fish stocks and marine conservation. UNCLOS is limited in its ability to manage these stocks because implementation is left to the individual judgment of States Parties.²⁸

When UNCLOS was adopted, technology did not represent a catalyst that could expand the reach of fishing fleets to ABNJ waters. Additionally, government incentives have continually promoted inefficient practices that do not reflect basic market principles. As scientific knowledge has advanced, it is becoming clear that UNCLOS was not designed to address the current conservation challenges involving the protection of ecosystems. Consequently, continuing to leverage the existing framework fails to address an international problem with an internationally comprehensive solution. The improvements of regulations that will reduce potential threats in ABNJ have not yet been resolved by the international community.

Currently, the available global instruments and organizations do not effectively address the wide range of threats negatively impacting marine biodiversity in ABNJ.

2.1.5 Evaluating the improvement of the status quo

Consequences: Under the business as usual approach, scientific data demonstrates that ecosystems will be pushed to exhaustion.²⁹ However, if States choose to leverage the existing frameworks in a proactive manner, biodiversity conservation could be enhanced. However, this may not be enough to relieve the upward trend of over exploiting the marine ecosystem.

²⁸ Hart, 2008, 6.

²⁹ UN FAO 2009

Feasibility: Increasing the status quo is feasible, and should be done while acknowledging it cannot address all of the challenges facing marine ecosystems. Moving forward, as marine biodiversity is pushed towards exhaustion the need will increase for a global approach leveraging cooperation and commitment. Even with leveraging the existing frameworks under UNCLOS and through existing regional agreements, we are on an unsustainable consumption path.

Cost: The critical need is to increase cooperation in the management of the resources through economic bargaining. Several institutions and agreements, such as RFMOs, exist that could be used to facilitate increased cooperation, but these institutions will to be strengthened to specifically address the elimination of IUU fishing. The revenue that fishermen would forego as a result of curtailing IUU fishing could have a total gross value of \$8-16 million annually to the global economy.³⁰

The cost of operating the status quo is becoming increasingly clearer through scientific data. Not only would markets be devastated, ecosystems would be threatened with exhaustion. The current international regime coupled with proactive measures at the regional level is an immediate measure that can increase cooperation and coordination between fragmented sectors. The costs of promoting increased scientific assessments and implementing enhanced review processes are minimal in comparison to the alternative.

Effectiveness: The effectiveness of the existing regime rests in its flexibility and speed. Regional commitments bypass hurdles of larger mandates that will require time draft and implement. Existing frameworks have achieved successes and those valuable lessons can be applied easier than creating mechanisms. OSPAR-like successes demonstrate that strengthening mandates aimed towards a network of MPAs in waters beyond national jurisdiction is supported by the provisions of UNCLOS and promote conservation. Area based management tools strengthen existing measures' effectiveness.

³⁰ Srinivasan, 2009, 5.

2.2 Study Case 2: Regional Approach

Although Regional Fisheries Management Organizations (RFMOs) and Regional Seas Conventions (RSCs) are a part of the status quo, as discussed above, in order for the regional approach to fulfill its potential, new RFMOs and RSCs need to be created, and the existing ones need to be improved, with stricter oversight. The following section details both the existing regional landscape and ways and strategies that could improve regional oversight, should States decide to pursue a regional strategy.

2.2.1 Regional Fisheries Management Organizations and Regional Seas Conventions

The umbrella agreement over RFMOs is the “United Nations 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” (referred herein after as the United Nations Fish Stocks Agreement - UNFSA). UNFSA specifies the mandate of RFMOs, sets out principles for the conservation and management of fish stocks and establishes that, “States should cooperate to ensure conservation and promote the objective of the optimum utilization of fisheries resources both within and beyond the exclusive economic zone.”³¹

RFMOs are responsible for regulating fishing activities for straddling and highly migratory fish stocks in areas beyond national jurisdiction³² while coastal states are required to adopt compatible measures.³³ It also obliges Parties fishing in a region with an RFMO to either join the RFMO or agree to abide by its rules. If an RFMO does not exist in a region, UNFSA requires relevant states to create one.³⁴ Some RFMOs focus on a specific region whereas others focus on particular species such as tuna, but under the UNFSA both types have a mandate to “protect

³¹ United Nations Division for Ocean Affairs and the Law of the Sea, “The United Nations 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 (in force as from 11 December 2001): Overview,” (UNFSA), January 8, 2010.

³² UNFSA, Article 7.

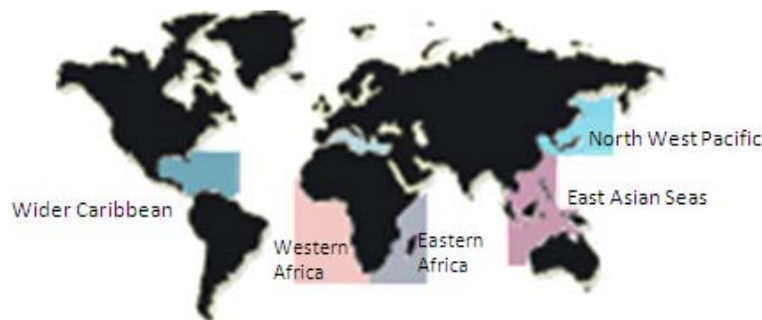
³³ UNFSA, Article 8, paragraph 3.

³⁴ UNFSA, Article 8 paragraph 5.

biodiversity in the marine environment.”³⁵ Since RFMOs address mainly fish stocks, they do not cover many issues of crucial concern for ocean governance and a healthy marine ecosystem in ABNJ.

Regional Seas Conventions (RSC) or Agreements take a broader ecosystem approach. They offer opportunities to deal with activities that can negatively impact environmental resources, not covered by RFMOs. These activities concern both the water column and the resources or biodiversity found on the seabed or the continental shelf.³⁶ RSCs have so far mainly been operated under the framework of the United Nations Environmental Program (UNEP) Regional Seas Program. The Regional Seas Program takes a sustainable management approach on issues such as chemical wastes, coastal development and the conservation of marine animals and ecosystems.³⁷ It establishes cooperation between neighboring countries to protect their shared marine environment on specific environmental topics. Of the 13 Regional Seas Programs, only some apply to ABNJ, while others focus on internal seas or areas within EEZ.³⁸ Thus the coverage of High Seas by RSCs, which would add a more holistic approach to conservation in ABNJ, is limited.

UNEP Regional Seas Programmes



Source: adapted from UNEP, Regional Seas Programme

³⁵ UNFSA, Article 5 (g).

³⁶ Interview with Terje Lobach.

³⁷ United Nations Environment Programme, Regional Seas Programme, “About,” <http://www.unep.org/regionalseas/about/default.asp>, last accessed February 20, 2010.

³⁸ United Nations Environment Programme, *Financing the implementation of regional seas conventions and action plans: A guide for national action*, Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, Regional Seas Programme, UNEP Regional Seas Reports and Studies No. 180, 2006.

