

**ESTABLISHMENT AND IMPLEMENTATION OF A CONSERVATION AND
MANAGEMENT REGIME FOR HIGH SEAS FISHERIES, WITH FOCUS ON THE
SOUTHEAST PACIFIC AND CHILE**

From Global Developments to Regional Challenges

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DISCLAIMER

The views expressed herein are those of the author and do not necessarily reflect the views of the Government of Chile, the United Nations, the Nippon Foundation of Japan or Dalhousie University.

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ABBREVIATIONS

CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CCAMLR	Commission for the Conservation of the Antarctic Marine Living Resources
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COFI	FAO Committee on Fisheries
CPPS	Comisión Permanente del Pacifico Sur (Permanent Commission for the South Pacific)
DWFS	Distant Water Fishing States
DOALOS	Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
FAO Compliance Agreement	1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas
HSTF	High Sea Task Force
I-ATTC	Inter-American Tropical Tuna Commission
IOTC	Indian Ocean Tuna Commission
IPOA	International Plan of Action
ICJ	International Court of Justice
ITLOS	International Tribunal for the Law of the Sea
IUU	Illegal, Unreported and Unregulated
LOS Convention	1982 United Nation's Convention for the Law of the Sea
MSY	Maximum Sustainable Yield
ODIL	Journal of Ocean Development and International Law
OECD	Organization for Economic Co-operation and Development
RFMO	Regional Fisheries Management Organization
UN	United Nations
UNCLOS I	First United Nations Conference on the Law of the Sea (1958)
UNCLOS III	Third United Nations Conference on the Law of the Sea (1973-1982)
UNEP	United Nations Environment Programme
UNFSA	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
UNGA	United Nations General Assembly
UNICPOLOS	United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea
WTO	World Trade Organization

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PART I - ESTABLISHMENT OF THE CONSERVATION AND MANAGEMENT REGIME FOR HIGH SEAS FISHERIES

Introduction

Living resources of areas beyond national jurisdiction¹ have been traditionally regarded as common property, common resources, or common-pool resources.² The doctrine of common property implies that no single user can have exclusive rights over them, or the right to prevent others from joining in their exploitation.³ In other words, the fisheries regime of the high seas has been traditionally regarded as an 'open access' regime. The freedoms of the high seas, and in particular the freedom to fish, well recognized in international customary law, is a consequence of the doctrine of the common property applied to fisheries resources in the area beyond national jurisdiction. Open access regimes, however, are inevitably

¹ The fish stocks found in the high seas can be classified as straddling stocks (fish stocks found both within the coastal State EEZ and the adjacent high seas), highly migratory stocks (stocks included in Annex 1 of the United Nations Convention on the Law of the Sea of 10 December 1982, hereinafter the LOS Convention), consisting primarily of the major tuna species, found both within the EEZ of one or more coastal States and the high seas), discrete stocks (fish stocks found exclusively in the high seas), anadromous stocks (fishes which ascend fresh-water streams to spawn), catadromous stocks (fishes which spawn in the sea, but live a large portion of their existence in fresh waters), marine mammals (mammal that is primarily ocean-dwelling or depends on the ocean for its food) and sedentary stocks outside the continental shelf under national jurisdiction (organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil). (See: LOS Convention, Article 77(4); FAO Fisheries Technical Paper No. 465. Gordon Munro, Annick Van Houtte, Rolf Willmann. *The conservation and management of shared fish stocks: legal and economic aspects*, FAO, Rome, 2004, available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007, at p. 3; Meltzer, Evelyne. "Global overview of straddling and highly migratory fish stocks: maps and charts detailing RFMO coverage and implementation.(regional fisheries management organisations)(High Seas Fisheries Governance: Moving from Words to Action)." *International Journal of Marine and Coastal Law* 20.3-4 (Nov 2005): 571-604).

² Common pool resources are characterized for being non-excludable and rival or subtractable. Non-excludable, because it is costly, but not impossible, to exclude potential beneficiaries from obtaining benefits from its use; rival, or subtractable, because its use by one individual reduces the availability for others (the concepts were obtained from Elinor Ostrom, Roy Gardner, and James Walker, *Rules, Games, & Common-Pool Resources*, University of Michigan Press 1994. See also: Wikipedia website <www.wikipedia.org>, public good and common pool resources, retrieved January 3, 2007).

³ Christy and Scott, *The Commonwealth in Ocean Fisheries* (2nd ed., Baltimore, 1972), ch. 2, as cited by Birnie and Boyle, *International Law and the Environment* (Oxford, 1992).

followed by over-exploitation, over-capitalization, and sub-utilization, as was theoretically proposed by Hardin and empirically proven in the fishing history of nearly every fish stock.⁴

The once absolute freedom of the high seas, including the right to fish, began to change as the fisheries resources proved to be exhaustible. Early agreements to jointly manage fish stocks present in the high seas led to a wider recognition of the need to conserve and cooperate for the conservation of those stocks, obligations which were codified in the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas.⁵ Those duties, however, were insufficient to stop the increasing fishing activity on the high seas, threatening the conservation of the fisheries resources and the livelihood of coastal communities. States, and particularly developing Coastal States, began to claim extended jurisdiction over the oceans adjacent to their coasts. The practice was recognized in the Third United Nations Conference on the Law of the Sea (hereinafter UNCLOS III) and set forward in the United Nations Convention on the Law of the Sea of 10 December 1982 (hereinafter the LOS Convention) regime for fisheries under the institution of the economic exclusive zone (EEZ).⁶ For the remaining high seas, the LOS Convention maintained the common resources approach, recognizing to all States the freedom for their nationals to engage in fishing activities in the high seas.⁷ However, the freedom to fish in the high seas recognized in the LOS Convention is not absolute, but qualified. Article 87 recognizes to all States the freedom of fishing “*subject to the conditions laid down in section;*” and Section 2 of Part VII, particularly Article 116, subjects “*the right [of all States] for their nationals to engage in fishing on the high seas*” to:

⁴ Garret Hardin, *The tragedy of the commons*, *Science*, New Series, Vol. 162, No. 3859 (1968), pg. 1243-1248.

⁵ 1958 Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas, Article 1: “1. All States have the right for their nationals to engage in fishing on the high seas, subject (a) to their treaty obligations, (b) to the interests and rights of coastal States as provided for in this Convention, (c) to the provisions contained in the following Articles concerning conservation of the living resources of the high seas. 2. All States have the duty to adopt, or to co-operate with other States in adopting, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas.”

⁶ The EEZ is an area beyond and adjacent to the territorial sea, extending up to 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, and where the coastal State exercises sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds (LOS Convention, Articles 55, 56 (1) (a) and 57).

⁷ LOS Convention, Articles 87 and 116.

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

The provisions of the section condition the right to fish on the duty to take the measures necessary for the conservation of the living resources (conservation duty) and to co-operate with other States in taking those measures (cooperation duty). As noted by one author, “under Article 116 of the LOS Convention the duties of conservation of the living resources of the high seas become prominent since *the very right to fish* is conditioned to this major objective.”⁸

However, freedom of the high seas and the right to fish have experienced further restrictions (or even derogation) in current developments of international law. That has been the trend adopted in hard law instruments and, remarkably, also by soft law instruments and standards set by the States through international or regional declarations. As noted by Burke:

[o]ver this entire period of time, we have witnessed, and continue to witness, a series of attempts to escape from the principle of freedom of fishing on high seas. Therefore, the most noticeable trend today, consisting of the various attempts to restrict freedom of fishing on the high seas, is only a continuation of one of the main characteristics of international decision making since 1945.⁹

This part of the paper addresses the evolution and rationale behind this restrictive process, as well as the mechanisms envisaged for the application of the principles of law and policy regulating the right to fish in the high seas. It will be proposed that the general trend aiming at restricting the freedom of fishing in the high seas is characterized by globalization of management and conservation standards, regionalism for the application of the global standards set by the international community, regional enclosure of the oceans, and increased accountability of the management authorities.

⁸ Francisco Orrego Vicuña, *The Changing International Law of High Seas Fisheries* (Cambridge University Press, 1999), at p. 46; emphasis added.

⁹ W.T. Burke, *Trends in International Law for High-Sea Fisheries Management*, in René-Jean Dupuy (ed.) *The Future of the international law of the environment*, 1985, Workshop of the Hague Academy of International Law, United Nations University, 12-14 November 1984, The Hague.

Section 1 - Policy and Legislative Aspects of the High Seas Fisheries Regime

The ancient rule of freedom of the high, as applied to fisheries, means that no single State can have exclusive rights over them, or the right to prevent others from joining in their exploitation. However, the unrestricted action of each State may conflict with the interests of other States, resulting in chaos. Thus, the right to fish in the high seas must be exercised according to some generally accepted rules in order to avoid conflict and chaos. The first section of this part addresses the evolution of those rules of law and principles of policy that inform the high seas fisheries regime, with special reference to current developments.

1. High seas fisheries in the LOS Convention: the starting point

The origins of a high seas fisheries conservation and management regime can be traced back to at least to the early 1600s, when Hugo Grotius's doctrine of the freedom of the high seas became a structural pillar of international law of the sea. The freedom to fish in the high seas, a corollary of that doctrine, started its evolution when competing fishing States negotiated and signed agreements to protect, not so much the fish, but their economic interests in the fisheries. Later on, the need to conserve the stocks became apparent and was recognized as an obligation for fishing States. A lack of effectiveness in the implementation of that duty, or due the lack of implementation whatsoever, Coastal States unilaterally extended the jurisdiction over areas that, formerly, were regarded as high seas, for the exploration, exploitation, conservation and management of marine living resources. The LOS Convention is the current multilateral treaty that codified these early developments, establishing a general framework for the conservation and management of the high seas fisheries that is regarded as international customary law. Because of this reasons, it will serve as the starting point in the analysis of the principles for the establishment of a conservation and management regime for high seas fisheries. It will be analyzed how the LOS Convention is based in the freedom to fish and the correlative obligation to conserve the high seas fisheries resources; relying, for

its implementation, on Flag State responsibility and international, regional or subregional cooperation.

1.1 Conservation and management in the LOS Convention

According to the provisions of the LOS Convention regarding fisheries conservation and management, the oceans are divided in several different areas with different management and conservation regimes, the most important of which are the EEZ and the high seas. For the purpose of this paper, it is worth noting that the duties and responsibilities regarding the conservation and management of marine living resources and the protection of the marine environment for those two areas are equivalent. In fact, the relevant provisions of the LOS Convention, Articles 61 and 119, are almost identical.¹⁰ However, the implementation of the management and conservation regime, and the bodies responsible for that implementation differ: in the EEZs, the Coastal States have sovereign rights for exploring and exploiting, conserving and managing the natural resources, and the duty and responsibility to conserve those resources;¹¹ in the high seas, all States have the right for their nationals to engage in fishing,¹² and all the States have the duty or responsibility to conserve the living resources of the high seas¹³ and to cooperate with other States to that end.¹⁴

The conservation of living resources has its origin in their economic consumption value, i.e. the significance of the marine resources as a protein source for the world's growing population. "[T]he law concerning conservation of fisheries has been dominated by their exploitation and has thus concentrated on the need to maintain catches at sustainable levels whilst respecting the principle of equitable utilization[...]"¹⁵ Recent developments of international and national law have stressed the importance of the conservation of some

¹⁰ Article 61 makes an explicit reference to the "economic needs of coastal fishing communities" as a factor to be taken into account in ensuring levels which can produce the maximum sustainable yield of harvested species in the exclusive economic zones (hereinafter EEZ), where Article 119 does not include a similar reference (United Nations Legal Office, Division of Ocean Affairs and Law of the Sea DOALOS, *The Regime for High Seas Fisheries: Status and Prospects*, United Nations, New York, 1992, at paragraph 17, p.9)

¹¹ LOS Convention, Article 61.

¹² LOS Convention, Articles 87 and 116.

¹³ LOS Convention, Articles 117, 118, and 119.

¹⁴ LOS Convention, Articles 63, 64 and 118.

¹⁵ Birnie and Boyle, *supra* note 3, at p. 549.

species due to their intrinsic value, which is especially the case of charismatic marine species, or due to their instrumental non-economic or non-consumptive value, which is the case of species providing an essential service to certain populations, habitats or ecosystems.¹⁶

The LOS Convention does not define conservation.¹⁷ However, the provisions addressing the conservation of living resources in the EEZ (contained in Part V of the LOS Convention), and in the high seas (contained in section 2 of Part VII of the LOS Convention), provide a framework to establish the nature and objectives of conservation and management required.¹⁸ The conservation of the living resources requires, in the first place, that living resources are not endangered by over-exploitation.¹⁹ This conservation and management measures goal is only referred to in relation to the EEZ. The competent authority²⁰ must adopt the necessary measures to maintain or restore populations of the living resources at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing States.²¹ Furthermore, and in regard to the EEZ, the Coastal State shall promote the objective of optimum utilization

¹⁶ For a description of the different values of protection, see: P. van Heijnsbergen, *International Legal Protection of Wild Fauna and Flora*, IOS Press, 1997, chapter 4, p. 53-58.

¹⁷ The 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas defines ‘conservation of the living resources of the high seas’ as the “aggregate of the measures rendering possible the optimum sustainable yield from those resources so as to secure a maximum supply of food and other marine products” (1958 Convention on Fishing and Conservation of the Living Resources of the High Seas, Article 2). At the time of its adoption, food supply was a primary concern of the international community, and overexploitation of natural resources and environmental protection were not a priority. The Convention stresses that the “conservation programmes should be formulated with a view to securing in the first place a supply of food for human consumption.” The 1958 Convention, however, has never been widely ratified. It is worth noting that the 1955 Rome Technical Conference that preceded the first UN Conference on the Law of the Sea (UNCLOS I) established that the optimum sustainable yield was only the main objective of living resource conservation, thus implying that conservation could have other goals than the mere production of food or other products. The Geneva Convention, however, equates conservation with optimum sustainable production (see: van Heijnsbergen, *ibid*, at p. 97).

¹⁸ Part V and VII of the LOS Convention refers to the conservation and management of the ‘marine living resources’; however, its provisions address almost exclusively the conservation of targeted species by fishing activities (fish stocks). It includes only one provision dealing with dependent and associated species and broad provisions regarding the impacts of fishing on the ecosystem. Part XII of the LOS Convention contains several provisions regarding the protection of the marine environment from other human activities. The provisions taken into account in this section refer only to conservation measures for fishing activities.

¹⁹ LOS Convention, Article 61(2). See also DOALOS, *supra* note 10; William T. Burke, *Unregulated High Seas Fishing and Ocean Governance*, in *Freedom for the Seas in the 21st Century*, Edited by Jon M. van Dyke, Durwood Zaelke, and Grant Hewison (1993), at p. 110.

²⁰ The State, in regard to the areas under national jurisdiction, and regional fisheries management organizations or arrangements, as appropriate, in the high seas.