UNEP partners with independent Regional Seas programs, namely the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), The Arctic Council, and the Convention for the Protection of the Marine Environment in the North East Atlantic (OSPAR).³⁹ These independent regional institutions represent mechanisms under which Contracting Parties commit to carrying out activities aimed at protecting marine biodiversity and environmental quality.⁴⁰ The OSPAR Convention for example requires its Contracting Parties to report on actions completed towards their obligations and commitments.⁴¹ Some regions rely on non-binding action plans for cooperation, out of which only one applies to ABNJ, namely the Arctic Environmental Protection Strategy.⁴²

The following paragraphs identify the strengths and weaknesses of RFMOs, RSCs and other regional agreements in addressing conservation and protection of the marine environment in ABNJ. Further, the chapter lays out options for improving the current regional regime and finally compares the cost, feasibility and effectiveness of improving it with other legal and management frameworks.⁴³

2.2.2 Conservation measures addressed by regional agreements

To ensure conservation of fish stocks and the marine environment in general, regional agreements include conservation and management measures, such as catch limits, closing areas to exploitation and regulation of IUU fishing. There are substantial differences from one organization or convention to another in the degree of detail of commitment agreed upon by States under the different conventions and in the implementation of the measures.

³⁹ Huebert and Yeager, 2008.

⁴⁰ OSPAR Commission, "How OSPAR works," April 19, 2010, http://www.ospar.org/content/content.asp?menu=00330110000000_000000_000000.

⁴¹ OSPAR Commission, "Programmes and Measures," April 19, 2010, http://www.ospar.org/content/content.asp?menu=00040400000000_000000_000000.

⁴² Kimball, L.A., *The International Legal Regime of the High Seas and the Seabed Beyond the Limits of National Jurisdiction and Options for Cooperation for the establishment of Marine Protected Areas (MPAs) in Marine Areas Beyond the Limits of National Jurisdiction*. Secretariat of the Convention on Biological Diversity, Montreal, Technical Series no. 19, 2007

⁴³ Michael W. Lodge et al, *Recommended Best Practices for Regional Fisheries Management Organizations: Report of an independent panel to develop a model for improved governance by Regional Fisheries Management Organizations*, The Royal Institute of International Affairs, Chatham House, 2007.

Catch limits: to ensure conservation of migratory and straddling fish species and to sustain fish stocks, RFMOs establish catching quotas. The overcapacity of the fishing industry can lead to the extinction of fish stocks and thus RFMOs need to calculate total allowable catch (TAC)⁴⁴ levels and try to distribute quotas and fishing opportunities on an equitable and sustainable basis.⁴⁵ However, RFMOs have often failed to allocate fishing opportunities sustainably due to gaps in reporting and uncertainty of scientific research.⁴⁶ Additionally, RFMOs face the challenge of the so-called new member problem, i.e. how to accommodate new countries that want to join the RFMO to have access to the resources in the area. This is difficult because the maximum sustainable catch (or more) has already been allocated to existing members, so allocations for existing members must decrease to make room for late entries. The other possible but controversial solution is to prohibit new membership.⁴⁷

Marine Protected Areas (MPAs) and closed areas: CCAMLR recently established a high seas MPA south of the South Orkney Islands in 2009.⁴⁸ CCAMLRs conservation mandate is broader than other RFMOs as it focuses first on conservation and then “rational use” and also extends to all marine living resources in the region. Many RFMOs have closed large areas to bottom fishing to protect vulnerable marine ecosystems such as cold water corals and sponges. For example, in 2007, North East Atlantic Fisheries Commission (NEAFC) closed 330,000 km² in the Rockall-Hatton Bank area to bottom fishing, and further extended the area in 2009. Finally, other conservation measures include temporary or permanent limits to fishing (“no-take” zones), and move-on rules that force vessels to leave zones once they reach a specified by-catch fish limit, as well as special areas for scientific studies.⁴⁹

⁴⁴ The Organization for Economic Co-operation and Development defines TAC as “a catch limit set for a particular fishery, generally for a year or a fishing season,” usually expressed in tons of live-weight equivalent or numbers of fish (The Organization for Economic Co-operation and Development, “Glossary of Statistical Terms: Total Allowable Catch (TAC),” <http://stats.oecd.org/glossary/detail.asp?ID=2713>.)

⁴⁵ Interview with Terje Lobach, Senior Legal Adviser to the Directorate of Fisheries Norway and Vice-Chair of the General Council of NAFO, February 3, 2010.

⁴⁶ Interview with Sebastian Losada.

⁴⁷ Interview with Kjartan Hoydal, Secretary of the North East Atlantic Fisheries Commission, February 4, 2010.

⁴⁸ British Antarctic Survey, “South Orkneys Marine Protected Area,” November 20, 2009, http://www.antarctica.ac.uk/about_bas/news/news_story.php?id=1054.

⁴⁹ Kimball, L.A., 2007

Illegal, Unreported and Unregulated Fishing: RFMOs allow member countries to access a share of the fish stock through fishing quotas and help to keep non-members out.⁵⁰ However, IUU exploitation of resources continues although many RFMOs have attempted to limit these activities. Blacklisting of non-compliant vessels, observers on board of vessels and new technologies have helped monitoring and enforcement.⁵¹ To discourage reflagging, a practice used by some ships to avoid compliance with conservation measures, governments adopted a Port State Agreement to enhance the role of Port States in combating IUU in 2009. This agreement is the first global treaty aimed at providing disincentives for fishers by blocking IUU-caught fish from entering international markets. The agreement also provides for information-sharing and addresses assistance to developing countries.⁵² Developing countries are often marked by political instability and weak institutions, which leads to a lack of accountability in the process of reviewing, monitoring and enforcing fishing licenses.⁵³ Illegal fishing practices undermine the logic of RFMOs and minimize the benefits of the organizations for their members. Therefore, fighting IUU is crucial and efforts to coordinate pursuit and prosecution of pirate fishers, through information sharing and use of better technology, are needed.⁵⁴

In order to implement the conservation measures outlined in regional agreements, most RFMOs and regional conventions or programs establish mechanisms to facilitate compliance, enforcement, cooperation, information sharing and transparency. The use of these mechanisms varies widely between institutions.

Cooperation and information sharing: RFMOs require cooperation between member countries in order to coordinate scientific information about fish stocks, decide on TAC, and implement oversight on the high seas and in ports. Cooperation between RFMOs is also crucial, because

⁵⁰ Interview with Kjartan Hoydal.

⁵¹ Northwest Atlantic Fisheries Organization, “29th Annual Meeting, September 2007, Annual Compliance Review,” NAFO/FC Doc. 07/23, Serial No., N5450, 2007.

⁵² FAO, Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, adopted at the Thirty-sixth Session on 22 November 2009, <http://www.fao.org/Legal/treaties/037t-e.pdf>

⁵³ Quentin Hanich, Feleti Teo and Martin Tsamenyi, “A Collective Approach to Pacific Islands Fisheries Management: Moving Beyond Regional Agreements,” *Marine Policy*, 34, January 2010, 85–91.

⁵⁴ UNEP. Ecosystems and Biodiversity in Deep Waters and High Seas. UNEP Regional Seas Reports and Studies No. 178. UNEP/ IUCN, Switzerland 2006.

parts of the world's oceans are covered by more than one RFMO, such as in the South-East Atlantic, which is under the auspices of the International Commission for the Conservation of Atlantic Tunas (ICCAT), the South-East Atlantic Fisheries Organization (SEAFO) or the Commission for the Conservation of Southern Bluefin Tuna (CCSBT).⁵⁵ Although most RFMOs and regional programs have regular meetings with each other, formal processes for data collection and the exchange of information are not in place.