²¹ LOS Convention, Article 61(3) and Article 119(1)(a).

of the living resources without prejudice to the conservation duties imposed in Article 61.²² With respect to highly migratory species,²³ the LOS Convention also sets optimum utilization as a goal of international cooperation. Conservation also requires taking into consideration the effects on species associated with, or dependent upon, harvested species with a view to maintaining or restoring populations of such associated or dependent species above levels at which their reproduction may become seriously threatened.²⁴ Finally, it requires the employment of the best scientific evidence available to establish needed conservation measures,²⁵ and a duty to ensure that conservation measures do not discriminate against the fishermen of any State.²⁶

The standard, or threshold, set for conservation of harvested species is the concept of ‘maximum sustainable yield’ (MSY), which has been defined as “the largest average catch or

²² According to De Klemm, optimum utilization must not, and has never been, considered as a conservation principle (Cyrille de Klemm, *Living Resources of the Ocean*, in Douglas M. Johnston (ed.), *The Environmental Law of the Sea*, International Union for Conservation of Nature and Natural Resources, 1981, at pg. 130). However, according to the definition of the term conservation by van Heijnsbergen, and considering its evolution in international environmental law, conservation includes sustainable utilization as one of its components (van Heijnsbergen, *supra* note 16, at p. 45-52). It must be noted that the reference to optimum utilization was “a compromise between those States, mostly developing nations, who favored complete control over the living resources of their EEZ and other States, mostly nations with long-distance fishing fleets, or with traditional interest in certain coastal fisheries abroad, who feared they would be losing some economic benefit to no corresponding advantage for those States who do not have the capacity to harvest themselves the resources in their newly established EZZs” (de Klemm, *ibid*).

²³ The LOS Convention does not define highly migratory or straddling stocks. However, it is understood that straddling stocks are species that occur in one (or more) EEZ and the high seas, and highly migratory species in more than one EEZ and the high seas (see: Meltzer, *supra* note 1). The proposed concepts arise from Article 64 of the LOS Convention. Although it would be difficult to assess if a stock is straddling or highly migratory in some cases, the issue is addressed by Annex I of the LOS Convention which provides a list of the species that are legally considered highly migratory. However, the LOS Convention does not provide for a simplified procedure to amend the Annex, so it is highly improbable that the list will ever be changed (see: Cyril de Klemm, “Migratory Species in International Law”, 29 *Natural Resources Journal* (1989), p. 935-978, at p. 942). It is worth noting that, according to the 1979 Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), migratory species are defined as “the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries” (Article I(1)(a)). It is, therefore, a broader definition than the one that seems to be adopted in the LOS Convention, because it encompasses not only Annex I stocks, but also stocks that would be considered under the LOS Convention as straddling and even shared stocks. In any case, as the Bonn Convention also uses a list technique (Appendices I and II), there is no ambiguity. It is also worth noting that the United Nations 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, also known as the 1995 Fish Stocks Agreement or UNFSA (hereinafter UNFSA), does not define the concepts of highly migratory or straddling stocks either, although its scope is precisely these stocks.

²⁴ LOS Convention, Article 61(4), and Article 119(1)(b).

²⁵ LOS Convention, Article 61(2), and Article 119(1)(a).

²⁶ LOS Convention, Article 119 (3).

yield that can continuously be taken from a stock under existing environmental conditions”.²⁷ The concept of MSY has been criticized by environmentalists and economists. From an environmental point of view, MSY does not take into account the impacts on recruitment and mortality by environmental factors, such as availability of food, water currents, temperature, salinity, and pollution. Nor does it consider the ecological relationships of species with each other. In addition, scientific uncertainty makes it difficult to calculate MSY confidently and accurately. Therefore, biologists have concluded that MSY is often an overly ambitious strategic objective for fishing, and have recommended the adjustment of exploitation rates and catch levels below MSY.²⁸ Economists, on the other hand, criticized the concept because it is calculated exclusively on the basis of biological criteria, which can result in the pursuit of uneconomic fishing activities. The economic efficiency is most probably achieved when the stocks levels are higher than the one producing a MSY.²⁹

The issues can be considered to be addressed, at least partially, by the LOS Convention. On one hand, the LOS Convention does not provide a definition of conservation, which allows further development of the standards or goals aimed at the integral protection of fish stocks. In addition, Articles 61 and 119 explicitly qualified MSY to

relevant environmental and economic factors, including the economic needs of coastal fishing communities and the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global.³⁰

²⁷ Ricker, 1975. Living populations or stocks are capable of growth in abundance and biomass, but only up to a certain limit, which is determined by the current size of the population in relation to its average abundance in the unexploited state, and by the environment in which the stock occurs (FAO Technical Guideline for Responsible Fishing No. 4, Fisheries Management, chapter 3.1, available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007). A stock that is not fished at all will tend to remain at this maximum size, and natural mortality and reproduction will balance out. When a stock begins to be fished, its size will decrease, and the stock will start growing at a rapid rate to recover the loss. The rate of increase is greatest when the stock has been reduced to a particular size. This level is known as the maximum sustainable yield, and it represents the greatest quantity of fish that can be caught continuously without adversely affecting the total size of the stock (Churchill and Lowe, *The Law of the Sea*, Manchester University Press 1999, at pg. 282).

²⁸ Fisheries Technical Paper No. 224. J-P. Troadec. *Introduction to fisheries management advantages, difficulties and mechanisms* (FIPP/T224). FAO, Rome, 1983 (Reprinted 1992), available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007.

²⁹ Birnie and Boyle, *supra* note 3, at pg. 551. See also de Klemm, *supra* note 23, at p. 82.

³⁰ LOS Convention, Article 61(3) and Article 119(1)(a).

This suggests that, while managing a specific stock, the responsible agency can adjust the 'biological' MSY to meet multi-species or eco-systemic approaches, and economic needs (especially of coastal fishing communities and developing States). The same Articles stipulate that the conservation goal might be further developed through 'generally recommended international minimum standards'.³¹ Nevertheless, the conservation standard set in the LOS Convention (which defines the content of the duty or responsibility of States) is open to adjustments and even interpretations, and does not provide a clear framework to assess an eventual international breach of the obligation to conserve the living marine resources both in the EEZ and in the high seas.

However, an important feature of conservation, as considered in the LOS Convention, can be highlighted: the framework of the Convention seeks conservation *while exploiting* living resources. The conservation approach of the LOS Convention, thus, is anthropocentric and anchored in the need to maintain commercially exploited fish stocks to ensure both the maintenance of the economic activity and the food supply for the world's population. It is, furthermore, a single-species approach, paying little attention to the relations among species or between the harvested species and its habitat.³² In order to achieve that goal, regulation of fishing activities is essential. In fact, and with the arguable exception of experimental or highly costly fisheries, the long-term maintenance of a fish stock requires *limitation* of the fishing activity through catches or effort control and technical restrictions.³³ Thus, the

³¹ The recognition and reference to generally recommended international minimum standards might be considered as a 'hardening' of soft law, in the sense that global standards acquire binding character because of their inclusion in a binding instrument.

³² Articles 61 and 119 provide for an exception to this approach, while specifying the need to take into consideration the effects on species associated with, or dependent upon, harvested species, with a view to maintaining or restoring populations of such associated or dependent species above levels at which their reproduction may become seriously threatened. The provision has been identified as a first, but timid recognition of the ecosystem approach: "By taking into account the effect of exploitation on dependent and associated species the Convention on the Law of the Sea has taken a first step towards an ecosystem approach" (Rudiger Wolfrum and Nele Matz, "The interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity", *Max Planck Yearbook of United Nations Law*, Kluwer Law International Inc. 2000: p-448-480, at p. 449-450.) In addition, the provisions of Part XII of the LOS Convention provide for some protection of the marine environment, although not directly from fishing activities.

³³ The total amount of fish caught in a fixed period will depend on the concentration of fish in the area, the amount of fishing effort employed, and the efficiency of the gear used. As a consequence of this relation, the total catch can be regulated through technical measures (gear restrictions, closed seasons, closed areas), input

regulation of the activities require: a) that the management or conservation goal is defined and b) an agency is responsible for the design, application and enforcement of the regulation set. As noted above, the LOS Convention regime only provides vague elements to define the conservation goal; in addition, it doesn't provide a proper framework for its effective implementation in the high seas.

1.2. Implementation of the LOS Convention management and conservation framework for the high seas

The establishment and enforcement of conservation and management measures (including access restriction, total allowable catch, and allocation of fishing rights) in the EEZ is under the jurisdiction of the Coastal State. Accordingly, the respective State has the power to establish the necessary measures, restricting activities taking place in the ocean area under its jurisdiction, ensuring compliance through the appropriate mechanisms, enforcing the regulation, and imposing sanctions considered severe enough to deter illegal fishing. The hierarchical authority of the State allows for the establishment of a fisheries regulation that ensures the goal of sustainable development of the economic activity.³⁴

control (regulation of the amount of effort put into the fishery) or output control (regulation of the catch which can be taken from a fishery). In most instances, fisheries are regulated by a combination of more than one of these control measures. Technical restrictions alone are generally not an adequate measure to restrict catches as long as there is an economic incentive for fishermen to engage in fishing activities. On the other side, output control measures alone generate economic inefficiency and do not provide incentives for the fishermen to engage in responsible fishing activities, usually causing 'derby' or 'Olympic' catch patterns. Therefore, some degree of effort limitation by the management authority is a pre-requisite for responsible fisheries, whatever other control measures are in place. Effort limitation includes the restriction of the number of fishing units, restrictions on amount of time which units can spend fishing, restrictions on the size of vessels and/or gear. However, experience has shown that in the absence of a limit on fleet capacity, the amount of effort expended by industry cannot be effectively controlled. On the other hand, where secure and appropriate access rights are in place, the holders of rights will tend to regulate their inputs to appropriate levels in their own economic interest. Thus, restricting fishing capacity (number of vessels) has shown to be a fundamental measure of fisheries management. However, often the access restriction is not enough. Technology improvements allow the same fishing units to increase their fishing effort beyond the recommended yield levels and therefore harvest stock in an unsustainable manner. Therefore, input control often requires to be complemented by output control measures (and specifically, by total allowable catch). Although those complementary measures can be sufficient to achieve sustainable biological utilization, they often generate economic inefficiency through the competition of the actors. Therefore, the third step in sustainable management is the allocation of fishing rights to the fishing units allowed in the fishery (FAO, Technical Guidelines No. 4, *supra* note 27, chapter 3).

³⁴ It is worth noticing, however, that despite that authority, the fishing regulation in the EEZ has shown to be difficult and the achievement of conservation goals doubtful. Several reasons are accountable for the weak results: lack of scientific knowledge; lack of resources to undertake scientific research or monitoring, compliance and surveillance procedures; political, social, and economical pressure coming from the industry,

However, fish do not respect the boundaries set by humans. Therefore, the same stock might be found either in one EEZ only, in two or more EEZs of different States, in one or more EEZs and the high seas, that is, the waters beyond any national jurisdiction, or in the high seas only. In the first case, it is the Coastal State's responsibility to conserve the living resources of the EEZ. All other situations described above imply shared stocks³⁵ or common resources: resources that are not under a single jurisdiction. This situation includes stock occurring in the EEZ of two or more States, where the Range States would have sovereignty to regulate the stock while present in their respective EEZ; and stock occurring partially or totally in the high seas, where no single State has jurisdiction to establish conservation and management measures and the stocks are regarded "international common resources" while they are in international waters.³⁶

It must be noted however, that the stocks are considered common resources not because of the nature of the resources but because of a political decision arising from customary international law and incorporated in a legal binding instrument. Indeed, the approaches to the regulation of stocks might be classified as internationalization, nationalization, and shared resources approaches.³⁷ Internationalization is understood as meaning that "sovereignty over a species would be vested in the world community and no longer in individual states. Conservation and management decisions would be taken by an international body [...]".³⁸ The concept of an international regulatory body for fisheries has been proposed several times, and every proposal has failed.³⁹ The LOS Convention did not provide for an

the fishermen and the labor sector; and lack of political priority. All have been recognized as constraint for national regulatory systems.

³⁵ FAO Fisheries Technical Paper No. 465, *supra* note 1, at p 3. Meltzer uses the term 'shared stocks' as synonym of transboundary or joint stocks (Meltzer, *supra* note 1).

³⁶ de Klemm, *supra* note 23.

³⁷ *Ibid*, at p. 939.

³⁸ *Ibid*, at p. 939-940. De Klemm adds that the measures adopted by the international body "would be applicable to all jurisdictional zones, including of course the high seas." It might be considered, though, that this is again a political decision. The measures adopted by the hypothetical international body could be adopted only for international waters, while the coastal States remained jurisdiction to adopt measures in the waters under their national jurisdiction. It must be said, though, that this approach contradicts one of the principles of governance for migratory species as established by de Klemm: the need to adopt measures which are applicable to the whole range of distribution of the migratory species.

³⁹ De Klemm, *ibid*, identifies several initiatives: the first proposal of the establishment of an International Fisheries Office empowered to take conservation measures is attributed to Leonard in International Regulation

‘international approach’ for fisheries, although it incorporated the innovative concept of ‘common heritage of mankind’ for the regulation of the seabed mineral resources.⁴⁰

The nationalization should be understood as

the extension of the sovereign rights, or at least of the exclusive jurisdiction, of a State over wild animals outside areas under the jurisdiction of that State. As a result, conservation and management decisions regarding the animals concerned would be made by that State, and all other range States, [and] States fishing for the resources on the high seas would have to comply with these decisions.⁴¹

As in the case of internationalization, several proposals to “nationalize” the marine species were made, which yielded some positive results during UNCLOS III. The establishment of the EEZ and the regulation of anadromous and catadromous species, conferring special rights to the State of origin, were the concrete results of those proposals as codified in the LOS Convention.⁴²

of Fisheries (1944). The idea arose during UNCLOS I and UNCLOS III. During the latter, several delegations proposed to extend the jurisdiction of the Seabed Authority to the water column of the high seas and to marine living resources. In recent times, some proposals have also been made, as a response to the lack of ability or will of the States to effectively cooperate to ensure conservation and sustainable exploitation of the living resources.

⁴⁰ The LOS Convention creates a new regime for the exploration and exploitation of solid, liquid and gaseous mineral resources of the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction, known as ‘the Area’ (LOS Convention, Articles 1(1) and 133(a)). The regime is called ‘common heritage of mankind’ (LOS Convention, Article 136). “The common heritage of mankind principle consists of four elements. It prohibits States from proclaiming sovereignty over any part of the deep seabed, and required that states use it for peaceful purpose, sharing its managements and the benefits of its exploitation.” (Edward Guntrip. "The common heritage of mankind: an adequate regime for managing the deep seabed?" *Melbourne Journal of International Law* 4.2 (Oct 2003): 376-405, at p. 375. See also: LOS Convention, Articles 137, 138, 140(1) and 141).

⁴¹ De Klemm, *supra* note 23, at p. 943.

⁴² It appears to be a contradiction between the concept of “nationalization” given by de Klemm and the examples proposed. The concept of “nationalization” supposes the exercise of special jurisdiction of a State in international waters (outside areas under national jurisdiction). Therefore, the EEZ is not included in the concept of nationalization because it does not entail the exercise of jurisdiction outside areas under national jurisdiction, but an extension of areas under national jurisdiction. That, unless de Klemm is referring exclusively to areas under national sovereignty (territorial sea). It might be argued that there is another example of “nationalization” in the LOS Convention: the recognition of the special interest of the coastal State, as stated in Article 116. One author, indeed, give practical and important effects to that declaration. In his book *The New International Law of Fisheries, UNCLOS 1982 and Beyond* (Clarendon Press, Oxford, 1994), William Burke writes: “Thus, Article 116 goes beyond requiring action to seek agreement, and declares that the right to fish on the high seas is subject to the rights and duties of coastal states with respect to straddling stocks.” (p. 133) He adds that “[a]ccordingly, the 1982 Convention might be interpreted as providing that high seas fishing upon stocks that also occur within a coastal state’s EEZ is subject to the sovereign right of that coastal state. The

The third approach identified for the management of high seas species is the shared resources concept. It implies the sovereignty of the States to exploit the shared resources and establish conservation measures, but also the responsibility of the States for the health and conservation of the resources *vis-à-vis* the other States.⁴³ The approach is linked to Principle 21 of the Stockholm Declaration,⁴⁴ Principle 2 of the Rio Declaration,⁴⁵ and to the ancient principle of *sic utere tuo ut alienum non laedas*.⁴⁶ The LOS Convention considers the latter approach for the regulation of high seas fisheries.⁴⁷ It recognizes the right of all States to fish in the high seas, but also the corresponding responsibility or duty to conserve the high seas

question which remains to be answered regarding Article 116 is how the apparently superior right of the coastal state might be implemented in the specific context of straddling stocks, where high seas fishing take stocks also occurring within the EEZ of the coastal State. Assuming the states concerned have not been able to conclude an agreement on conservation in the high seas area, one interpretation of Article 116 is that the coastal state is considered authorized to establish conservation measures applicable to the stocks as a whole, including the high seas portion, and to demand compliance by high seas fishing states. Refusal to comply with genuine conservation measures would constitute a violation of the treaty (were it in force) and, otherwise, of the customary international law obligation to join in conserving the living resources of the high seas.” (p. 133-134). It must be noted that during the UNCLOS I, UNCLOS III and UNFSA negotiations, proposals were made to give the coastal State special rights over highly migratory and straddling stocks even in international waters, on the basis of the interrelation of the stocks, the dependence of the coastal State on those species and the “special interest” of the coastal State in the conservation and management of those stocks, as recognized in Article 116 of the LOS Convention. Those attempts failed in the negotiations processes.

⁴³ De Klemm, *supra* note 23, refers to the Range States. However, if a stock migrates in the high seas, there is not a State with jurisdiction to establish conservation measures, i.e., there is not a Range State but a common resource.

⁴⁴ 1972 Stockholm Declaration of the United Nations Conference on the Human Environment, Principle 21 “States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”

⁴⁵ 1992 Rio Declaration on Environment and Development, Principle 2: “States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”

⁴⁶ ‘One should use his own property in such a manner as not to injure that of another’.

⁴⁷ With the exception of anadromous and catadromous species, as noted above. The political definition of the LOS Convention was due to the difficult balance among the interest at stake during the negotiation: the establishment of the EEZ, the continental shelf, the international Authority for the exploration and exploitation of mineral resources of the seabed beyond the continental shelf, the recognition of the freedom of navigation, and the freedom to fish in the high seas were the result of that balance. The regime for high seas stocks is strongly influenced by the traditional concepts of international law and particularly, by the sovereignty, equality and independence of the States recognized in international law.

stocks. For this purpose, it relies on a) *unilateral measures* adopted by the Flag State in respect to the vessels flying its flag; and b) *international or regional cooperation*.⁴⁸

1.2.1. Flag State Responsibility

The principle of freedom of the high seas brings as a corollary that a vessel in the high seas is under the sole jurisdiction of the Flag State, and that other States must refrain from interfering with it. This principle is codified in Article 92(1) of the LOS Convention:

Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in this Convention, shall be subject to its exclusive jurisdiction on the high seas. A ship may not change its flag during a voyage or while in a port of call, save in the case of a real transfer of ownership or change of registry.⁴⁹

The jurisdiction that the Flag State exercises over the vessels flying its flag in the high seas imposes on that Flag State not only rights, but also obligations. Article 91(1) provides: “there must exist a genuine link between the State and the ship”. Article 94 of the LOS Convention develops the nature of that link prescribing that “every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its

⁴⁸ According to the LOS Convention, the fishing States are subject to the following obligations: a) Take into consideration the interests of other States in their exercise of the freedom of the high seas, and the rights under the convention with respect to activities in the Area. (Article 87); b) Take such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas (Article 117); c) Cooperate with other States in the conservation and management of the living resources in the areas of the high seas (Articles 117 and 118); d) Enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned (Article 118). In relation to this latter duty, the LOS Convention sets special provisions for straddling stocks, highly migratory stocks, marine mammals, anadromous stocks, and catadromous species (Articles 63(2), 64, 65, 66, and 67). These provisions also require the interested States, including the coastal State, to cooperate for the conservation and optimum utilization of this species, encouraging the establishment of subregional or regional fisheries organizations to this end; e) Cooperate with other States to establish subregional or regional fisheries organizations for the conservation of the living resources of the high seas, as appropriate (Article 63, 64, and 118); and f) States bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization, to co-ordinate the management, conservation, exploration and exploitation of the living resources of the seas, and to invite, as appropriate, other interested States or international organizations to co-operate with them in furtherance of the provisions of this Article (Article 123 a and d).

⁴⁹ The principle of exclusive jurisdiction of the Flag State has, however, some exceptions in international law, as recognized in Article 92(1).

flag”, as well as to ensure safety at sea.⁵⁰ It further defines specific measures that must be taken by the Flag States. It may be considered that Article 117 adds one obligation to the previous: “all States have the duty to take [...] such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas.”

The lack of capacity, or lack of will, of some States to perform their responsibilities as Flag States has triggered the flagging or re-flagging of vessels to avoid the regulations established for the high seas, either for fisheries or for other activities, or to avoid the sanctions to the violations to those regulations. The “open-registry” system existent in some States makes that practice easy and fast.⁵¹ In addition, the vagueness of the concept of genuine link in the LOS Convention leaves eventual breaches of the responsibility uncertain. In practice, the jurisdiction of the Flag State has proven to be insufficient to effectively implement Flag State law with respect to their vessels, particularly conservation standards in the high seas.

In addition to the poor performance of the Flag States’ responsibility, unilateral conservation measures adopted by the Flag State in respect to their nationals can only be an effective means to achieve conservation when just one State is fishing for a certain stock. As soon as a

⁵⁰ Authors have argued if the elements provided in article 94 are conditions of ‘genuine link’ (therefore helping to clarify its nature) or a consequence of it. The establishment of the of the concept of genuine link and these elements in different articles in the LOS Convention suggest to the majority of authors that “the genuine link in Article 91 –whatever it is – is a condition to be met before registration while Article 94 deals with the separate and consequential issue of effective control.” In addition, although the concept of genuine link is still not well defined in international law –regardless the various attempts to this end-, the consequences of the registrations, i.e., the responsibilities and duties of the Flag State, have been subject of considerable development for both fishing vessels as well as cargo vessels. (Rosemary Rayfuse. *Non-Flag State Enforcement in High Seas Fisheries*. Martinus Nijhoff Publishers, Leiden, Boston, 2004, at p. 26-27).

⁵¹ An open registry is one which allows ships to register, hence fly the flag of that State, in the absence of the elements of a genuine link between the vessel owner and the State of registration. “A State of open registration means any State which does not require that its citizens directly or through share participation in the capital of any joint-stock society be the owners or charterers of a vessels without a crew or otherwise have responsibility for the operation of a ship registered in that State.” (UNCTAD TD/RS/CONF/10/Add.1, p. 5, as cited by G.S.Egiyan, “Flag of Convenience or Open Registration of Ships”, *Marine Policy* 14n2 (March 1990): 106-111, at p. 108). Generally, open-registry States offer fiscal benefits to attract considerable tonnage. Usually, the benefits of an open-registry also include less stringent labor, social, construction, pollution, or environmental standards (including responsible fishing standards), as well as lack of enforcement and compliance mechanisms. Thus, open-registry States are usually considered to be ‘Flags of Convenience’, because they facilitate non-compliance with international standards. One characteristic identified for open registries is that the procedures for registration or withdrawal thereof are easy (G.S. Egiyan, *ibid*, at p. 107). For that reason, it has been stated that Flags of Convenience allow a vessel to set sail under one flag, fish under a second flag, and land under a third flag.

second State starts developing the fishery, then cooperation becomes necessary.⁵² Therefore, in practice, cooperation is the main tool for fulfilling the conservation duty imposed by the LOS Convention on States fishing in the high seas. That is probably the reason why this subject has been given little attention by scholars and the international community, where Flag States' responsibility has been focused on registration requirements and the compliance with measures adopted for the high seas through cooperative regimes. However, it is worth exploring the development of standards or practices of a responsible Fishing State, even when the vessels flying its flag fishes for a stock, or in an area, that has not been managed by a collaborative regime.⁵³

1.2.2. International or regional cooperation

Article 118 of the LOS Convention provides that States shall cooperate with each other in the conservation and management of living resources in the high seas; and that “States whose nationals exploit identical living resources, or different living resources in the same area, shall enter into negotiations with a view to taking the measures” necessary for the conservation of the living resources concerned. It adds that they shall, as appropriate, cooperate to “establish subregional or regional fisheries organizations” to this end. While regulating the conservation of straddling stocks and highly migratory stocks, the LOS Convention provides that where the same stock or stocks of associated species occur both within the EEZ and in an area beyond and adjacent to the zone, the “coastal State and the State fishing for such stocks in the adjacent area shall seek, either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary for the conservation of these stocks in the adjacent area;”⁵⁴ and that the coastal State and other States whose nationals fish in the region for the highly migratory species listed in Annex I

⁵² FAO recognizes some cases in which non-cooperative management for transboundary stocks is a perfectly acceptable option. However, it also stressed that, other than in exceptional cases, cooperation is a fundamental prerequisite for effective resource management (FAO Fisheries Technical Paper No. 465, *supra* note 1, at p. 13-15).

⁵³ Resolution A/61/105 adopted by the United Nations General Assembly in 2006 is an interesting precedent in this respect. (The UNGA Resolutions will be identified in this paper by the number assigned to the document by the United Nations. All the Resolutions are available on DOALOS website <www.un.org/Depts/los>). In addition, the standard or practices could also be applied when the collaborative regime is not applicable to the Flag State, but this assertion depends on the position assumed in respect to non-parties to the regime. Both aspects will be analyzed in more detail below.

⁵⁴ LOS Convention, Article 63(2).

shall cooperate “directly or through appropriate international organizations with a view to ensuring conservation and promoting the objective of optimum utilization of such species throughout the region, both within and beyond the EEZ.” It adds that “in regions for which no appropriate international organization exists, the Coastal State and other States whose nationals harvest these species in the region shall co-operate to establish such an organization and participate in its work.”⁵⁵

In a broad sense, cooperation means the action of common effort or the association of persons for common benefit.⁵⁶ In the context of the LOS Convention, it therefore implies the collective action of a group of States to achieve a common benefit: the conservation and management of marine fish stocks. It is assumed that States will benefit from the long-term conservation of the harvested stocks and, therefore, will be willing to cooperate, even though they acted as ‘rational egoists’ moved by purely national and economic interest.

It has been discussed whether the LOS Convention’s provisions distinguished between different kinds of duties to cooperate. The discussion has arisen mainly because of the different language used in Articles 63, 64 and 119. It has been proposed that, where Article 63 and 119 establish a duty of cooperation of the nature of a *pactum de negotiando*, Article 64 establishes a *pactum de contrahendo*. But it has also been proposed that the distinction is no longer of significance since

[...] first, good faith requires in either case that the parties genuinely attempt to reach agreement and, second, in no case has an international tribunal held a party to a *pactum de contrahendo* in breach of that pactum for failure to reach the contemplated agreement. Nevertheless, they are of the view that there is a real legal content in a *pactum de negotiando*, as evidenced by the 1969 North Sea Continental Shelf cases [...].⁵⁷

⁵⁵ LOS Convention, Article 64(1).

⁵⁶ Encyclopædia Britannica.

⁵⁷ André Tahindro. "Conservation and management of Transboundary Fish Stocks: Comments in Light of the Adoption of the 1995 Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks." *Ocean Development and International Law*, 28.1 (Jan-March 1997): 1-58, at p.19-20. In the 1969 North Sea Continental Shelf cases, the International Court of Justice states that “the parties are under an obligation to enter into negotiations with a view to arriving at an agreement, and not merely to go through a formal process of negotiations as a sort of prior condition for the automatic application of a certain method of delimitation in the absence of agreement; they are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists on its own position

The duty to cooperate can be discharge through different means: cooperation can be expressed through informal agreements, bilateral or multilateral agreements, or through the establishment of international or regional bodies, which can have various competences. The LOS Convention does not provide much guidance to assess which activities fulfill the duty of cooperation envisaged in its provisions: it simply imposes on the States the duty to cooperate “directly or through appropriate regional or subregional (or international) organizations”.⁵⁸ However, international or regional fisheries organizations are always encouraged to, and in the case of highly migratory species, required.⁵⁹

The concept of cooperation is broad enough to include a range of different activities, from simple information exchange to the application and enforcement of binding conservation measures, including harmonization of information, joint research programs, training programs, joint enforcement programs, or even coordination of activities. A distinction may be made between primary and secondary level cooperation: primary level of cooperation consist of cooperation in research alone, without reference to coordinated management programmes. Secondary level, or active management, involves the establishment of coordinated joint management programmes requiring: allocation of harvest shares among the participating States, determination of an optimal management strategy through time, including *inter alia*, the determination of optimal global harvests over time, and implementation and enforcement of coordinated management agreements.⁶⁰ Article 118 of the LOS Convention allows to distinguish between those two different levels of cooperation, recognizing a general duty to cooperate imposed on all States for the conservation of living resources; and a specific duty to cooperate imposed on States fishing for stocks in the high seas, or on States fishing for highly migratory or straddling stocks and the Coastal States in whose EEZ those stocks occur, to act collectively to take those measures that ensure the

without contemplating any modifications to it” (International Court of Justice, North Seas Continental Shelf case, Reports 1969, p.3).

⁵⁸ See: LOS Convention, Articles 63, 64 and 119.

⁵⁹ LOS Convention, Article 64(1): “In regions for which no appropriate international organization exists, the coastal State and other States whose nationals harvest these species in the region shall cooperate to establish such an organization and participate in its work.”

⁶⁰ J.A. Gulland, 1980, *Some problems of the management of shared stocks*. FAO Fish.Tech.Pap., (206):22 p, as cited in FAO Fisheries Technical Paper No. 465, *supra* note 1.

conservation and management of the marine living resources.⁶¹ Therefore, the cooperation required by the LOS Convention for the fishing States, or fishing States and Coastal States, as appropriate, is not satisfied with a simple exchange of scientific or catch information or a joint research program;⁶² although the exchange of information is a specific component of the obligation.⁶³

In respect with the latter and more specific duty to cooperate, another distinction is useful to understand the developments (and constraints) of a high seas fisheries governance framework and related cooperative efforts. As observed above, the long-term maintenance of a fish stock requires limitation of the fishing activity through catches or effort control and technical restrictions.⁶⁴ Experts recognize that different methods of fishing control have different effects, advantages and disadvantages that will make them more or less suitable under different conditions. Therefore, there is no single correct approach to controlling fishing, and fisheries management authorities will have to select the option, or more frequently, a combination of options, which best suits the nature of the fishery and the objective of the interest groups. However, they also agree that open access systems, where anyone who wishes to has a right to exploit the resource, can have severe environmental, economic and social consequences, as has been shown by world-wide experience. Limited access is widely considered to be essential for efficient and responsible fisheries:⁶⁵ “fundamentally, the number of users has to be limited, and the amount of the resource any one user can appropriate has to be restricted [...] by providing a limited set of users with rights to the resources.”⁶⁶ It has been stated that, optimally, fishery management should be approached in the following sequence: (1) political decisions for the allocation of exclusive use rights, (2) socioeconomic optimization of unit fisheries, and (3) resource conservation. The author also

⁶¹ This distinction can be useful to assess an eventual breach of the obligation, as well as the participation in fisheries organizations. See: section 4.1 below.

⁶² This interpretation is confirmed by Article 119(1) of the LOS Convention. It can be argued that, if the conservation of the resource is not threatened (or if the levels of the stock can produce the maximum sustainable yield), no additional conservation and management measures are required. However, other than in exceptional cases, the principle of preventative action should lead the interested parties to take such measures as necessary to maintain those levels and avoid conservation problem in the future.