Transparency: UNFSA places obligations on RFMOs to allow participation by inter-governmental organizations and non-governmental organizations (NGOs), and publicize records and reports timely.⁵⁶ RFMOs have been slow to adopt transparency measures, but some have recently considered including a transparency mandate in the conventions.⁵⁷ CCAMLR is a best practice example, as it generally includes both conservation and industry NGOs at its meetings and welcomes observers, although it has the right to hold negotiations of conservation measures in closed meetings.⁵⁸ CCSBT, however, has long lead times for applications to attend meetings and can reject applications on the basis of an objection by a single member.⁵⁹ Provisions for transparency could be made more consistent throughout RFMOs rather than being left to the interpretation of members.

2.2.3 Conservation measures insufficiently addressed by regional agreements

Geographical gaps: Coverage of ABNJ by RFMOs, RSCs and regional programs is incomplete. Two RFMOs have recently been negotiated: the South Indian Ocean Fisheries Agreement (SIOFA) and the South Pacific Regional Fisheries Management Organization (SPRFMO). Although these RFMOs have not yet entered into force, when they do they will address areas where no regional body previously existed.⁶⁰ UNEP's regional seas program, which requires

⁵⁵ Willock and Lock, 2006.

⁵⁶ UN Division for Ocean Affairs and the Law of the Sea, "The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea..." Articles 10 and 12.

⁵⁷ Willock and Lock, 2006.

⁵⁸ Kock, Karl-Hermann, Understanding CCAMLR's Approach to Management, CCAMLR, 2000, http://www.ccamlr.org/pu/e/e_pubs/am/am-all.pdf

⁵⁹ Willock and Lock, 2006.

⁶⁰ Interview with Terje Lobach.

conservation for the marine environment as a whole in addition to fish stocks, only applies to a limited part of the oceans.

Ecosystem approach: The ecosystem approach is undermined by the slow movement by some RFMOs to adopt measures such as MPAs. Most RFMOs have been established with a focus on a specific species, and have failed to address associated or dependent species or habitats,⁶¹ even though attention to the ecosystem is required in RFMOs provisions.⁶² RSCs advocate taking a broader approach, but activities are limited and coordination between RFMOs and RSC is insufficient. Few RFMOs have so far adopted measures to avoid by-catch and negative impacts on non-target fish species or on seabirds, marine turtles and other marine mammals. The IATTC agreed to reduce dolphin by-catch in purse seine⁶³ fisheries and discussed measures to protect sharks and marine turtles.

Precautionary approach:⁶⁴ Most RFMOs call for adopting a precautionary principle, however the need for conducting EIAs is rarely explicitly mentioned. The Madrid Addendum to the Antarctic Treaty, establishes EIA procedures for all activities conducted under the Treaty, including scientific research and tourism.⁶⁵

Compliance and enforcement: Across conservation activities under the regional regime, compliance and enforcement has been insufficient. The reasons are mainly lack of political will to implement internationally agreed norms, differences among implementing capacity in countries and regions as well as lack of oversight mechanisms. Evidence from performance reports of regional organizations suggest that more attention should be paid to implementing agreed upon regulation.

⁶¹ Associated and dependent species refer to primary productivity consumers low in the food chain, as well as top predators such as mammals, tuna and sharks.

⁶² Lodge et al. 2007.

⁶³ Seine: large fishing net that hangs in the water by attaching weights along the bottom and floats along the top.

⁶⁴ The precautionary approach is a provision of the UNFSA and mandates caution when information is uncertain, or unreliable, and that “the absence of adequate information shall not be used as a reason for postponing or failing to take conservation and management measures.” (UN Division for Ocean Affairs and the Law of the Sea, “The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea”)

⁶⁵ ASOC, The Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the Ecosystem Approach, As published in the International Journal of Marine and Coastal Law, Vol. 23, No. 3, 2008

In terms of the overall goal of marine biodiversity conservation, RFMOs thus present considerable weaknesses as there is neither a global ocean perspective nor an ecosystem approach currently taken. While some have started considering a shift in their approach, as shown by best practice examples, the measures taken so far are limited compared to what is needed to maintain the ecosystem.⁶⁶

2.2.4 How the regional approach can be improved

Despite the existence and operation of organizations and conventions that aim to protect the oceans, straddling and migratory fish-stocks and the marine environment are deteriorating. This highlights the need to address biodiversity conservation more effectively. High seas governance through regional bodies should aim for the following improvements:

Expanding the mandate of RFMOs and RSCs: The problems of marine conservation in ABNJ can only be addressed successfully if the provisions set out by RFMOs and RSCs have a global application. This means that the geographic gaps need to be closed, RSCs' provisions could be extended to all ABNJ and RFMOs could expand their mandate to the entire ecosystem, rather than limiting it to straddling and migratory fish or specific fish species. As a consequence the actions of RFMOs and RSCs would be reinforced, but to avoid overlap, regional bodies would have to coordinate and cooperate.

Adopting the ecosystem approach: Some regional bodies have already established temporary and permanent MPAs. However, isolated zones of protection might not be sufficient to safeguard marine ecosystems. Rather, comprehensive management of MPA networks is needed. OSPAR for example has committed to establishing a coherent network of MPAs this year—and is planning to designate more high seas MPAs. This pioneering effort can help lead the way in other regions. Special attention should be given to bottom trawling, which is extremely destructive for the deep seabed. Application of conservation provisions regarding bottom trawling is very patchy and needs more rigorous implementation. The protection of non-target species, such as predators and sea-birds, which is in theory provided for in UNCLOS should be taken more seriously. These non-target species could either be explicitly mentioned in existing

⁶⁶ Interview with Sebastian Losada, Oceans Policy Adviser at Greenpeace International, February 4, 2010.

agreements or regional bodies could adhere to non-binding instruments that account for non-target species, such as the FAO guidelines to reduce sea turtle mortality in fishing operations.⁶⁷

Precautionary approach: Provisions to conduct EIAs are included in UNCLOS and regional bodies organize cooperative projects on training in EIA. However, EIAs are not conducted consistently under regional regimes and thus the harm of activities in the high seas is often not assessed. Adopting a precautionary approach should also apply to new uses and possible human impacts on the marine environment, such as bio-prospecting, marine pollution and climate change which are currently not explicitly accounted for.⁶⁸

Integrated mechanisms: The effectiveness of RFMOs and RSCs has so far been assessed only partially and evaluation is fragmented. A regular independent assessment process could present achievements and failures of conservation measures under regional bodies. Secretariats of RFMOs could play a more active role in planning and delivering conservation management through increased cooperation, establishing a reform process based on evaluation criteria. The criteria of evaluation should be based on the principles provided for in international fisheries conventions, such as FAO or the CBD. Also, revising and adjusting the provisions under the different regional bodies and stepping up efforts for similar implementation across the regions will help address the deterioration of marine ecosystem health. To achieve this goal a regular process for meetings of all regional bodies could be established which would institutionalize cooperation and lay out a long-term strategy for assessing the effectiveness of the regional regime.

Strengthening compliance and enforcement: Measures available to strengthen compliance and enforcement include flag state and port controls that are responsible for flagging of vessels, at sea boarding and inspection arrangements as well as vessel monitoring systems (VMS). Also, States could be encouraged to commit to the 1993 Agreement to Promote Compliance with

⁶⁷ FAO Fisheries Department. Guidelines to reduce sea turtle mortality in fishing operations. Rome, FAO. 2009. 128p. <http://www.fao.org/docrep/012/i0725e/i0725e02.pdf>

⁶⁸ UNEP Regional Seas Reports, 2006.

International Conservation and Management Measures by Fishing Vessels on the High Seas and similar agreements so that they can focus on non-fishing related conservation.