⁶³ LOS Convention, Article 119(2).

⁶⁴ See: *supra* note 33.

⁶⁵ FAO, Technical Guidelines No. 4, *supra* note 27, paragraphs 3.1.4(i), 3.2.1(i), and 3.2.1.(iv), at p. 51 and 52.

⁶⁶ Alf Håkon Hoel and Ingrid Kvalvik, “The allocation of scarce natural resources: The case of fisheries.” *Marine Policy* 30.4 (July 2006): 347-356, p. 347.

considers that, with the conditions of open access, fishery management has to be restricted to its last step, resource conservation. As a consequence, only the effect and not the cause of overfishing is considered, which explains the poor performance of current fishery management practices.⁶⁷

Whether accepting the sequential approach to fisheries management or not, the question of who gets what – the allocation of fisheries resources – is one that must be addressed for sustainable management of shared resources. Thus, a cooperative regime aimed at the conservation and sustainable use of fishery stocks must address to different questions: (1) how much fish can be caught, where, when and how; and (2) who can caught that fish, and in what proportion. The two different questions imply different interest of the concerned States and, therefore, different approaches towards cooperation.

The first question has traditionally been considered through game theory using the non-zero sum game ‘Prisoner’s Dilemma’, where the outcome of cooperation (common action) is better than the outcome of defeating (not cooperating), but the incentive for unilaterally defecting is high.⁶⁸ In such games, the possibilities of achieving a cooperative result are, at least theoretically, optimum. In practice, however, the cooperative result can be less straightforward due to the complexity and interrelation of different elements involved in fisheries management: an increased number of participants, the complex and often incompatible interests of each participant, and lack of enforcement, are all elements that may alter the result of the ‘game’ and hinder effective cooperation.

The second question, however, is essentially a zero sum game: given a fixed amount of resources, the benefit of one State can only be achieved at the expense of the others. As noted by one author:

⁶⁷ Jean-Paul Troadec, *The Mutation of World Fisheries: Its effects on management Priorities and Practices*, in Edward L. Miles (ed.), *Management of World Fisheries: Implications of Extended Coastal State Jurisdiction*, University of Washington Press, 1989, at p. 4-5.

⁶⁸ See: Annex 1, Brief explanation of the ‘Prisoner’s Dilemma’, non-zero sum games and zero-sum games.

[i]f conservation per se was the only problem international fisheries management would be easy to achieve. The real problem is how the distribution of the wealth of the living resources will be affected by the exploitation program.⁶⁹

The possibilities of achieving cooperation, in this respect, are at the lowest⁷⁰; and the LOS Convention does not provide a clear framework for a solution of allocation conflicts (i.e., the solution of the zero-sum game).

It must be noted that access restriction, and therefore fishing rights allocation, although necessary for conservation has also an economic purpose: the development of an 'efficient' or 'rational' management of fish resources, where efficiency and rationality are considered mainly in economic terms. And it must also be highlighted that access restrictions have strong social effects, because they imply distribution of wealth (the fish resources).

1.3. A critical analysis of the LOS Convention framework for high seas fisheries

The LOS Convention provisions regarding the responsibility of conservation of the marine living resources, both in its substantive elements as well as the implementing mechanisms for the high seas, were soon acknowledged as insufficient. Indeed, the LOS Convention provides “very little guidance as to the content of fisheries conservation and management regimes” and “few, if any, means of ensuring that coastal states and flag states live up to their responsibilities.”⁷¹ As noted by Professor Orrego Vicuña,

[i]mportant as these developments were they were not quite complete or sufficient to dispose of high seas fisheries problems. [...] In connection with some species the necessary details were provided for since there was a substantial consensus on the matter, this being the case notably with anadromous and catadromous species and to a lesser extent with marine

⁶⁹ Lee G. Anderson. “Economic Aspects of Fisheries Utilization in the Law of the Sea Negotiations.” *San Diego Law Review* 11.3 (May 1974):656-678, p. 657.

⁷⁰ In a zero-sum game [...] the two players have totally conflicting interest. Thus, “cooperation between the two players would not occur.” (Wayne L. Winston. *Operations Research. Applications and Algorithms*. Duxbury Press, Wadsworth Inc., 1994 (Third Edition), at p. 825).

⁷¹ Ellen Hey, *Reconceptualization of the Issues Involved in International Fisheries Conservation and Management*. In Ellen Hey (ed.) *Developments in International Fisheries Law*, 1999, Kluwer Law International, at p. 579.

mammals. However, in respect of other species where consensus was not readily available, particularly straddling stocks and highly migratory species, the concepts that the Convention did include were not followed by the detailed specific arrangements that would have made their implementation possible and practical. Broad forms of cooperation were called for but the required authority was lacking, while the role of the flag state continued to provide the fundamental jurisdictional link. In addition, open access fisheries that are not attached to any particular form of interaction with areas under national jurisdiction were loosely dealt with by means of the very general provisions of Section 2 of Part VII of the Convention.⁷²

While establishing a governance regime for high seas fishing, the LOS Convention relied on a shared resources approach and on the classical principles of sovereignty, equality and independence of States. The consequence of those principles, as applied to fisheries management, are the freedom of all States for their vessels to engage in fishing activities in the high seas; the exclusive jurisdiction of the Flag State in the high seas; and regulation of the activities beyond areas of national jurisdiction by agreement of the interested parties. Although the LOS Convention recognizes ill-defined duties to conserve the fish stocks and to cooperate to that end, it does not recognize a primacy of the duty to cooperate in the sense that the access to fish is not subject the duty to cooperate.⁷³ As stated by Oda, “[p]resumably, if a State enters into negotiations in good faith then it has discharged the duty to seek to cooperate, and can continue fishing the high seas area without interruption, or being in breach of its international law obligations.”⁷⁴ Even if cooperation is achieved, the results of the negotiation process will more likely reflect the particular goals and interests of the participating States, and specially their economic interests, rather than broader environmental concerns or intergenerational and even intra-generational equity. As has been stated generally for environmental problems,⁷⁵ those classical principles fall short of effectively addressing some areas of interest not only to one or more specific States but to the international community as a whole, including present and future generations: the areas of common

⁷² Orrego Vicuña, *supra* note 8, at pg. 51.

⁷³ Hey, *supra* note 71, at p. 584.

⁷⁴ Shigeru Oda. "Fisheries under the United Nations Convention on the Law of the Sea." *American Journal of International Law* 77.4 (Oct 1983): 739-755, at p. 149.

⁷⁵ Palmer, Geoffrey. "New ways to make international environmental law." *American Journal of International Law* 86.n2 (April 1992): 259-283; Sebastian Overthur and Thomas Gehrin, "Reforming International Environmental Governance: An Institutional Perspective on Proposals for a World Environment Organization", in Frank Biermann and Steffen Bauer (eds.), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* (England: Ashgate Publishing Limited, 2005), p. 205.

concern.⁷⁶ The main impact of the concept of common concern appears to be that “it gives the international community of States both a legitimate interest in resources of global significance and a common responsibility to assist in their sustainable development.”⁷⁷ The area identified to be of common concern is a legitimate object of international regulation and supervision. States continue to enjoy sovereignty over their own natural resources, but this sovereignty is not unlimited or absolute, and must now be exercised within the confines of global responsibilities.⁷⁸ Furthermore, the consideration of environmental protection as a matter of common concern might be followed by its consideration as an *erga omnes* obligation,⁷⁹ giving any State standing before International Tribunals and allowing the international community to hold individual States accountable for compliance with their obligations.⁸⁰

The evolution of fisheries law is influenced by those trends. As will be analyzed in the next section, the last decades have been characterized by several initiatives of global ambition, which elaborate on the contents of the ambiguous provisions of the LOS Convention.

⁷⁶ Edith Brown Weiss, *In Fairness to Future Generations*, United Nations University/Transnational Publishers, 1989. Also expressed as international community of States, international community, or interest of present and future generations. It might be considered that fishing in the high seas could be covered by the international instruments related to transboundary harm, after those instruments broaden their range of application to harm caused on areas beyond national jurisdiction. However, in our opinion, the lack of a causal relation between the particular activity of one vessel and the deterioration of a fish stock hinders such an application. Indeed, the depletion of stocks is the result of the cumulative effect of all the fishing activities over the same stock over a certain period of time, and the specific activity of one vessel can not be considered the direct cause of the environmental harm.

⁷⁷ UNEP, *Report of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in relation to Global Environmental Issues* (1990), as cited in Birnie and Boyle, *supra* note 3, at p. 99. It must be noted that the authors narrow the applications of common concern to climate change and biological resources, considering the high seas and the high seas resources under the common property regime. However, they also state that common property resources cannot effectively be protected without the support of all States taking the resources (p. 141). Indeed, the support - and commitment - must be even broader: it must encompass all States, because all States are entitled to fish in the high seas (LOS Convention, Article 86).

⁷⁸ Birnie and Boyle, *ibid.*

⁷⁹ *Ibid.* The authors note, however, that outside the human rights context, the International Court has made little use of the concept of *erga omnes* obligations; and that it only has been raised in few environmental cases.

⁸⁰ *Ibid.*, at p. 100.

2. Post-LOS Convention developments of high seas fisheries: the reinforcement process

The international community has struggled in the past decades to withdraw, or avoid, the constraints of the governance regime for the high seas established in the LOS Convention, that is, freedom of the high seas, conservation duty, and international cooperation. The efforts, however, have not been conducted to formally or explicitly modify or derogate the main principles of the governance regime. Nevertheless, the trend in international practice has been to shrink and even derogate the freedom of the high seas through a set of instruments of both hard and soft law aimed at regulating fishing activities in the high seas and so as to stop the steady trend of overexploitation and depletion of natural resources. As stated by the High Seas Task Force,

[w]hat all these instruments have in common is the aim of elaborating upon those provisions of the Law of the Sea Convention that deal with the conservation and management of high seas living resources. So, while the basic fishing entitlements of the Convention remain unaltered, the exercise of these entitlements is increasingly being constrained by a patchwork quilt of measures in the form of binding and non-binding instruments with differing geographical and legal reach and different levels of participation by states.⁸¹

2.1 International instruments and instances of development

The instruments used for their development are, with two exceptions,⁸² non-binding international instruments of so called ‘soft law’:

⁸¹ *High Seas Task Force (2006). Closing the net: Stopping illegal fishing on the high seas.* Governments of Australia, Canada, Chile, Namibia, New Zealand, and the United Kingdom, WWF, IUCN and the Earth Institute at Columbia University, at p. 41. The High Seas Task Force was established under the auspices of the Round Table on Sustainable Development at the OECD in 2003 by a small group of fisheries Ministers and international NGOs who decided to work together to develop an action plan designed to combat illegal, unregulated and unreported (IUU) fishing on the high seas. Ministerial membership in the Task Force includes fisheries ministers from Australia, Canada, Chile, Namibia, New Zealand and the UK. In addition to Ministers, other key stakeholders from NGOs, philanthropic foundations, institutes and business were invited to join the Task Force. Members included the Earth Institute, IUCN-World Conservation Union, WWF International and the Marine Stewardship Council. The final report of the Task Force *Closing the net: Stopping illegal fishing on the high seas*, was released in March 2006. However, its members carry on working towards putting the proposals into action (information provided on the High Seas Task Force website <www.high-seas.org>, retrieved 30 January 2007).

⁸² FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement) and 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 (UNFSA).

These instruments are clearly not law in the sense used by [Article 38 of the ICJ Statute] but nonetheless they do not lack all authority. It is characteristic of all of them that they are carefully negotiated, and often carefully drafted statements, which are in many cases intended to have some normative significance despite their non-binding, non-treaty form. There is at least an element of good faith commitment, an expectation that they will be adhered to if possible, and in many cases, a desire to influence the development of state practice and an element of law-making intention and progressive development. Thus they may provide good evidence of *opinio juris*, or constitute authoritative guidance on the interpretation or application of a treaty, or serve as agreed standards for the implementation of more general treaty provisions or rules of customary law.⁸³

In the case of ocean governance, they provide a guide for States in their action to achieve the objectives of the LOS Convention and other related multilateral agreements and implement their provisions.⁸⁴ They go even further and identify goals and objectives to be pursued by the States and the regional organizations, harmonize fisheries governance with developments in other environmental areas, establish standards to verify compliance, and suggest measures to be adopted to enforce the ocean governance system. Although not legally binding, the soft law principles and standards are useful mechanisms to promote harmonious implementation of the LOS Convention, to serve as a basis for negotiation and establishment of regional organizations or arrangements, and to improve compliance and accountability of the so called hard law. However, it must be noted that the precise status of the principles and standards set in this variety of instruments is uncertain and dependant upon a range of factors.⁸⁵

⁸³ A.E. Boyle. "Some reflections on the relationship of treaties and soft law." *International and Comparative Law Quarterly* 48.4 (Oct 1999): 901-913.

⁸⁴ See: Climate Change Convention, Article 3. See also the reference to 'generally recommended international minimum standards' as referred to in Articles 61 and 119 of the LOS Convention.

⁸⁵ See: Philippe Sands, "International Law in the Field of Sustainable Development: Emerging Legal Principles", in Winfried Lang (ed.), *Sustainable Development and International Law*, London:Graham & Trotman Limited, 1995, p. 53- 66; Pierre-Marie Dupuy. "Soft law and the international law of the environment." *Michigan Journal of International Law* 12.n2 (Wntr 1991): 420-435.

FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement)

The FAO Compliance Agreement was adopted by the 27th Session of the FAO Conference in 1993, and entered into force in 2003.⁸⁶ According to FAO Conference Resolution 15/93, it forms an integral part of the Code of Conduct for Responsible Fisheries.⁸⁷ The objective of the Compliance Agreement is to specify Flag States' responsibility in respect of fishing vessels entitled to fly their flags and which are operating on the high seas, including vessels engaged in the transshipment of fish, flying its flag. In this way, the FAO Compliance Agreement aims to deter and eliminate the practice of flagging or re-flagging of fishing vessels as a means of avoiding compliance with international conservation and management measures for living marine resources, a practice which clearly undermines the effectiveness of such measures.⁸⁸

United Nations Fish Stock Agreement (UNFSA)

The provisions of the LOS Convention provides for the obligation of “States whose nationals exploit identical living resources, or different living resources in the same area”, to enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned and, as appropriate, establish subregional or regional fisheries organizations to this end.⁸⁹ However, these provisions do not provide the instruments to achieve that goal. In order to fill this gap, the UN organized a Conference for the implementation of the provisions related to the conservation of highly migratory fish stocks and straddling stocks. The result of that Conference was the adoption of the United Nations

⁸⁶ FAO Compliance Agreement, Article XI(1): “This Agreement shall enter into force as from the date of receipt by the Director General of the twenty-fifth instrument of acceptance.”

⁸⁷ Article 1.1 of the Code of Conduct for Responsible Fisheries states that it is voluntary. However, certain parts of it are based on relevant rules of international law, including those reflected in the LOS Convention. The Code also contains provisions that may be, or have already been, given binding effect by means of other obligatory legal instruments amongst the Parties, such as the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, 1993, which, according to paragraph 3 of the FAO Conference resolution 15/93, forms an integral part of the Code. However, it must be noted that, unlike the Code, the Agreement is a multilateral agreement binding for its members, as Article 1.1 of the Code highlights.

⁸⁸ Preamble of FAO Compliance Agreement, paragraphs 8, 9, and 10.

⁸⁹ LOS Convention, Article 118.

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 Stocks⁹⁰ in 1995, which entered into force in 2001.⁹¹ To date, 63 States have ratified the Agreement.⁹²

The objective of UNFSA is to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the LOS Convention.⁹³ For this purpose, it provides a set of general principles, including the ecosystem approach and the precautionary principle, for the conservation and management of the aforementioned stocks considering their whole range of distribution,⁹⁴ therefore applicable to the high seas and, *mutatis mutandis*, the areas under national jurisdiction. For this purpose, UNFSA establishes both the requirement and the principles to achieve compatibility between the measures adopted by the international community for the high seas and the relevant Coastal State for the areas under its jurisdiction.⁹⁵ It also encourages and regulates the institutional framework for the governance of the high seas, recognizing the subregional and regional fisheries management organizations (RFMOs) as the most suitable framework to achieve cooperation among relevant States, provides some guidelines for the allocation on fishing rights within the regional organizations and regulates the consequences of failing in the cooperation required by the LOS Convention. Finally, it also provides for improved enforcement systems, complementing the Flag State jurisdiction with Port States' and Coastal States' jurisdiction. UNFSA (as well as the FAO Code of Conduct for Responsible Fisheries)⁹⁶ summarize the basic guidelines for fisheries governance, which have been repeated and, to some extent,

⁹⁰ The Agreement is commonly known as United Nations Fish Stock Agreement or UNFSA. The latter form will be used hereinafter.

⁹¹ UNFSA, Article 40(1): "This Agreement shall enter into force 30 days after the date of deposit of the thirtieth instrument of ratification or accession."

⁹² Information provided by DOALOS website <www.un.org/Depts/los/index.htm>, Convention and Related Agreements, retrieved 30 January 2007.

⁹³ UNFSA, Article 2. See also Article 3 (1).

⁹⁴ UNFSA, Article 5 and 6. The principles set in those Articles were qualified as "substantially more specific than those in the 1982 Convention" (David Balton, "Strengthening the Law of the Sea: The New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks", in *Ocean Development & International Law*, 27: 125-151, 1996, at p. 135).

⁹⁵ UNFSA, Article 7.

⁹⁶ See: section 3.2 below.

strengthened in more recent developments. The paramount importance of UNFSA has been recognized in recent declarations calling to apply the UNFSA principles not only to straddling and highly migratory stocks, but also to discrete or high seas stocks.

United Nations General Assembly Resolutions

The United Nations General Assembly⁹⁷ (UNGA) has issued several resolutions regarding fishing practices, both in the areas under national jurisdiction and in the high seas, calling upon States and regional organizations to take certain measures to protect the marine ecosystem from fishing activities. The origin of these resolutions can be found in the 1989 Driftnet Resolutions. On 22 December 1989, the UNGA expressed alarm at the over exploitation of living marine resources of the high seas by driftnets and the likelihood that driftnet fishing would have an adverse impact on the marine resources of the EEZ of adjacent Coastal States. It unanimously adopted Resolution 44/225 recommending that all members of the United Nations agree to a moratoria on large-scale drift net fishing by 30 June 1992.⁹⁸

⁹⁷ It should be noted that the global community does not have, as States do, a legislative global authority. Under Article 10 of the Charter of the United Nations, the General Assembly may discuss any questions or any matters within the scope of the Charter or relating to the power and functions of any organs provided for in it, and, except as provide in Article 12, may make recommendations to the Members of the United Nations or to the Security Council or to both on any such questions or matters. Under Article 12 of the UN Charter, while the Security Council is exercising in respect of any dispute or situation the functions assigned to it, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so request. Article 13 adds that the General Assembly shall initiate studies and makes recommendations for the purpose of: a) promoting international cooperation in the political field and encouraging the progressive development of international law and its codification; and b) promoting international cooperation in the economic, social, cultural, educational and health fields and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion. (1945 Charter of the United Nations, available on United Nations website <www.un.org>). It must be noted, in addition, that UNGA resolutions are “adopted by simple or weighed (three-quarters) majority vote according to whether they relate to procedural or substantive matters respectively – unanimity is not required. Dissenting minorities may undermine the authority and law-making significance of a resolution, particularly if they comprise states most affected.” It has been also noted that “an alternative practice has grown up of continuing negotiations until a resolution can be adopted by consensus, without resort to any voting. States are not expected to raise any objections unless they are vital to their interests (there is pressure o them not do so if the vast majority support the resolutions). Some states may nevertheless retain serious reservations regarding such resolutions, which may be expressed before or after formal adoption. Care thus has to be taken, in evaluating the legal status of resolutions, to ascertain the views of states, even in relation to resolutions that have achieved apparent consensus.” (Birnie and Boyle, *supra* note 3, at p. 23)

⁹⁸ UNGA Resolution A/44/225, adopted in the 85th plenary meeting of 22 December 1989, addressing large-scale pelagic driftnet fishing and its impacts on the living marine resources of the world’s oceans and seas, paragraph 4, recommended the United Nations members to adopt the following measures:
(a) Moratoria should be imposed on all large-scale pelagic driftnet fishing by 30 June 1992, with the understanding that such a measures will not be imposed in a region or, if implemented, can be lifted, should

Three aspects of the UNGA Driftnet resolution can be highlighted in relation to the freedom to fish: the international forum adopting the resolution, its effects on the fishing activities worldwide, and its relation with the precautionary approach. The latter will be addressed in a subsequent section of the present paper.⁹⁹

The resolution was adopted by the United Nations General Assembly as an expression of the global duty to cooperate for the conservation of living resources of the high seas, as established in Articles 117 and 119 of the LOS Convention.¹⁰⁰ It has been noted that the sponsoring States were aware of the lack of a suitable international mechanism for coping with activities on the high seas, and motivated by various considerations they invoked the

effective conservation and management measures be taken based upon statistically sound analysis to be jointly made by concerned parties of the international community with an interest in the fishery resources of the region, to prevent unacceptable impact of such fishing practices on that region and to ensure the conservation of the living marine resources of that region;

(b) Immediate action should be taken to reduce progressively large-scale pelagic driftnet fishing activities in the South Pacific region with a view to the cessation of such activities by 1 July 1991, as an interim measure, until appropriate conservation and management arrangements for South Pacific albacore tuna resources are entered into by the parties concerned; and

(c) Further expansion of large-scale pelagic driftnet fishing on the high seas of the North Pacific and all the other high seas outside the Pacific Ocean should cease immediately, with the understanding that this measure will be reviewed subject to the conditions in paragraph 4 (a) of the present resolution.

In December 1990, UNGA passed resolution A/45/197 reaffirming the principles and recommendations set in Resolution 44/225. Later, on 20 December 1991, the UN General Assembly agreed to Resolution 46/215, calling upon all members of the international community to implement resolutions 44/225 and 45/197 by, *inter alia*, taking the following actions:

(a) Beginning on 1 January 1992, reduce fishing effort in existing large-scale pelagic high seas drift-net fisheries by, *inter alia*, reducing the number of vessels involved, the length of the nets and the area of operation, so as to achieve, by 30 June 1992, a 50% reduction in fishing effort;

(b) Continue to ensure that the areas of operation of large-scale pelagic high seas drift-net fishing are not expanded and, beginning on 1 January 1992, are further reduced in accordance with paragraph 3 (a) of the present resolution.

(c) Ensure that a global moratorium on all large-scale pelagic drift-net fishing is fully implemented on the high seas of the world's ocean and seas, including enclosed seas and semi-enclosed seas, by 31 December 1992

Contrary to Resolution 44/225, Resolution 46/215 does not provide for the possibility of not implementing or lifting the ban if effective conservation and management measures are taken, based upon statistically sound analysis and taken by the concerned parties, to prevent the unacceptable impact of such fishing practices on that region and to ensure the conservation.

⁹⁹ See: section 5.2. below.

¹⁰⁰ UNGA Resolution A/44/225, Preamble: "Recalling the relevant principles elaborated in the United Nations Convention of the Law of the Sea, Affirming that, in accordance with the relevant Articles of the Convention, all members of the international community have a duty to co-operate globally and regionally in the conservation and management of living resources on the high seas, and a duty to take, or to co-operate with others in taking such measures or their nationals as may be necessary for the conservation of those resources". See also: Ellen Hey, *Global Fisheries Regulation in the First Half of the 1990s*, 11 International Journal of Marine and Coastal Law (1996), pg. 459-490, at pg. 467.

broad jurisdiction and very public forum of the UN.¹⁰¹ A main consequence of the Driftnet resolutions of the UN is to confirm the need for an adequate mechanism for making conservation decisions regarding high seas living resources.¹⁰² The global international forum used in this case, in the absence of a suitable decision-making process for the global regulation of ocean fishing, has however been criticized because of its lack of professional competence to deal with highly technical and scientific subjects.¹⁰³

Another important feature of the UNGA Driftnet resolutions was its effects on States' behavior. Although such resolutions are not legally binding instruments, and therefore States may simply ignore them, they had a very important political effect. In the first place, they were adopted unanimously by the UNGA and have been reaffirmed yearly.¹⁰⁴ Several important fishing organizations, as well as NGOs and civil society, supported its adoption, and several organizations and States adopted legally binding instruments applying the principles contained in it.¹⁰⁵ As a result, the large-scale driftnet fishing activity stopped almost completely.

Since the Driftnet resolutions, the UNGA has issued two annual resolutions on oceans governance and sustainable fisheries. Each year, the resolutions have become more ambitious

¹⁰¹ William Burke, Mark Freeberg and Edward L. Miles, "United Nations Resolutions on Driftnet Fishing: An Unsustainable Precedent for High Seas and Coastal Fisheries Management", 25 *Ocean Development and International Law*, pp. 127-186, at p. 170.

¹⁰² *Ibid.*, at p.136.

¹⁰³ *Ibid.*, at p. 135 and 170.

¹⁰⁴ UNGA Resolution A/45/197 has been reaffirmed yearly by UNGA to this day. The General Assembly further calls upon States and other entities to fully enforce such measures.

¹⁰⁵ The UNGA resolution was supported by the International Whaling Commission (IWC), the International Conference on the Conservation and Management of the Living Resources of the High Seas, the Fisheries Commission of the Organization for Economic Co-operation and Development (OECD), and the South Pacific Conference. The Resolution has been recalled and reaffirmed through successive UNGA resolutions to this day. By the fall of 1991, several States had already taken action to ban, or strictly regulate, driftnet fishing in waters under their jurisdiction. Some States also prohibited their nationals from engaging in driftnet fishing on the high seas and prohibited foreign driftnet vessels from using their ports except in an emergency. In addition, several regional organizations sought to prohibit pelagic driftnet fishing. The South Pacific Forum issued the Tarawa Declaration, and further declarations were adopted by the Joint Assembly of the Associated States in Africa, the Caribbean, the European Economic Community (EEC), urging all members States to ban driftnet tuna fishing in their own waters. The Langkawi Declaration on the Environment, adopted by the Commonwealth Heads of Government, the Castries Declaration adopted by the Eastern Caribbean States, and CCAMLR followed the trend.

both in their contents and in their influence on States' behavior.¹⁰⁶ Despite certain criticisms,¹⁰⁷ the forum provided by the UNGA has proven to be an important political instance in performing several functions for the development of international fisheries governance. It is an instance which promotes coordination and linkages among the different initiatives taking place simultaneously in the variety of organizations currently dealing with marine affairs; it is an instance through which to emphasize the global problems and provide a forum to seek global solutions; it is also an opportunity to shape the legal principles governing conservation of marine living resources; and the recommendations provided in UNGA resolutions probably influence States' behavior in the same manner that the Driftnet resolutions did. Furthermore, in 2000 the UNGA decided to:

establish an open-ended informal consultative process in order to facilitate the annual review by the General Assembly, in an effective and constructive manner, of developments in ocean affairs by considering the Secretary-General's report on oceans and the law of the sea and by suggesting particular issues to be considered by it [...].¹⁰⁸

The consultative process was recommended by the Commission on Sustainable Development through the Economic and Social Council,¹⁰⁹ and its purpose was to provide more time for the discussion of the complex and interrelated issues related to the oceans, as well as a

¹⁰⁶ UNGA Resolution A/49/116 addressed the unauthorized fishing in zones under national jurisdiction and its impact on the living marine resources of the world's oceans and seas; and UNGA Resolution A/49/118 addressed fisheries by-catch and discards and their impacts on the sustainable use of the world's living marine resources. The following year, UNGA adopted Resolution A/50/25, which addresses jointly the large-scale driftnet fishing, unauthorized fishing in zones under national jurisdiction and fisheries by-catch and discards, and reaffirms the previous resolutions. The same approach was adopted in UNGA Resolutions A/51/36, A/52/29, A/53/33, A/55/8. Resolution A/57/142 addresses the same three issues, but added other developments. The next year, UNGA adopted the more comprehensive Resolution A/58/14 on 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. Similar resolutions have been adopted the following years: Resolutions A/59/25 and A/60/31. Those resolutions address a variety of different subjects concerning the protection of the oceans: sustainable fisheries, implementation of UNFSA and related fisheries instruments, IUU, fishing overcapacity, large scale drift-net pelagic fishing, fisheries by-catch and discard, subregional and regional cooperation, responsible fisheries in the marine ecosystem, capacity building and cooperation within the UN system. Resolution A/59/25 paragraphs 66 to 70, Resolution A/60/31 paragraphs 69 to 74, and Resolution A/58/14, paragraph 46, address the risks to marine biodiversity of vulnerable marine ecosystems including, but not limited to, seamounts, coral reefs, including cold water reefs and certain other sensitive underwater features, related to fishing activities, but without a specific reference to deep-sea trawling fishing.

¹⁰⁷ See: Burke et al., *supra* note 101.

¹⁰⁸ UNGA Resolution A/54/33, paragraph 2.

¹⁰⁹ UNGA Resolution A/54/33, paragraph 1 at p. 2.

broader participation. In fact, UNICPOLOS is the “only body in the United Nations System with a membership comprised of the whole membership of the General Assembly and intergovernmental and regional organizations as well as the major groups of civil society”.¹¹⁰ The consultative process takes place every year, under the coordination of two co-chairpersons, with the participation of Member States of the United Nations, Member States of the specialized agencies, all parties to the Convention, entities that have received a standing invitation to participate as observers in the work of the General Assembly pursuant to its relevant resolutions, and intergovernmental organizations with competence in ocean affairs.¹¹¹ The main objective of the process is to identify areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced. The Consultative Process had become a forum that had “increased substantially the understanding of the international community of cross-cutting issues and assisted in promoting greater interagency coordination and cooperation.”¹¹² UNGA has declared its intention to maintain the process, and improve both its efficiency and the effective participation of delegations.¹¹³

FAO

The Food and Agriculture Organization of the United Nations was founded in 1945 with the purpose of achieving food security for the world’s population. Its specific objectives were to raise the levels of nutrition, improve agriculture production, better the life of rural populations, and contribute to the growth of the world’s economy. During the first years of its operation, the Fisheries Department of FAO engaged in several projects aimed at improving the fishing capacity of developing States and to increase catch levels. When stocks started to show severe levels of overexploitation, FAO Fisheries changed its politics. Its current mission is to facilitate and ensure the long-term sustainable development and utilization of the world’s fisheries and aquaculture, recognizing the fundamental role of fisheries in meeting global and national sustainable food security, providing self and paid

¹¹⁰ Elisabeth Mann Borgese. “UNICPOLOS: The First Session”. *Ocean Yearbook* 16 (2002): 1-21, at p.1.

¹¹¹ UNGA Resolution A/54/33, paragraph 3 (a).

¹¹² Report on the Work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its seventh meeting, 17 July 2006, A/61/156, hereinafter UNICPOLOS 2006, Paragraph 17, p.6. Document available at DOALOS website, <www.un.org/Depts/los>.