2.2.5 Evaluation of RFMOs and RSCs and other regional bodies

Consequences: Enhancing the functioning of the regional approach could have the following consequences:

- Expansion of the species-specific approach to include the ecosystem and adopt the precautionary principle
- Extension of RSCs and other regional bodies to cover all ABNJ;
- Establishment of more comprehensive networks of MPAs;
- More specific and stricter regulation and subsequent reduction of by-catch and non-target species as well as a reduction in bottom trawling;
- More consistent application of EIAs and adaptation to new uses of marine resources; and
- Increased transparency through a review process and assessment of successes and failures of regional bodies in relation to marine conservation.
- Increased compliance from member and non-member states

However, some problems are likely to remain, such as:

- IUU fishing, due to overcapacity of the world's fishing fleets, which enables more fish to be caught than is sustainable;
- Inadequate allocation of total allowable catch levels, due to changing fish stocks, gaps in reporting and unwillingness of states to give up their initial catch levels, as would be required with the membership of new states to existing RFMOs.

Feasibility: The regional regime has provided an incomplete framework that fails to protect oceans globally or from an ecosystem perspective. The difference in application of provisions for conservation leads to a two-sided conclusion. On the one hand, past examples such as CCAMLR have shown that regional bodies can take considerable action to protect oceans in ABNJ.⁶⁹

⁶⁹ Huebert and Yaeger, 2008.

Through the implementation of regulation regionally, measures can be adopted into customary international law. Without these regional experiences, convergence of opinions on issues such as MPAs internationally might be slower.

Agreements at regional level do not require global consensus and thus decision can often be made faster, and regional operations are more flexible as they do not require a global consensus. Indeed, reaching an international agreement is currently hindered by discussions on bio-prospecting and marine genetic resources. Regional bodies have so far not addressed these controversial issues successfully either, but they can move conservation forward on other topics.⁷⁰ However, this flexibility also allows for incomplete implementation of conservation measures. The regional approach thus poses the risk of differences in interpretation and partial implementation.

Cost: The cost of extending the mandate of regional bodies, improving their operation, and enhancing cooperation and compliance is difficult to quantify, but is likely to be high. Currently, regional bodies already lack funding for their basic expenses, which generally include the operation costs of the Secretariat of the regional body and the costs of functioning, such as monitoring projects and conducting studies.⁷¹ The implementation costs are the responsibility of the national authorities. Funding sources at the national level for conservation measures can come from any source that provides funding for conservation, such as direct or indirect transfers, polluter and user-pay schemes or foreign international grants.⁷² While it might be difficult for RFMOs, RSCs and other regional bodies to secure large funds from donors for international projects, their regional and fragmented character can allow for more diverse funding resources.

⁷⁰ Willock and Lock, 2006.

⁷¹ Global Forum on Oceans, Coasts, and Islands, *Moving Toward Ecosystem-Based Management and Integrated Coastal and Ocean Management in Marine Areas Beyond National Jurisdiction*, Report from the Strategic Planning Workshop on Global Ocean Issues in Marine Areas Beyond National Jurisdiction in the Context of Climate Change, Nice, France, January 23-25, 2008, Executive Summary, 2008, <http://www.globaloceans.org/globaloceans/sites/udel.edu.globaloceans/files/High-Seas-PB-April9.pdf>.

⁷² UNEP. Financing the implementation of regional seas conventions and action plans: A guide for national action. UNEP Regional Seas Reports and Studies No. 180. UNEP, The Hague, 2006

Effectiveness: The effectiveness of improvements suggested above, aimed at enabling regional bodies to better address marine conservation in ABNJ is limited. This is mainly due to the fact that improvements would have to be made on many different issues, in different regions and bodies that are partly influenced by the interests of their member countries. The existence of many different bodies and their overlap in some regions is confusing. Existing regional bodies are likely to improve their operational effectiveness in the areas they cover. Regional bodies that entered into force more recently, such as the Western and Central Pacific Fisheries Commission (WCPFC), prove that lessons have been learned from previous experiences concerning the organizational structure and functions as well as the adoption of modern management approaches.⁷³ RFMOs could be accompanied by other ocean governance options, such as an implementing agreement, to best ensure biodiversity conservation in ABNJ.

2.3 Study Case 3: UNCLOS Implementing Agreement

While the international community at large views the 1982 Law of the Sea Convention as the legal framework for activities in the high seas, some countries consider this framework not sufficient to address conservation and sustainable use comprehensively. In 2008 the European Union at the UN Ad-Hoc Open Ended Working Group on conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction put forward a proposal for a new UNCLOS Implementing Agreement⁷⁴ to address these issues.

Implementing agreements to UNCLOS have been already adopted in the past to address what Freestone refers to as “unfinished agendas,”⁷⁵ namely to discipline seabed mining and use of fish stocks, without going through the cumbersome amendment process of UNCLOS. Could this be a viable instrument also for biodiversity conservation and sustainable use? In particular, what type of implementing agreement should be adopted? What should this agreement address? What are

⁷³ Willock and Lock, 2006.

⁷⁴ Alexander Cícero, “Statement on behalf of the European Union,” United Nations General Assembly, Ad-Hoc Open Ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, New York, April 28, 2008.

⁷⁵ David Freestone, “Problems of High Seas Governance,” October 24, 2009, draft contribution for Davor Vidas, Peter Johan Schei and Martinus Nijhoff (eds) *The World Ocean in Globalization: Challenges and Responses*, 2010.

likely to be the most controversial issues? Is this the most adequate instrument to address these issues? Which consequences could we anticipate and how will existing organizations respond? The following section aims at trying to answer these questions and to stimulate a constructive debate that will support policymakers' decision making in supporting an implementing agreement or in moving on to a different solution.

2.3.1 Implementing agreements under the Law of the Sea Treaty

In the 1982 Law of the Sea Convention no article specifically refers to implementing agreements, nevertheless the Treaty has undergone what Tullio Scovazzi refers to as “evolution by integration”⁷⁶. The 1994 Agreement relating to the Implementation of Part XI of the 1982 UN Convention on the Law of the Sea⁷⁷ and the 1995 UN Fish Stocks Agreement⁷⁸ have respectively amended and provided further interpretation on issues that were of particular controversy among States. While the first is not a “stand-alone agreement”, but has to be “interpreted and applied together as a single instrument”⁷⁹ with the 1982 Convention, the second is a standalone agreement⁸⁰. This implies that even States who are not members of UNCLOS can become parties to the 1995 Fish Stocks Agreement.

An Implementing Agreement on biodiversity conservation and sustainable use could address the implementation shortcomings of UNCLOS by further defining general obligations. It could also respond to the existing fragmentation of efforts and discipline by providing an overarching set of regulations. Furthermore, it could address the problem of lack of participation by having a similar legal status as that of the 1995 Fish Stocks Agreement, therefore attracting also the participation of States that are currently not part to the 1982 Convention.

⁷⁶ Tullio Scovazzi, “The Evolution of the International Law of the Sea: New Issues, New Challenges,” *Collected Courses of the Hague Academy of International Law, Recueil des Cours* Vol. 286 (43), 2001, 123.

⁷⁷ United Nations Division for Ocean Affairs and the Law of the Sea, 1994 Implementation Agreement.

⁷⁸ UNFSA.

⁷⁹ 1994 Implementing Agreement, Article 2.