¹¹³ UNGA Resolution A/60/31, paragraphs 99 and 113.

employment for fishing communities as a means of alleviating poverty in fishing communities and stemming rural/urban drift, contributing to national and international trade, and generating national income.¹¹⁴

To achieve this mission, FAO has carried out numerous programs, both at local and global scales, to develop standards for responsible fisheries and long-term conservation and utilization of fish stocks, protection of the marine environment, and to provide assistance for the implementation of those standards. In this capacity, it developed the FAO Compliance Agreement and the Code of Conduct for Responsible Fisheries,¹¹⁵ both widely recognized as the global standard for setting out the aims of sustainable fisheries and aquaculture over the coming decades, and as a basis for reviewing and revising national fisheries legislation. In the framework of the Code of Conduct, FAO has also developed four International Plans of Action (IPOA):

- IPOA for the management of fishing capacity;
- IPOA for reducing incidental catch of seabirds in long-line fisheries;
- IPOA for conservation and management of sharks; and
- IPOA to prevent, deter and eliminate Illegal, Unreported and Unregulated (IUU) fishing.

¹¹⁴ Mission as stated in FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>, under 'About the Department', retrieved January 30, 2007.

¹¹⁵ The Code of Conduct for Responsible Fisheries was adopted by the twenty-eighth Session of the FAO Conference on 31 October 1995. According to Article 2 of the Code, its objectives are to: a) establish principles, in accordance with the relevant rules of international law, for responsible fishing and fisheries activities, taking into account all their relevant biological, technological, economic, social, environmental and commercial aspects; b) establish principles and criteria for the elaboration and implementation of national policies for responsible conservation of fisheries resources and fisheries management and development; c) serve as an instrument of reference to help States to establish or to improve the legal and institutional framework required for the exercise of responsible fisheries and in the formulation and implementation of appropriate measures; d) provide guidance which may be used where appropriate in the formulation and implementation of international agreements and other legal instruments, both binding and voluntary; e) facilitate and promote technical, financial and other cooperation in conservation of fisheries resources and fisheries management and development; f) promote the contribution of fisheries to food security and food quality, giving priority to the nutritional needs of local communities; g) promote protection of living aquatic resources and their environments and coastal areas; h) promote the trade of fish and fishery products in conformity with relevant international rules and avoid the use of measures that constitute hidden barriers to such trade; i) promote research on fisheries as well as on associated ecosystems and relevant environmental factors; and j) provide standards of conduct for all persons involved in the fisheries sector.

In addition, FAO has developed technical guidelines for responsible fisheries to assist States in the implementation of the Code of Conduct and the related International Plans of Action,¹¹⁶ as well as an Interregional Programme of Assistance for Developing Countries.¹¹⁷ In 2005, FAO developed a Model Scheme on Port State Measures to Combat Illegal Unreported and Unregulated Fishing. FAO has also developed several programmes aimed at improving the information and knowledge of fish captures and aquaculture,¹¹⁸ including the recently approved Strategy for Improving Information on Status and Trends of Capture Fisheries,¹¹⁹ and the administration of the High Seas Vessels Authorization Record as mandated by the FAO Compliance Agreement. In addition, FAO Ministerial Meetings serve as fora through which States express their views with respect to the conservation of marine living resources and the governance of the high seas.¹²⁰ Furthermore, FAO has promoted and

¹¹⁶ The 1999 Rome Declaration on the Implementation of the Code of Conduct for Responsible Fisheries, adopted by the FAO Ministerial Meeting on Fisheries, encouraged FAO to develop further technical guidelines on various aspects of the Code of Conduct to support its national implementation. As requested by the FAO Conference through its Resolution 4/95, FAO has also developed an Interregional Programme of Assistance to Developing Countries for the Implementation of the Code of Conduct.

¹¹⁷ Through its Resolution 4/95, the FAO Conference urged that the special requirements of developing States be taken into account in implementing the Code of Conduct, and requested FAO to develop an interregional programme for external assistance. Thus, the Interregional Programme for Assistance to Developing Countries for the Implementation of the Code of Conduct (FISHCODE) was funded. The general objective of the programme is to raise the economic, social, and nutritional benefits obtained from the fisheries and aquaculture, especially in developing States, through the adoption of responsible development, management and conservation practices, and including improved institutional and legal arrangements (information provided on FAO Fisheries and Aquaculture website < <http://www.fao.org/fi/default.asp>>, Fisheries Information Center, FishCode, retrieved 31 January 2007).

¹¹⁸ Fisheries Global Information System (FIGIS) is a network of integrated fisheries information. A part of FIGIS is Fishery Resources Monitoring System (FIRMS), which aims to provide access to a wide range of high-quality information on the global monitoring and management of fishery marine resources. FIRMS draws together a unified partnership of international organizations, regional fishery bodies and, in the future, national scientific institutes collaborating within formal agreements to report and share information on fisheries resources. For effective fisheries information management, FIRMS also participates in the development and promotion of agreed standards (information provided on FAO Fisheries and Aquaculture website <<http://www.fao.org/fi/default.asp>>, Fisheries Global Information System FIGIS, retrieved 31 January 2007).

¹¹⁹ The Strategy for Improving Information on Status and Trends of Capture Fisheries was approved by consensus by the Committee on Fisheries on 28 February 2003. Its objective is to provide a framework for the improvement of knowledge and understanding of fishery status and trends as a basis for fisheries policy making and management for the conservation and sustainable use of fishery resources within ecosystems. It applies to inland and marine fisheries, including catches of the industrial, commercial, subsistence, and recreational sector. It also includes issues of deliberate or unintentional introduction of species, wild stock enhancement, wild fish destined for on-growing or fattening in captivity, and stock recovery (FAO, Strategy for Improving Information on Status and Trends of Capture Fisheries (Rome 2003), available at FAO Fisheries and Aquaculture website <<http://www.fao.org/fi/default.asp>>, retrieved 31 January 2007).

¹²⁰ The 1995 Rome Consensus on World Fisheries and the 1999 Rome Declaration on the Implementation of the Code of Conduct for Responsible Fisheries are examples.

assisted several international meetings where those issues have been addressed by the international community.¹²¹

The seas programmes developed by FAO since early times deserved special mention. It resulted in the establishment of several fisheries bodies throughout the world.¹²² Although initially focused on increasing the fish catches in order to meet the food requirements of the post-war world, they have also played a significant role in the development of knowledge and advice for sound management of fisheries. Some of the regional bodies have further evolved into RFMOs while changing their statutes to meet the current requirements set for these bodies.¹²³

Environmental Agreements

Some environmental agreements have a direct or indirect relation with the conservation of marine living resources. Those agreements address marine living resources as a component of the environment and biodiversity, and thus seek conservation either because of their intrinsic value or because of the service they provide for the environment, rather than as an economic resource. The 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora CITES,¹²⁴ the 1979 Convention on the Conservation of Migratory

¹²¹ Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem, held in Reykjavik, Iceland, 1-4 October 2001, organized with the Government of Iceland and co-sponsored by the Government of Norway; Kyoto Conference on the Sustainable Contribution of Fishery to Food Security, held in Kyoto, Japan, 4-9 December 1995.

¹²² Before the LOS Convention was signed, FAO established the Asia-Pacific Fisheries Commission (APFIC), Commission for Inland Fisheries of Latin America (COPESCAL), Fishery Committee for the Eastern Central Atlantic (CECAF), Committee for Inland Fisheries of Africa (CIFA), European Inland Fisheries Advisory Commission (EIAFC), Regional Commission for Fisheries (RECOFI), South West Indian Ocean Fisheries Commission (SWIOFC), Western Central Atlantic Fishery Commission (WECAFC) and Regional Fisheries Advisory Committee for the Southwest Atlantic (CARPAS, now abolished). After 1982, the General Fisheries Commission for the Mediterranean (GFCM) and Indian Ocean Tuna Commission (IOTC) were established. Those two organizations have jurisdiction to establish conservation and management measures. (FAO Report of the High-level Panel of External Experts in Fisheries, Rome, Italy, 26-27 January 1998. Report presented to the Twenty-third session of the FAO Committee of Fisheries, Rome 15-19 February 1999 (COFI/99/inf.11), available at FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>, Committee on Fisheries, Meetings and Documents, 23th Session. See also: FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>, Regional Fishery Bodies).

¹²³ See section 4.1. below.

¹²⁴ Convention text available on CITES website <www.cites.org>.

Species of Wild Animals,¹²⁵ the 1992 United Nations Convention on Biological Diversity,¹²⁶ and Part XII of the LOS Conventions, must be taken into account in the regulation and management of marine living resources, including high seas fish stocks.

Other Political Declarations

Other political declarations have also addressed the conservation of marine living resources, setting global standards for the management of fisheries both in the high seas and in areas under national jurisdiction. Some of them considered fish conservation as a component of global environmental concerns. Agenda 21 dedicates chapter 17 to the health of the ocean, the 2000 UN Millennium Development Goals,¹²⁷ and the Political Declaration and Implementation Plan adopted at the 2002 World Summit on Sustainable Development held in Johannesburg, also refer to conservation of marine living resources.¹²⁸ Other political declarations and plans of action address the need to conserve marine living resources and the environment as an important component of biodiversity. The Jakarta Mandate on Marine and Coastal Biological Diversity, a program of action adopted by the Conference of the Parties to the Convention on Biological Diversity in 1995, is a clear example.¹²⁹ Finally, other declarations are the result of conferences or meetings addressing, in particular, the threats to the marine environment caused by fishing activities: political declarations such as the 1992 Cancun Declaration and the 1995 Kyoto Declaration and Action Plan; and Ministerial Declarations such as the 1995 Rome Consensus on World Fisheries, the 1999 Rome Declaration on the Implementation of the Code of Conduct for Responsible Fisheries, the

¹²⁵ Convention text available on the Convention of Migratory Species website <www.cms.int>.

¹²⁶ Convention text available on the Convention on Biological Diversity website <www.biodiv.org>.

¹²⁷ One of the U.N. Millennium Development Goals is to ensure environmental sustainability. For this purpose, the integration of the principles of sustainable development into State policies and programmes and reverse the loss of environmental resources is considered a target. However, no direct reference to the marine environment is made.

¹²⁸ Paragraph 30 to 34 of the Johannesburg Plan of Implementation address the conservation of the ocean and the living marine resources, considering different actions aimed at ensuring sustainable development and conservation and management of the oceans, responsible fisheries, protection of the marine environment from land-based activities and other pollution sources, and also reaffirming commitments contained in previous international instruments (Johannesburg Plan of Implementation adopted at the 2002 World Summit on Sustainable Development, available at the United Nations Department of Economic and Social Affairs, Division for Sustainable Development <<http://www.un.org/esa/sustdev/index.html>>, retrieved 9 February 2007)

¹²⁹ The program of work for the Jakarta Mandate was adopted in 1998 and reviewed and updated in 2004. It focuses on integrated marine and coastal area management, the sustainable use of living resources, marine and coastal protected areas, mariculture and alien species.

2001 Reykjavik Declaration on Responsible Fisheries, and the 2005 Saint John's Ministerial Declaration.

2.2. Developments in specific components of the high seas fisheries framework: an overview

As a result of the regulatory processes undertaken over the last 25 years, the international community has been given a set of specific and interrelated standards that specify, further develop and even complement the pillars on which the LOS Convention has constructed the high seas fisheries regime: the duty to conserve, the Flag State responsibility, and the duty to cooperate.

2.2.1. Sustainable approaches to conservation and management of high seas fisheries

As noted above, the elements of the required conservation of high seas fish stock are not precise enough to actually define the content of the obligation of the States – both fishing States and Coastal States. In addition, the provisions of the LOS Convention do not incorporate the current standards of environmental protection. The development of the duty to conserve the high seas fisheries, thus, has been strongly influenced by the development of international environmental law, which has specified but also broadened the concept of conservation as applied to marine living resources. That development has shifted the single species and economic approach of the LOS Convention to a more comprehensive and integrated approach to conservation that acknowledges the interlinkages between different fish stocks, between fish stocks and other marine species, and between fish stocks and the marine environment, including biodiversity, water column quality, etc.

Most of the developments have been considered in the elaboration of UNFSA and the FAO Code of Conduct for Responsible Fisheries. The UNFSA codifies the most important developments of the duty to conserve high seas fish stocks in Articles 5, 6 and 7. The Agreement has 8 main requirements, namely:

Firstly, it requires to adopt measures to ensure the long-term sustainability of straddling fish stocks and highly migratory fish stocks and promote the objective of their optimum utilization.¹³⁰ The long term sustainability of the stocks was a goal already considered in the LOS Convention. The optimum utilization, however, was considered only for the stocks in the EEZs and for highly migratory fish stocks. UNFSA develops the conservation goal by restating the goals already considered in Articles 61(3) and 119(a) of the LOS Convention: ensure that such measures are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global.¹³¹ In this regard, Annex II of UNFSA develops the application of points of reference, based on a precautionary principle, to ensure that the levels capable of producing maximum sustainable yield are maintained or restored. UNFSA further considers the need to take measures to prevent or eliminate overfishing and excess fishing capacity and to ensure that levels of fishing effort do not exceed those commensurate with the sustainable use of fishery resources.¹³² Fisheries subsidies, as one of the elements that contribute to over-capacity and overfishing, have also been specifically addressed.¹³³

¹³⁰ UNSA, Article 5(a).

¹³¹ UNFSA, Article 5(b). The Johannesburg Plan of Implementation establishes as a goal to “maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015” (Johannesburg Plan of Implementation, *supra* note 128, chapter IV, paragraph 31(a)).

¹³² UNFSA, Article 5(h). Overfishing and fishing capacity has also been addressed through the FAO International Plan of Action for the Management of Fishing Capacity, adopted by the twenty-third Session of the FAO Committee on Fisheries in February 1999 and endorsed by the FAO Council during its November 2000 session (information provided at <www.fao.org>, link to International Plan of Actions, as reviewed on January 08, 2007). The Johannesburg Plan of Implementation call to “urgently develop and implement national and, where appropriate, regional plans of action, to put into effect the international plans of action [...] for the Management of Fishing Capacity by 2005.” (Johannesburg Plan of Implementation, *ibid*, chapter IV, paragraph 31(d)).

¹³³ The Johannesburg Plan of Implementation calls upon the States to “eliminate subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity, while completing the efforts undertaken at the World Trade Organization to clarify and improve its disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.” (Johannesburg Plan of Implementation, *ibid*, chapter IV, paragraph 31(f)). The 2001 Doha Declaration adopted at the Ministerial Conference of the WTO has highlighted the need to “clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries” (Doha Declaration, paragraph 28), as well as the “relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements” (Doha Declaration, paragraph 31). Further work has been done by the Negotiating Group on Rules

Secondly, UNFSA also considers the goal already set in Articles 61(4) and 119(1)(b) of the LOS Convention: adopt, where necessary, conservation and management measures for species belonging to the same ecosystem or associated with or dependent upon the target stocks, with a view to maintaining or restoring populations of such species above levels at which their reproduction may become seriously threatened.¹³⁴ This only element of a multi-species approach to fisheries management considered in the LOS Convention is, however, broadened by UNFSA which makes provisions for States to assess impacts of fishing, other human activities and environmental factors not only on target stocks but also on species belonging to the same ecosystem or associated with or dependent upon the target stocks.¹³⁵ It also provides for specific measures aimed at the protection of associated or dependent species, in particular endangered species: minimize catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and other impacts on associated or dependent species, through measures including, to the extent practicable, the development and use of selective and cost-effective fishing gear and techniques.¹³⁶

Thirdly, UNFSA further develops the conservation goal to ensure the protection of not only target and non-target species, but also of the general health of the marine environment and biodiversity. For that end, it imposes on States the obligation to protect biodiversity,¹³⁷ to minimize pollution, waste, and discards;¹³⁸ and, to the extent practicable, the development of environmentally safe and cost-effective fishing gear and techniques.¹³⁹ This last measure has had concrete applications through the Driftnet resolutions adopted by the UNGA in 1989,¹⁴⁰

of WTO (information provided in World Trade Organization website <www.wto.org>, retrieved 10 January 2007).