⁸⁰ Colin Warbrick, Dominic McGoldrick and D.H. Anderson, “The Straddling Stocks Agreement of 1995 – An Initial Assessment,” *International and Comparative Law Quarterly*, 45, 1996, 463-475, published online by Cambridge University Press January 17, 2008.

2.3.2 Elements to be addressed by the Implementing Agreement

Modern Principles of High Seas Governance: The international community has agreed to a set of basic principles, either in international agreements, UNGA declarations or simply by practice in certain activities. An implementing agreement for biodiversity conservation and sustainable use could harmonize the application of such principles and provide for an internationally agreed minimum standard⁸¹. These principles are: conditional freedom of the high seas, protection and preservation of the marine environment, international cooperation, science-based approach, the precautionary approach, the ecosystem approach, sustainable and equitable use, public availability of information, transparent and open decision making process and responsibility of States as stewards of the global marine environment.

Environmental Impacts Assessment (EIA): EIA and Strategic Environmental Assessments (SEA) are tools used to determine upfront the natural, social and economic, positive or negative, impacts of a project. These assessments are particularly interesting in order to identify and allow for the mitigation of any potential impacts and to provide for monitoring and reporting. While EIA are foreseen under UNCLOS and are recognized by the Convention on Biological Diversity (CBD), by the International Seabed Authority (ISA), and by UNFSA for fisheries, they are insufficiently implemented and provisions are too broad and general. An implementing agreement could therefore provide for specific means to ensure prior environmental impact assessment including taking account of cumulative impacts across different sectors, and ongoing monitoring when planned or ongoing activities may cause significant impacts. It could also foresee to introduce an obligation for ex-post EIA which could inform on the efficiency of the mitigation measures as well as on the actual impact of the project.

Adaptation mechanisms: The evolution of technologies and new scientific discoveries has led to the emergence of new activities. These range from ocean fertilization to bio-prospecting of marine genetic resources which pose a possible threat to biodiversity and resource conservation. At the time of the negotiation of UNCLOS these activities were not even foreseen by those who

⁸¹ Freestone, 2009.

negotiated UNCLOS. While some activities that were not considered in 1982 have subsequently been added to UNCLOS (like ocean fertilization, for instance, which is now being addressed by the London Convention), UNCLOS has not been updated sufficiently to reflect current expectations for biodiversity conservation. The provision of mechanisms for adaptation should therefore be a key element of the implementing agreement. This could include a provision that requires for a notification and reporting process for new and emerging uses of ABNJ, including experimental activities, as a way of flashing out implementation of the general obligation under article 192 of UNCLOS.⁸²

Enforcement mechanisms: It is difficult at this point to imagine that States could reach agreements on enforcement measures that are more stringent than the ones currently foreseen by UNCLOS, although more stringent enforcement mechanisms have been established in UNFSA and the FAO Port State measures agreement. To the extent these enforcement mechanisms could be applied to enforce rules related to biodiversity conservation, it would strengthen UNCLOS' existing enforcement mechanisms. It seems likely, though, that enforcement will remain under the responsibility of flag, costal and port State.⁸³ Nevertheless, an implementing agreement could play an important role in further legitimizing enforcement of obligations related to conservation and sustainable use of resources.

Transparency and accountability The implementation agreement could provide for a framework of measures to ensure transparency, consultation, and accountability for all major stakeholders in ocean use and conservation. These measures would foster better trust therefore greatly advancing cooperation.

⁸² UNCLOS, Part XII, Protection and Preservation of the Marine Environment, Section 1, General Provisions, Article 192, General Obligations: "States have the obligation to protect and preserve the marine environment."

⁸³ Under the UNCLOS Convention, States are responsible for activities of ships carrying their flag and shall exercise enforcement with respect to the obligations under the convention for activities in their territorial waters and ports. See Art. 73 "Enforcement of laws and regulations of the coastal State," Art. 217 "Enforcement by flag States," Art. 218 "Enforcement by Port States," Art. 220 "Enforcement by costal States," Art 222 "Enforcement with respect to pollution from or through the atmosphere."

2.3.3 Controversial elements in biodiversity conservation and sustainable use

Marine Genetic Resources: The high seas are a major basin of global biodiversity, particularly around hydrothermal vents, seamounts, methane seeps, the water column, pelagic waters, and deepwater corals. The organisms that inhabit these ecosystems have evolved under extreme conditions and therefore have become of great interest to the scientific community for research and commercialization purposes. The controversy lays on the legal status of MGR. A number of countries, mostly developing, would like to see the definition of “resources” in Part XI of UNCLOS to extend to living biological resources. In particular many developing countries would like MGR to be regarded as common heritage of mankind. This would imply benefit sharing under Part XI of UNCLOS, while many developed countries view only freedom of the high seas to apply, namely Part VII. According to article 137 of UNCLOS, “all resources in the Area are vested in mankind as a whole”⁸⁴, however resources are defined only as mineral resources, which would de facto exclude MGR. The debate on how the benefit from the exploitation of marine genetic resources beyond areas of national jurisdiction should be dealt with is one of the most debated issues⁸⁵ and negotiation of an implementing agreement could be used to help resolve this dispute or to find a mechanism that avoids the legal dispute but still reflects the interests and concern of both sides.

Marine Scientific Research: Linked to Marine Genetic Resources is the issue of definition of what constitutes marine scientific research and what constitutes bio-prospecting. Marine scientific research is one of the six activities for which the 1982 Convention recognizes freedom, subject to Parts VI ,VIII, XI and XIII of the Convention. Bio-prospecting involves the search, collection and extraction of genetic resources samples from marine biodiversity for industrial commercial utilization (such as for pharmaceuticals, cosmetics and culture).

⁸⁴ UNCLOS, Article 137(2).

⁸⁵ Dire Tladi, “Marine Genetic Resources on the Deep Seabed: The Continuing Search for a Legally Sound Interpretation of UNCLOS,” updated version of the article by Dire Tladi, “Genetic Resources, Benefit Sharing and the Law of the Sea: the Need for Clarity,” *Journal of International Maritime Law* Vol. 13, 2007.

Marine Protected Areas: These are portions of waters which are under special protection or in need of special protection due to their natural, biological or cultural interest. They are or should be subject to certain restrictions with regard to use and access which target conservation and sustainable use. Such restrictions do not necessarily prohibit all activities, but they rather limit the uses of the areas concerned to what is believed to be sustainable for the ecosystem. The problem that MPAs face is that they are not universally recognized and their protection is more a function of the engagement of the single states under which they are created, rather than a shared responsibility. An implementing agreement could go a long way in legitimizing MPAs beyond national jurisdiction by creating a mechanism for their recognition and endorsement, provisions for their management and enforcement, and encourage their protection among the international community at large. A new global agreement will also help overcome some of the challenges associated with meeting the World Summit on Sustainable Development goals of a representative network of MPAs by 2012.⁸⁶ Establishing networks of MPAs will be much more difficult than individual MPAs absent an implementing agreement or some other global agreement.

2.3.4 Possible Impacts Resulting from the Adoption of a New Implementing Agreement

At this stage it is very difficult to envisage how this implementing agreement would look like and therefore any prediction in this sense is nothing more than speculation. Some elements however can be realistically be foreseen, regardless of how e possible agreement would be shaped

Consequences: a new implementing agreement for biodiversity conservation and sustainable use could:

- provide a framework for covering unregulated activities impacting biodiversity,
- ensure application of modern ocean governance principles in sector-specific activities,
- provide implementation guidelines to general provisions to ‘protect and preserve,’

⁸⁶ United Nations, “Report of the World Summit on Sustainable Development,” Johannesburg, South Africa, August 26-September 4, 2002 <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N02/636/93/PDF/N0263693.pdf?OpenElement>.

- improve the cooperation and co-ordination amongst existing institutions by providing a new, binding umbrella framework, and
- foster the ecosystem based approach through promoting cross-sector integrated management and co-operation.

Feasibility: this will mainly depend on the political will of States to commit and to invest the necessary resources. Moreover, the cohesiveness of the international community in placing conservation and sustainable use at the top of the agenda is of key importance in creating a critical mass of engaged players.

Costs: these will likely range from the preparation of background studies to the cost of the actual international negotiations. They will also include any cost linked to compliance to the new obligations and implementation needs under the agreement, but should also account for the benefits resulting from it and moving away from the unsustainable status quo. Also to be factored into the costs is time and in particular the time needed to assign the mandate to the Ad-Hoc Working Group⁸⁷ to formulate a proposal, the time for the elaboration of this proposal, a few years of negotiation and the time frame for the agreement to come into force. Overall, this may take ten years which would clearly raise a need for interim measures or better implementation of current instruments.

Effectiveness: this will entirely depend on the political will, on the resources and on the capacity that member States will be ready to invest. Once into force, the implementing agreement would provide for a set of shared and more specific binding obligations that should greatly improve conservation efforts. However, any step in this direction will strongly depend on the ability to move beyond short term national interests in favor of a long term global vision. Moreover, broad international participation, particularly by those states that are heavily engaged in maritime activities, would be a fundamental element in guaranteeing effectiveness.

⁸⁷ The Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction.

2.4 Study Case 4: UNGA Resolutions

The international community can also work to close legal and regulatory gaps regarding ABNJ by passing a resolution or resolutions in the UNGA. Potential resolutions could take the form of a declaration of conservation and environmental governance principles and a call for States working through RFMOs to abide by these principles; could mandate that all activities in ABNJ must be preceded by an EIA or SEA; or could create regulations and restrictions on individual activities in ABNJ. While many of these issues could also be covered in an implementation agreement, UNGA resolutions would tackle discrete aspects of a potential implementation agreement. This would allow the international community to cherry-pick the aspects of the agreement on which it would be easiest to reach agreement, but could also minimize the likelihood of passing all of the components of an implementation agreement.

2.4.1 Declaration of principles

A declaration of principles of oceans governance in ABNJ would create a common framework and facilitate a common understanding amongst all member nations.⁸⁸ A declaration could call for states and RFMOs (and any other competent bodies) to apply conservation principles such as the precautionary approach, the ecosystem approach, the polluter/user pays principle, conditional freedom of the seas, etc., many of which are widely accepted by states but have not been applied more broadly to all activities in ABNJ.⁸⁹ For the resolutions to be truly effective, they would perhaps also need to include consequences for failing to apply the principles in the declaration.⁹⁰

A resolution declaring principles of ocean governance would define good governance of marine ABNJ as being consistent with conservation principles, and as the expected international norm. A very strong declaration could include affirmation that certain environmental and management principles and approaches have reached the status of customary international law. Indeed, the

⁸⁸ Gjerde et al, *Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction*, 5.

⁸⁹ Gjerde et al., *Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*.

⁹⁰ Gjerde et al, *Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction*.

unanimous support of the UNGA member states would be a *de facto* indication that the principles are equivalent to customary international law. If all states engaged in activities in ABNJ actually followed the precautionary principle, the ecosystem approach and the other principles supported in a declaration of principles, it could represent a major step forward in protecting marine biodiversity.

Weaknesses of a declaration of principles

Although there is precedent of similar declarations evolving into international law,⁹¹ a declaration of principles on oceans governance in ABNJ would only achieve that status with universal (or near universal) support from the states that would have to implement the principles. Presumably, if such support were forthcoming then there would already be universal application of these principles in ABNJ. This has not occurred, despite the public support of many states for this goal. This is basically a catch-22 – a declaration of principles would be far more meaningful if it received unanimous support, but if unanimous support is available then the usefulness of a declaration of principles is at least partially mitigated.

2.4.2 Expanded EIA requirement

A UNGA resolution could also be developed calling for states to perform environmental impact assessments before all activities with potentially damaging environmental effects in ABNJ. This would build on UNGA Resolution 61/105,⁹² which calls upon RFMOs or other competent organizations to perform EIAs to determine whether proposed bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems. If evidence is found that activities would have adverse impacts, countries should proceed in a manner to prevent those

⁹¹ See, for example, United Nations General Assembly, Resolution 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,” October 1970; John N. Clarke, “A Pragmatic Approach to Humanitarian Intervention,” *Journal of Humanitarian Assistance*, September 2001, 8. This Resolution has even served as the basis for decisions by the International Court of Justice. “Legal consequences of the construction of a wall in the Occupied Palestinian Territory,” July 9, 2004, <http://www.reliefweb.int/rwarchive/rwb.nsf/db900sid/SZIE-62QPZZ?OpenDocument>.

⁹² UN Division for Ocean Affairs and Law of the Sea, “Oceans and Law of the Sea in the General Assembly of the United Nations,” December 15, 2009.

impacts, either by adapting the proposed activities or cancelling them.⁹³ It also calls upon competent authorities to: identify vulnerable marine ecosystems (VMEs) and determine whether bottom fishing would cause significant adverse long-term impacts in those ecosystems, particularly regarding the sustainability of deep sea fish stocks; close VMEs to bottom fishing until such time as conservation and management measures are established to prevent adverse impacts on the VMEs; and require members of the RFMOs or other arrangements and other States to require vessels flying their flag to cease bottom fishing activities in areas that are found to contain VMEs.⁹⁴ The resolution foresaw a review process to assess progress and monitor the effectiveness of the use of EIAs prior to bottom fishing activities,⁹⁵ the framework of which could be used to monitor and assess EIAs performed before other activities as well.

Recent UN deliberations and reports reveal that some delegations support expanding this model. Confining EIA to a sectoral or regional scope does not allow for an assessment of the cumulative global impacts of activities in ABNJ.⁹⁶ Delegates from several states recently made reference to UNGA Res 61/105, with many calling for the resolution's principles to apply to other, even all, activities in ABNJ.⁹⁷ Even those states that opposed an extension of the use of EIAs to other activities in ABNJ made a point of declaring their support for Resolution 61/105.⁹⁸

Alternatively, the more urgent need may be for those States with experience conducting EIAs to give technical assistance to those States that operate in ABNJ without formally considering the

⁹³ United Nations General Assembly, Resolution, "61/105. Sustainable fisheries, including through the 1995 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, and related instruments," A/RES/61/105, Distributed March 6, 2007, paragraph 83.

⁹⁴ UNGA, A/RES/61/105, paragraph 83.

⁹⁵ UNGA, A/RES/61/105, paragraphs 84-87.

⁹⁶ United Nations General Assembly, "Letter dated 15 May 2008 from the Co-Chairpersons of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction addressed to the President of the General Assembly," A/63/79, Distributed May 16, 2008, Annex, paragraph 18.

⁹⁷ Such as Australia and the EU, for example. Observations at the Third Meeting of the *Ad Hoc* Open-ended Informal Working Group to Study Issues Relating to the Conservation and Sustainable Use of Marine Biological Diversity Beyond Areas of National Jurisdiction, February 1-5, 2010.