¹³⁴ UNFSA, Article 5(e)

¹³⁵ UNFSA, Article 5(d).

¹³⁶ UNFSA, Article 5(f). The protection of endangered non-target species has been further addressed through the FAO International Plan of Action for reducing incidental catch of seabirds in longline fisheries, also adopted by the twenty-third Session of the FAO Committee on Fisheries in February 1999 and endorsed by the FAO Council at the session it held in November 2000, and the Guidelines to Reduce Sea Turtle Mortality in Fishing Operations, adopted by FAO at its twenty-sixth session of the Committee on Fisheries, held in March 2005 (information provided at FAO Fisheries and Aquaculture website, <www.fao.org>, International Plan of Actions, retrieved 8 January 2007).

¹³⁷ UNFSA, Article 5(g).

¹³⁸ *Ibid.*

¹³⁹ UNFSA, Article 5(f).

¹⁴⁰ See: UNGA Resolutions A/44/225, A/45/197, and A/46/215.

and more recently, the UNGA Resolutions calling on States to protect vulnerable marine ecosystems, including seamounts, hydrothermal vents and cold water corals, from destructive fishing practices.¹⁴¹ Another concrete application is sought through the application of marine protected areas (MPAs), both in the EEZ and in the high seas.¹⁴²

Fourthly, UNFSA stress the need to ensure that the conservation and management measures are based on the best available scientific evidence.¹⁴³ To ensure this, and that such evidence is also reliable and comparable, it further states the need to collect and share, in a timely manner, complete and accurate data concerning fishing activities on, *inter alia*, vessel position, catch of target and non-target species and fishing effort, as set out in Annex I, as well as information from national and international research programmes.¹⁴⁴ On a global level, efforts have been made to collect and share fisheries information through the action of

¹⁴¹ See: UNGA Resolutions A/59/25, A/60/31 and A/61/105. During the last meeting of the UNGA, States further agreed on calling regional fisheries management organizations or arrangements, with competence to regulate bottom fisheries, to adopt and implement measures for their respective regulatory areas as a matter of priority, but no later than 31 December 2008. Recommended measures include identification of vulnerable marine ecosystems, assessment of the impacts of individual bottom fishing on the vulnerable ecosystems, adoption and implementation of measures to prevent significant adverse impacts on vulnerable ecosystems, closure of vulnerable areas for bottom fishing until the establishment of conservation and management measures to prevent significant adverse impacts on the ecosystems. States also agreed to call upon Flag States to either adopt and implement such measures, or cease to authorize fishing vessels flying their flag to conduct bottom fisheries in areas beyond national jurisdiction where there is no regional fisheries management organization or arrangement with the competence to regulate such fisheries.

¹⁴² The Johannesburg Plan of Implementation stipulates as a specific goal to establish representative networks of MPAs by 2012 (Johannesburg Plan of Implementation, *supra* note 128, chapter IV, paragraph 32(c)). The Plan of Implementation does not specifically endorse the establishment of MPAs in the high seas, but its need has been addressed in different fora. However, it has also been warned that “while acknowledging biodiversity conservation as a major, if not over-riding, objective of MPAs, especially in the context of the implementation of the 1992 Convention on Biological Diversity and the Jakarta Mandate, the Committee [on Fisheries] recognized the potential impacts of MPAs on the fisheries sector including eventual social and economic effects on poor fishing communities. The Committee [on Fisheries] noted that the current knowledge was inadequate on both the biodiversity conservation function of MPAs and their function to achieving fisheries management objectives.” (FAO Fisheries Report No. 699. Report of the fourth session of the Advisory Committee on Fisheries Research, Rome, 10–13 December 2002 (FIPL/R699-En). FAO, Rome, 2002, available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007). In its last meeting in 2005, COFI recommended that FAO develop technical guidelines on the design, implementation and testing of MPAs, and some Members requested guidelines specifically on the use of MPAs on the high seas (FAO Fisheries Report No. 780, *Report of the twenty-sixth session of the Committee on Fisheries, Rome, 7–11 March 2005* (FIPL/R780-En). FAO, Rome, 2005, available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Committee on Fisheries, retrieved 20 February 2007).

¹⁴³ UNFSA, Article 5(b).

¹⁴⁴ UNFSA, Article 5(j).

FAO¹⁴⁵ and the Coordinating Working Party on Fisheries Statistics.¹⁴⁶ UNFSA also stresses the need to promote and conduct scientific research and develop appropriate technologies in support of fishery conservation and management.¹⁴⁷

Fifthly, and although not explicitly considered as a general principle in Article 5 of UNFSA, the management of fish stocks also considered the application of the principle of preventative action, meaning that action must “be taken at an early stage and, if possible, before damage has actually occurred.”¹⁴⁸ Provisions inspired in the preventative action are, among others:

- the need to maintain stocks at levels capable of producing the maximum sustainable yield
- the use of reference points as developed in Annex I
- the need to assess the impacts of fishing
- other human activities, and environmental factor on target stocks and species belonging to the same ecosystem or associated with or dependent upon the target stocks
- the need to maintain the population of species belonging to the same ecosystem or associated with or dependent upon the target stock above levels at which their reproduction may become seriously threatened
- the protection of biodiversity
- the obligation of minimizing pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species and impacts on associated or dependent species, in particular endangered species
- the obligation to take measures to prevent overfishing and excess fishing capacity

¹⁴⁵ See: *supra* note 118 and 119.

¹⁴⁶ The Coordinating Working Party (CWP) on Fisheries Statistics was created in 1960 and provides a mechanism to coordinate the fishery statistical programmes of regional fishery bodies and other inter-Governmental organizations with a remit for fishery statistics. Its main functions are: a) continually review fishery statistics requirements for research, policy-making and management; b) agree on standard concepts, definitions, classifications and methodologies for the collection and collation of fishery statistics; and c) make proposals for the coordination and streamlining of statistical activities among relevant inter-Governmental organizations. The CWP has strongly facilitated improved data collection through standardized statistical reporting systems and is now looking ahead to efficiently coordinate and exchange this data with participating organizations. Although first mandated to cover North Atlantic fisheries, since 1995 the CWP has extended its remit to all marine water bodies. Currently, the following regional fisheries bodies, international and intergovernmental organizations are members of the CWP: CCAMLR, CCSBT, FAO, I-ATTC, ICCAT, ICES, IOTC, NASCO, NAFO, NEAFC, OECD, EU/Eurostat, SEAFDEC (South East Asian Fisheries), SPC (Secretariat of the Pacific Community) and IWC (information provided at FAO Fisheries and Aquaculture website <www.fao.org>, Fishery Information, Data and Statistics Unit FIDI, retrieved 8 January 2007).

¹⁴⁷ UNFSA, Article 5(k).

¹⁴⁸ Philippe Sands, *Principles of International Environmental Law*, 1994, as cited by Orrego Vicuña, *supra* note 8, at p. 153.

- the need to take into account the interests of artisanal and subsistence fishers
- the need to collect timely and accurate data and to conduct scientific research and develop appropriate technology
- recently, the principle has had another application in the UNGA Resolution A/61/105, Paragraphs 83, 85 and 86, which calls upon States and RFMOs to stop bottom fishing activities, which potentially has adverse impacts to marine ecosystems, until appropriate measures to prevent such adverse impacts are adopted.¹⁴⁹

Sixthly, following the developments in international environmental law, UNFSA calls to apply the precautionary approach.¹⁵⁰ In addition to the recognition of the principle in Article 5(c), Article 6 of UNFSA provides guidelines or standards aimed at the application of the precautionary approach to fisheries management.

Seventhly, UNFSA also calls on States Party to implement and enforce conservation and management measures through effective monitoring, control and surveillance.¹⁵¹

Finally, and although not listed in Article 5 of UNFSA, another element of the Agreement helps to clarify the duty to conserve living marine species: the compatibility principle established in Article 7. Indeed, Article 7(2) provides that:

conservation and management measures established for the high seas and those adopted for areas under national jurisdiction shall be compatible in order to ensure conservation and management of the straddling fish stocks and highly migratory fish stocks in their entirety.

The compatibility principle implies that conservation has a minimum threshold or standards, and that is the conservation standard that the Coastal State has set for the straddling or highly migratory fish stocks. In fact, the conservation measures adopted for the high seas can't undermine the effectiveness of the measures adopted by the Coastal State for that specific

¹⁴⁹ The UNGA Resolution A/61/105 calls upon States and competent RFMOs to assess the adverse impacts of bottom fishing activities on vulnerable marine ecosystems, to take measures to prevent such impacts, and, until such measures are adopted, to close areas where vulnerable marine ecosystems are known or are likely to occur, and to cease to authorize fishing vessels to conduct bottom fisheries in such areas, beyond national jurisdiction, where there is no regional fisheries management organization or arrangement with the competence to regulate such fisheries.

¹⁵⁰ UNFSA, Article 5(c).

¹⁵¹ UNFSA, Article 5(l).

stock, thus “[t]he conservation policy of the coastal state will thus be the prevailing element of any high seas regime.”¹⁵²

2.2.2. Flag State Responsibility

The international community has made several attempts to define the vague concept of ‘genuine link’ that must exist between a State and a vessel in order to be registered and authorized to fly its flag. However, and because of the different interests at stake, this task has proven to be challenging and no concrete results have been achieved. Instead, and as a parallel development, the focus has been shifted to define, not the elements that enable to issue nationality to a vessel, but the consequences of that act:

In international law, the entire problem of reflagging can be (and has been) approached from two essentially different perspectives. One is to adopt rules in order to prevent the act of reflagging itself by requiring a ‘genuine link’ between the vessel and the state whose flag it flies. The other approach is to impose additional duties on the flag state in respect of its vessels, be these reflagged or not, fishing on the high seas [...].¹⁵³

The Flag States’ responsibilities and duties with respect to fisheries were first addressed by the FAO Compliance Agreement, which sets forth the following obligations:

- to authorize the vessel to engage in fishing activities in the high seas and maintain a record of the authorized vessels;¹⁵⁴

¹⁵² Francisco Orrego Vicuña. “International Law of High Seas Fisheries”. In Olav Schram Stokke (ed.), *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, Oxford University Press, New York, 2001.

¹⁵³ Budislav Vukas and Davor Vidas, *Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework*, in Olav Schram Stokke (ed.), *ibid.*

¹⁵⁴ Article III of FAO Compliance Agreement provides that “no Party shall allow any fishing vessel entitled to fly its flag to be used for fishing on the high seas unless it has been authorized to be so used by the appropriate authority or authorities of that Party. A fishing vessel so authorized shall fish in accordance with the conditions of the authorization” and that “no Party shall authorize any fishing vessel entitled to fly its flag to be used for fishing on the high seas unless the Party is satisfied that it is able, taking into account the links that exist between it and the fishing vessel concerned, to exercise effectively its responsibilities under this Agreement in respect of that fishing vessel.” It adds that no Party shall authorize any fishing vessel previously registered in the territory of another Party that has undermined the effectiveness of international conservation and management measures to be used for fishing on the high seas, unless it is satisfied that (i) any period of suspension by another Party of an authorization for such fishing vessel to be used for fishing on the high seas has expired; and (ii) no authorization for such fishing vessel to be used for fishing on the high seas has been withdrawn by another Party within the last three years. These provisions shall also apply in respect of fishing vessels previously registered in the territory of a State which is not a Party to this Agreement, provided that sufficient information is available to the Party concerned on the circumstances in which the authorization to fish

- require catch and operation information;¹⁵⁵
- cooperate with FAO and other international bodies in the exchange of the relevant information;¹⁵⁶ and,
- generally, to take such measures as may be necessary to ensure that fishing vessels entitled to fly its flag do not engage in any activity that undermines the effectiveness of international conservation and management measures.

was suspended or withdrawn. The provisions do not apply where the ownership of the fishing vessel has subsequently changed, and the new owner has provided sufficient evidence demonstrating that the previous owner or operator has no further legal, beneficial or financial interest in, or control of, the fishing vessel. Nevertheless, a Party may always authorize a fishing vessel to be used for fishing on the high seas, where the Party concerned, after having taken into account all relevant facts, including the circumstances in which the fishing authorization has been withdrawn by the other Party or State, has determined that to grant an authorization to use the vessel for fishing on the high seas would not undermine the object and purpose of the Agreement. Article IV adds that Each Party shall maintain a record of fishing vessels entitled to fly its flag and authorized to be used for fishing on the high seas.

¹⁵⁵ Article III(7) states that each Party shall ensure that each fishing vessel entitled to fly its flag provides it with such information on its operations as may be necessary to enable the Party to fulfill its obligations under this Agreement, including in particular information pertaining to the area of its fishing operations and to its catches and landings.

¹⁵⁶ Article V of the Agreement provides that the Parties shall cooperate as appropriate in the implementation of this Agreement, and shall, in particular, exchange information, including evidentiary material, relating to activities of fishing vessels in order to assist the flag State in identifying those fishing vessels flying its flag reported to have engaged in activities undermining international conservation and management measures. Article VI further states that the each Party shall make readily available to FAO information with respect to each fishing vessel entered in the record. The information shall include at least the name of fishing vessel, registration number, previous names (if known), and port of registry; previous flag (if any); International Radio Call Sign (if any); name and address of owner or owners; where and when built; type of vessel; and length. To the extent practicable, the State is required to also provide the name and address of operator (manager) or operators (managers) (if any); type of fishing method or methods; moulded depth; beam; gross register tonnage; and power of main engine or engines. Each party must also promptly inform FAO of any modification to the foresaid information; as well as any additions to, or deletions from, the record of authorized vessels, due voluntary relinquishment or non-renewal of the authorization by its owner or operator, withdrawal of the authorization, the fact that the fishing vessels is no longer entitled to fly its flag, the scrapping, decommissioning or loss of the fishing vessel concerned; or any other reason. Each Party shall also report promptly to FAO all relevant information regarding any activities of fishing vessels flying its flag that undermine the effectiveness of international conservation and management measures, including the identity of the fishing vessel or vessels involved and measures imposed by the Party in respect of such activities (unless confidentiality requirements of the domestic legislation applies); and, where it has reasonable grounds to believe that a fishing vessel not entitled to fly its flag has engaged in any activity that undermines the effectiveness of international conservation and management measures, the party shall draw this to the attention of the flag State concerned and may, as appropriate, draw it to the attention of FAO. FAO shall not circulate such information until such time as the flag State has had an opportunity to comment on the allegation and evidence submitted, or to object as the case may be. With this exception, FAO shall circulate promptly the information provided by the Parties to all Parties, and, on request, individually to any Party. FAO shall also, subject to any restrictions imposed by the Party concerned regarding the distribution of information, provide such information promptly on request individually to any global, regional or subregional fisheries organization. Finally, the Agreement calls upon the Parties to exchange information relating to the implementation of this Agreement, including through FAO and other appropriate global, regional and subregional fisheries organizations.