⁹⁸ The US and Canada, for example. Observations at the Third Meeting of the Working Group.

environmental impacts of their actions. A UNGA resolution could therefore propose a new program for capacity building and oversight of EIAs. If the resolution contained not only a commitment to share information and build capacity but also a commitment from all States undertaking activities in ABNJ to perform EIAs, it could prove very meaningful; there is little sense requiring countries to perform EIAs if they do not know how to properly assess environmental impacts. To monitor the success of this type of resolution, the Secretary-General of the UN could include information on EIAs undertaken with respect to planned activities in ABNJ in the annual report on oceans and the law of the sea, as recently recommended by the relevant Ad-Hoc Open-ended Informal Working Group.⁹⁹ The combined effect of these provisions could represent an important step to ensuring States perform EIAs.

Weaknesses of an expanded EIA resolution

UNCLOS already requires States to assess the damage of activities under their jurisdiction or control (as far as practicable), if they believe the activities may cause substantial pollution or significant and harmful changes to the marine environment.¹⁰⁰ This is not a requirement to perform EIAs specifically, but it does place the onus on states to evaluate the impact of their activities on the environment. To the extent this requirement is not already being followed, it is not immediately clear why an additional UNGA resolution calling for EIAs on activities in ABNJ without making provisions for technical assistance or increased reporting of EIAs undertaken would have a significant incremental impact.

Furthermore, as noted above, many states have expressed opposition to expanding the EIA requirement. This opposition explains why the proposed recommendations from the Ad-Hoc Open-ended Informal Working Group included three recommendations on EIAs, but not a recommendation that the UNGA expand the requirement to perform EIAs.¹⁰¹

⁹⁹ United Nations General Assembly Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, "Recommendations – advance and unedited text, as adopted by the meeting," February 5, 2010, Paragraphs 13 & 14.

¹⁰⁰ UNCLOS, Article 206.

¹⁰¹ UNGA Working Group, Paragraphs 12-14.

2.4.3 Sector-specific resolutions

The UN General Assembly could also pass resolutions barring specific actions in ABNJ. A model for this type of resolution could be the 1989 UNGA driftnet agreement, in which UN member states unanimously agreed to a moratorium on all large-scale pelagic driftnet fishing by 1992. The General Assembly passed subsequent resolutions urging implementation of this resolution in each of the next two years. The FAO developed and adopted a Code of Conduct for Responsible Fisheries.¹⁰² The UN Secretary General said, in 2002, “It is becoming increasingly evident that the problem of large-scale pelagic drift-net fishing is abating owing to the continued resolve by the international community to ensure implementation of the global moratorium on the use of large-scale pelagic drift-net fishing on the high seas.”¹⁰³

While the driftnet fishing resolution is a good example of what can be achieved with a well-focused UN level agreement, it can also be seen as an example of the difficulties that states face in attempting to bring about change through the UNGA. The driftnet resolution passed only after negotiations spanning roughly three years, despite the fact that it referred to a very specific type of fishing, using one type of gear, with very obvious detrimental ecosystem effects, undertaken by only a few countries. The more states have a stake in the activity addressed by a resolution, the greater the difficulty in coming to an agreement. For instance, the ongoing negotiations to ban or control bottom trawling – which a mountain of evidence shows is very damaging to ocean ecosystems and biodiversity, represents only a small part of the total catch of the fleets of the principle states engaging in bottom trawling, and is only profitable because of state subsidies¹⁰⁴ – have proceeded very slowly, in large part because many countries engage in that activity.¹⁰⁵

¹⁰² Patricia A. Michaels, “Cooperative Efforts Dealing with Driftnet Fishing,” *Green Nature*, 2006, <http://greennature.com/article2616.html>.

¹⁰³ United Nations General Assembly, “Large-scale pelagic drift-net fishing, unauthorized fishing in zones of national jurisdiction and on the high seas, illegal, unreported and unregulated fishing, fisheries by-catch and discards, and other developments,” Report of the Secretary-General, *A/57/459*, October 9, 2002.

¹⁰⁴ See, for example, Ussif Rashid Sumalia, et al., “Subsidies to high seas bottom trawl fleets and the sustainability of deep-sea demersal fish stocks,” *Marine Policy*, 2009, doi:10.1016/j.marpol.2009.10.004. or Matthew Gianni, “High Seas Bottom Trawl Fisheries and their Impacts on the Biodiversity of Vulnerable Deep-Sea Ecosystems,” Report Prepared for IUCN/the World Conservation Union, Natural Resources Defense Council, WWF International and Conservation International, June 2004.

¹⁰⁵ Interview with Jake Rice, Senior National Adviser, Ecosystem Sciences for the Canadian Department of Fisheries and Oceans, March 17, 2010.

Addressing governance of marine ABNJ is a much more complicated problem, with a great many more activities that must be overseen, regulated and controlled.

But while there are many activities that take place in ABNJ, not all or even most of them are in and of themselves damaging to marine biodiversity, especially not when they are effectively regulated. Although a resolution curtailing bottom trawling on sea mounts would be welcome, for most unregulated activities, such as marine scientific research, cable and pipeline laying and bio-prospecting, a resolution tying funding availability to compliance with codes of conduct that would increase monitoring, transparency and environmental awareness may be sufficient regulation to protect biodiversity, although this assumes that meaningful, environmentally sensitive codes of conduct could be developed. Admittedly, this is a big assumption.¹⁰⁶

Weaknesses of sector-specific resolutions

This sectoral approach allows for differentiated strategies attuned to the specifics of each sector, and has the added benefit of following the current international governance system, in which different activities are overseen by different international bodies. But there are potential shortfalls to separately regulating and monitoring each human activity in ABNJ. Although the current governance of marine ABNJ is structured on a sectoral basis, it is seen by some as being “fragmented, and inadequate” as a result.¹⁰⁷ Because there are many different sectors that can affect marine biodiversity, one laggard sector can undercut the efforts and sacrifices of the other sectors that cooperate with and adhere to regulation. This could create a slower, more hesitant process as sectors attempt to wait each other out to ensure that they are not making fruitless sacrifices. Coordinating a response to emerging cross-cutting environmental issues such as climate change is also more difficult with a fragmented, sectoral approach.

In order for a sectoral-level approach to regulating activities in ABNJ to be successful, the different sectors must still work in collaboration and cooperation with each other. The fishing,

¹⁰⁶ Gjerde et al, *Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*.

¹⁰⁷ Global Forum on Oceans, Coasts, and Islands, 2008, 1.

scientific, military, shipping, and all other related communities would need to develop their own approaches, but would need to calibrate their approaches to roughly match roughly those taken by the other relevant sectors. The lack of coordination between and among these sectors is seen by some as a hindrance to effective governance of activities in ABNJ.¹⁰⁸

2.4.4 Elements successfully addressed by UNGA Resolutions

Transparency

Even though UN resolutions are not hard law, in general, the States that take international law seriously in the first place take UNGA resolutions seriously as well. And even those States that are inclined not to care about such issues can be motivated to take action by reporting provisions that require States to report back to the UNGA on the progress they have made in implementing resolutions, if only to avoid embarrassment.¹⁰⁹ Furthermore, when States commit to something in the UNGA, it is a commitment made before the entire world; while history shows that this does not necessarily mean it is a commitment that will be upheld, it at least ensures awareness of whether states are keeping their word.

However, transparency is limited by the fact that UNGA resolutions are primarily developed out of the public eye. Non-governmental organizations are not permitted to witness, let alone participate in, the UNGA resolution process, and international government organizations are allowed to attend only if none of the state delegations object to their presence. So while the resolutions themselves are transparent, the process of developing them remains opaque.

Cooperation and Information Sharing

The UNGA is an ideal setting to facilitate cooperation and information sharing between States. Resolutions can lead to technical assistance, the creation of a data clearinghouse and shared commitments by States to cooperate and communicate, thus protecting against the tragedy of the commons discussed earlier.

¹⁰⁸ A/63/79, annex, paragraph 21.

¹⁰⁹ Interview with Jake Rice.

2.4.5 Weaknesses of UNGA Resolutions

The opposition of several States to any of these resolutions would prove a formidable stumbling block to their implementation. Without unanimity, no customary international law is created through the passage of UNGA resolutions, so it is likely that if States signal their strong opposition to a resolution calling for States to perform EIAs for all activities that may have significant adverse impacts, for example, no such resolution will be introduced, let alone passed unanimously.

Even UNGA resolutions that ultimately do receive unanimous support must first undergo a time-consuming negotiation process. Since unanimity is needed for a UNGA resolution to have any binding significance in international law, every State must parse each phrase, word, and punctuation mark before supporting a given resolution. This ensures that even those resolutions destined to fail will consume a large amount of time, resources, energy and political capital.

Following passage of a resolution, it still must be implemented and enforced in order to have any lasting significance. The whole reason to consider using UNGA resolutions is because of the perceived gaps that exist in current international law. But to the extent that these gaps are implementation gaps rather than regulatory gaps, creating a new UNGA resolution or series of UNGA resolutions could simply trade one implementation shortfall for another, wasting years or even decades in the process.¹¹⁰

¹¹⁰ Interview with Jake Rice.

Recommendations

Each of the strategies examined in this report has its strengths and its drawbacks. While the best possible outcome for marine biodiversity would probably be the passage of a comprehensive implementation agreement.

However, because an implementation agreement remains a long-term aspiration, short- and medium-term measures are needed in the meantime as the groundwork for preliminary negotiations is prepared. To that end, we recommend pursuing strategies to better implement the status quo and expand and strengthen RFMOs and RSCs in the short-term. In the medium-term, working through the UN to implement generally agreed upon principles and strategies would be a further step toward achieving an implementation agreement.

Specifically, the status quo could be improved by:

- Utilizing subsidy reduction schedules to remove market inefficiencies from commercial operations operating in ABJ. This will have the short-term effect of reducing fishing and the harvest of marine biodiversity where it is not economically profitable;
- In addition to reducing commercial subsidies that promote overexploitation, promoting conservation-based subsidies that strengthen marine resource infrastructure, promote marine management, research, and marine enforcement mechanisms;
- Continuing to push for a transparent review process aimed at promoting improved implementation of existing agreements. A review process would enhance existing agreements and strengthen marine biodiversity conservation;
- Promoting memoranda of understanding and memoranda of agreements. These measures are non-binding, but signal commitment by global powers such as the United States and European Union. These memoranda strengthen coordination and prevent fracturing of initiatives.
- Leveraging the existing frameworks under the status quo in order to improve conservation faster.

The regional framework could be improved by:

- Closing geographic gaps where no RFMO or RSC operate, extending RSC provisions to all ABNJ, and expanding the mandates of RFMOs to include associated and dependent species;
- Adopting the ecosystem approach, aided by achieving the WSSD goals of establishing a representative network of MPAs;
- Increasing the use of EIAs under regional regimes;
- Creating an integrated mechanism that would provide a regular independent assessment of regional regimes based on the principles found in the FAO or the CBD; and
- Strengthening compliance and enforcement mechanisms in RFMOs through flag and port state controls and through the use of vessel monitoring systems.

These short-term measures will ensure increased biodiversity conservation. Mid-term measures could be undertaken in the UN, especially on those areas in which there is already general agreement. Specifically, resolutions could be pursued that would:

- Increase and facilitate information sharing on best practices for environmental management, and capacity building as to how to undertake and assess EIAs;
- Declare commonly accepted conservation principles of ocean governance, including the precautionary and ecosystem approaches; and
- Recommit to the UNCLOS requirement to evaluate the environmental impact of all activities undertaken by or under the control of signatories to the Convention.

Finally, preliminary negotiations should begin on a timeline to draft an implementation agreement that would create a framework for all currently unregulated activities, ensure that modern conservation principles are incorporated and applied in all activities and sectors in ABNJ, improve communication among actors in ABNJ and improve enforcement mechanisms. But it is important to ensure that the preparations for these negotiations do not distract from the more immediately achievable recommendations listed above.

Conclusions

Biodiversity conservation and sustainable use of marine resources must be a priority if the international community is seriously committed to reaching the UN Millennium Development Goals. The UN has called upon States to take action to ensure environmental sustainability, but today, only 22 percent of the world's fisheries are sustainable (down from 40 percent in 1975), and only 0.7 percent of the world's oceans are protected.¹¹¹

To date, mechanisms for biodiversity conservation have not been implemented to the fullest extent possible, and the full potential of those instruments that are in place has yet to be exploited. Should nations choose to proactively leverage the existing framework, there would be noticeable improvements in biodiversity conservation. However, even so, we are on an unsustainable consumption path.

Some existing regional organizations have enabled significant improvements in marine conservation. However they provide an insufficient and fragmented option for ocean governance, because of their incomplete coverage and flaws in implementation. These flaws can largely be resolved given political will of member States, but will require thorough reform of regional organizations, a regular review process, buy-in and no small amount of effort.

A UNCLOS implementing agreement on biodiversity conservation and sustainable development could provide binding, specific guidelines on UNCLOS implementation, increasing the obligation to undertake conservation actions, and increasing international cooperation and coordination. But this option would also demand a great deal of political effort by the international community to overcome the negotiating hurdles that would assuredly present themselves, which would in turn require a great deal of time during which other actions might be forestalled. Of course, the international community could hypothetically take short-term steps to protect biodiversity while more long-term negotiations are underway, but it is also possible that enthusiasm and energy surrounding smaller scale short-term steps would be minimized with

¹¹¹ United Nations Millennium Development Goals, "Goal 7: Ensure environmental sustainability," Fact Sheet, High-level Event on the Millennium Development Goals, United Nations Headquarters, New York, September 25, 2008.

the promise of a wide-ranging, game-changing agreement. Negotiations on an implementing agreement could also provide an excuse for States that are less interested in ensuring biodiversity to argue that their existing, potentially soon to be obsolete, obligations no longer hold the same importance.

UNGA resolutions could be used to solidify international support for conservation best practices; to add another layer of assurance that States consider the environmental impacts of their actions; or to increase the transparency, monitoring and accountability of States operating in every sector that affects ABNJ. While all of these resolutions could significantly increase ABNJ biodiversity conservation, they would all also require a good deal of effort to craft and enact. And ultimately, their non-binding nature could result in a lot of effort for precious little tangible results.

There is no silver bullet to ensure protection of marine biodiversity. A combination of short- and long-term efforts must be undertaken in order to sacrifice neither speed nor ambition. The worst outcome would be a long-term effort that only proved fruitless after several years, but this should not be read as an excuse for inaction or complacency. Regardless of the final strategy pursued to protect marine ABNJ, it is clear we cannot afford to postpone further action. Marine biodiversity is a precious and unique resource. If we fail to protect it now, we will certainly appreciate how precious it was once it is gone.

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