According to the Compliance Agreement, FAO will serve as a clearinghouse for information regarding the vessels authorized by the States Party to engage in fishing activities on the high seas, as well as for information regarding operation of vessels undermining the effectiveness of conservation and management measures adopted for the high seas. The objective is to provide all States with the information required to take responsible decisions as Flag States, but also as Port States. For this purpose, FAO has developed the High Seas Vessels Authorization Record (HSVAR), which provides information about the record and authorization status of the vessels authorized by State Parties to fish in the high seas, as well as infringements. The effectiveness of the Compliance Agreement depends upon the effectiveness of the information exchange mechanisms. To date, however, only 35 States have ratified the Compliance Agreement,¹⁵⁷ and only 15 Parties have provided FAO with the required information.¹⁵⁸ In addition, FAO only grants access to the database to the Parties that have fulfilled the information requirements.¹⁵⁹ Therefore, the coverage of the Agreement and the usefulness of the information mechanisms to make sound decisions are far from satisfactory.

A few years later, UNFSA addressed the Flag State duties reiterating the duties already envisaged in the FAO Compliance Agreement, and also by further elaborating the content of some of the duties and adding new ones, especially to take into consideration the existence of regulatory regimes established by regional organizations. In this regard, Article 18 of UNFSA stipulates that States Party must:

- Issue the authorization, licence or permit according to any particular procedures agreed upon at the subregional, regional, or global level;
- Apply terms and conditions to the licence, authorization or permit sufficient to fulfill any subregional, regional or global obligations of the Flag State;
- Require vessels fishing on the high seas to carry the licence, authorization or permit on board at all times and to produce it on demand for inspection by a duly authorized person;

¹⁵⁷ Information provided at the FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>, Compliance Agreement, retrieved 30 January 2007.

¹⁵⁸ Information provided at the FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>, Compliance Agreement, HSVAR High Seas Vessel Authorization Record, retrieved 30 January 2007.

¹⁵⁹ *Ibid.*

- Ensure that vessels flying its flag do not conduct unauthorized fishing within areas under the national jurisdiction of other States;
- Include requirements for marking of fishing vessels and fishing gear for identification in accordance with uniform and internationally recognizable vessel and gear marking systems, such as the Food and Agriculture Organization of the United Nations Standard Specifications for the Marking and Identification of Fishing Vessels;
- Include requirements for recording and timely reporting of vessel position, catch of target and non-target species, fishing effort and other relevant fisheries data in accordance with subregional, regional and global standards for collection of such data;
- Include requirements for verifying the catch of target and non-target species through such means as observer programmes, inspection schemes, unloading reports, supervision of transshipment and monitoring of landed catches and market statistics;
- Exercise monitoring, control and surveillance of such vessels, their fishing operations and related activities; and ensure that the measures imposed are compatible with any subregionally, regionally or globally agreed system of monitoring, control and surveillance in effect.
- the measures it imposes on vessels flying its flag are compatible with any agreed subregional, regional, or global systems of monitoring, control, and surveillance already in effect
- Regulate transshipment on the high seas to ensure that the effectiveness of conservation and management measures is not undermined; and
- Regulate fishing activities to ensure compliance with subregional, regional or global measures, including those aimed at minimizing catches of non-target species.

While the FAO Compliance Agreement stresses the need for authorization, record and exchange of information, UNFSA highlights the need to ensure compliance with conservation and management measures. However, the assumption of most of the provisions is that the conservation and management measures are established for the high seas by an entity different from the Flag State (at least, the Flag State acting unilaterally) – namely, a subregional or regional body, or a measure adopted at the global level. However, Article 117 of the LOS Convention provides for the duty of States to “take such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas”. Therefore, the unilateral action of the Flag State to take substantive measures for the vessels flying its flag is not only not excluded, but required. Some States have taken

steps in this direction.¹⁶⁰ And again, UNGA Resolution A/61/105 provides for an interesting precedent in order to define, and even raise the standard of Flag State responsibility with respect to conservation of high seas resources and the marine environment.¹⁶¹ In this respect, the *mutatis mutandis* application of the principles and obligations developed by international environmental law for transboundary environmental damage may be explored.

Disregarding the efforts to establish a genuine link between the Flag State and the vessels entitled to fly its flag, Flag of Convenience persist. And beside the more successful efforts to accurately define the obligations on Flag States, some States remain unable or unwilling to fulfill their responsibilities. But the Flag State responsibility is a 'primary' but not 'absolute' responsibility;¹⁶² international law allows for a certain degree of control and enforcement by non-Flag States.¹⁶³ The developments in international fisheries law are aimed to complement Flag State responsibility with a patchwork of other controls so as to ensure compliance with conservation and management measures for high seas fish stocks. It must be noted, however, that

[n]othing [in these developments] abrogates the fundamental principle of flag state responsibility since the flag state – in the first place – has to accept these restrictions by signing up to the relevant international agreement. The flag state also retains the ultimate responsibility to investigate and prosecute violations.¹⁶⁴

One element provided to reinforce Flag State responsibility is the exercise of control over nationals, i.e., beneficial owners of the vessels flying a Flag of Convenience or Flags of Non-Compliance. The duty of States to ensure that their nationals do not engage in fishing activities that adversely impact the conservation of high seas fish stocks or the marine

¹⁶⁰ See Part II, section 4.2 and 4.3. below.

¹⁶¹ Paragraph 86 of the UNGA Resolution A/61/105 requires States to either adopt and implement measures in accordance with paragraph 83, *mutatis mutandis*, or cease to authorize fishing vessels flying their flag to conduct bottom fisheries in areas beyond national jurisdiction where there is no regional fisheries management organization or arrangement with the competence to regulate such fisheries or interim measures in accordance with paragraph 85, until measures are taken in accordance with those paragraphs. Paragraph 83 was aimed at RFMOs, and requires assessing whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems, to establish conservation measures to prevent such adverse impacts, to close the areas of where vulnerable marine ecosystems are known or are likely to occur to bottom fishing unless appropriate measures are established.

¹⁶² Rosemary Rayfuse, *supra* note 50, at p. 22 and 51.

¹⁶³ Vukas and Vidas, *supra* note 153, at p. 75.

¹⁶⁴ High Seas Task Force (2006), *supra* note 81, at p. 35-36.

environment, irrespective of the nationality of the vessel engaged in those activities, has arguably its legal basis in Article 117 of the LOS Convention. This approach has been further highlighted in several political declarations and incorporated in regional fisheries management conventions and arrangements.¹⁶⁵ In addition, the need to clearly identify the beneficial owner of the fishing vessels has been highlighted.¹⁶⁶

The role of the Port State has also been highlighted as a useful tool to deter fishing activities that undermine conservation and management efforts, this as a complement of Flag State jurisdiction.¹⁶⁷ In this regard, it is useful to distinguish between Port State control measures and Port State enforcement, the latter implying the extension of the Port State's enforcement authority over violations on the high seas or in foreign coastal waters.¹⁶⁸ According to Article 11 of the LOS Convention, ports are within internal waters and as such are under full territorial sovereignty of the State. Therefore, ships entering a foreign port put themselves within the territorial jurisdiction of the Coastal State.¹⁶⁹ It is generally accepted that, in exercising that territorial jurisdiction, the Port State can nominate those of their ports that are to be open for international trade, close its international ports, and prescribe conditions for access to their ports, with the only exception being with respect to vessels in distress and the obligations arising from international treaties or agreements to which they are parties.¹⁷⁰ It is also accepted that the Port State has jurisdiction to board and inspect foreign fishing vessels voluntarily in their ports. In respect to enforcement, however, the general principle is that:

¹⁶⁵ See, for example: Report of the Review Conference on the Agreement of the Implementation of the Provisions of the UN 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, (hereinafter Report of the Review Conference) A/CONF.210/2006/15, Annex Outcomes of the Review Conference, paragraph 43(j), at p. 40 (Document available on DOALOS website <www.un.org/Depts/los>).

¹⁶⁶ Report of the Review Conference, A/CONF.210/2006/15, *ibid*, Annex Outcome of the Review Conference, paragraph 43(1), at p. 40; High Seas Task Force (2006), *supra* note 81, Table 4 Summary of the Task Force proposals, proposal 2, at p. 64, 68-70.

¹⁶⁷ UNGA Resolution A/61/105, paragraphs 39, 42 and 43; Report of the Review Conference, A/CONF.210/2006/15, *ibid*, Annex Outcome of the Review Conference, paragraph 43(d), at p. 39; High Seas Task Force (2006), *supra* note 81, Table 4 Summary of the Task Force proposals, proposal 6(b), at p. 64.

¹⁶⁸ Rayfuse, *supra* note 50, at p. 69.

¹⁶⁹ Churchill and Lowe, *supra* note 27, at p. 61 and 65.

¹⁷⁰ *Ibid*, at p. 62. Some authors argue, however, that international law recognizes a 'right of access' to foreign Ports. Especially, it has been argued that the closure of ports for transshipment constitute a violation of Article V of GATT. The argument has been presented to a WTO panel.

customary and conventional international law, subject to limited exceptions, allows a port State to enact and enforce regulations against foreign vessels for actions or inaction that occur or exist while such vessels are in port [...] The LOS Convention provides that a port State can enact and enforce regulations against foreign vessels for actions or inactions that occurred while such vessels were in the territorial sea or the EEZ of the port State [...] Customary international law prohibits enforcement of local laws against foreign vessels for actions or inactions that took place beyond the national waters of the enforcing country, unless a specific treaty permits the enforcement action or the activity of a foreign vessel outside national waters has an “effect” within the enforcing port State.¹⁷¹

Article 218 of the LOS Convention provides for an exception to the Port State enforcement jurisdiction with respect to discharges by vessels outside areas under the jurisdiction of the Port State. However, no similar provisions are found in the LOS Convention with respect to fishing vessels that have violated international conservation and management measures.¹⁷² The FAO Compliance Agreement also addresses Port State control measures in Article V(2), but without substantially changing existent customary international law.¹⁷³ UNFSA, conversely, addresses Port States measures in Article 23, specifying that Port States have the right and the duty to take measures, in accordance with international law, to promote the effectiveness of subregional, regional and global conservation and management measures, with the restriction not to discriminate in form or in fact against vessels of any State. It further enunciates measures that may be taken by the Port State: inspect documents, fishing gear and catch on board fishing vessels, when such vessels are voluntarily in its ports or at its offshore terminals, or prohibit landings and transshipments where it has been established that the catch has been taken in a manner which undermines the effectiveness of subregional, regional or global conservation and management measures on the high seas. However, the measures designated in Article 23 are, according to most authors, measures already

¹⁷¹ Ted L. McDorman. "Port state enforcement: a comment on Article 218 of the 1982 Law of the Sea Convention." *Journal of Maritime Law and Commerce* 28n2 (April 1997): 305-322, p. 307.

¹⁷² André Tahindro, *supra* note 57, at p.40-41.

¹⁷³ Article V(2) of the FAO Compliance Agreement states: “When a fishing vessel is voluntarily in the port of a Party other than its flag State, that Party, where it has reasonable grounds for believing that the fishing vessel has been used for an activity that undermines the effectiveness of international conservation and management measures, shall promptly notify the flag State accordingly. Parties may make arrangements regarding the undertaking by port States of such investigatory measures as may be considered necessary to establish whether the fishing vessel has indeed been used contrary to the provisions of this Agreement.” According to Rosemary Rayfuse, while the final text falls short of a Port State inspection or enforcement regime, it does contain the basis for the development of such a regime (Rayfuse, *supra* note 50, at p. 77).

recognized in customary international law among the powers of the Port State. In that sense, it does not reinforce existent international law, or, as one author states,

it does not assist in delineating what the relevant internationally lawful measures might be, although guidance is given by providing that port states may inspect documents and catch when foreign fishing vessels are voluntarily within their ports and may adopt regulations prohibiting landings and transshipments of fish that has been taken in a manner which undermines the effectiveness of regional, subregional or global conservation and management measures on the high seas. In addition, nothing in Article 23 affects the exercise by port states of their sovereign rights under international law. Clearly the [UNFSA] does not settle the issue of the possibility of non-flag port state sanction but instead leaves it open to development on the basis of state practice.¹⁷⁴

In any case, Article 23 incorporates two elements of interest for the further development of Port State jurisdiction in relation to high seas fisheries: first, it establishes not only the right for the Port State to take such measures (which is arguably already established in customary international law), but also the *duty* of the Port State to take those measures. The duty of Port States to cooperate ensuring the effectiveness of conservation and management measures, not providing assistance to irresponsible fishing vessels, has been further developed and reinforced in the FAO Code of Conduct, IPOA-IUU and the recently approved Model Scheme Port State Measures to Combat Illegal, Unreported and Unregulated Fishing, the latter being considered the minimum standard for Port State control.¹⁷⁵ A new step in this trend is to convene a global conference to adopt the Model Scheme, or a similar instrument, as a multilateral treaty; an initiative that has already been proposed in different fora.¹⁷⁶ The second interesting feature is that, unlike Article 218 of the LOS Convention, it considers the application of Port measures for the effectiveness of conservation and management measures adopted at the global, regional and subregional levels. Consequently, the effects of such measures adopted by regional governance regimes in respect to non-parties of the regime, as will be analyzed below.

¹⁷⁴ Rayfuse, *supra* note 50, at p. 336. Orrego Vicuña is of the opinion that the expression ‘*inter alia*’ used in the provision allows the implementation of other measures, such as detention, arrest, and continuing boarding (Orrego Vicuña, *supra* note 8, at p.261). This interpretation is rejected by other scholars.

¹⁷⁵ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 108 at p. 24.

¹⁷⁶ See, for example: Report of the Review Conference, A/CONF.210/2006/15, *ibid*, Annex Outcome of the Review Conference, paragraph 43(d), at p. 39.

With respect to non-Flag State enforcement, Articles 20, 21 and 22 of UNFSA provide for an important development in international law while regulating international and regional cooperation in enforcement. Those provisions provide any State party to UNFSA and member of a RFMO the jurisdiction to board and inspect fishing vessels flying the flag of another State party to the Agreement, whether or not such State Party is also a member of the RFMO, and for the purpose of ensuring compliance with conservation and management measures for straddling fish stocks and highly migratory fish stocks established by that organization or arrangement. The boarding and inspection powers must be exercised according to the procedures established by the RFMO thereto, ensuring transparency and non-discrimination. However, the Agreement established a basic procedure to be applied until the specific regional procedure is established. Following a boarding and inspection, if there are clear grounds for believing that a vessel has engaged in any activity contrary to the conservation and management measures adopted for the high seas, the inspecting State shall, where appropriate, secure evidence and promptly notify the flag State of the alleged violation. The flag State shall respond to the notification within three working days of its receipt, and shall either:

- Fulfill, without delay, its obligations under Article 19 of UNFSA to investigate and, if evidence so warrants, take enforcement action with respect to the vessel. In this case, it shall promptly inform the inspecting State of the results of the investigation and of any enforcement action taken; or
- Authorize the inspecting State to investigate. In this case, the inspecting State shall, without delay, communicate the results of that investigation to the Flag State. The Flag State shall, if evidence so warrants, take two different actions:
 - fulfill its obligations to take enforcement action with respect to the vessel.
 - authorize the inspecting State to take such enforcement action as the Flag State may specify with respect to the vessel.

Article 21(8) further stipulates that if the boarding and inspection reveal there are clear grounds for believing that a vessel has committed a *serious* violation, and the Flag State has either failed to respond or failed to investigate and, where appropriate, take enforcement actions against the vessel, the inspectors may remain on board and secure evidence. The authorities may also require the master to assist in furthering the investigation including, where appropriate, by bringing the vessel without delay to the nearest appropriate port, or to

other specified port. The inspecting State shall immediately inform the Flag State of the measures taken. In any event, the Flag State is always entitled to take action to fulfill its obligations of inspecting and, where appropriate, sanctioning the alleged violation.

Table 1. Provisions regarding the operation, boarding and inspection, investigation and enforcement of measures adopted by a regional organization with respect to non-parties.

	Parties to UNFSA	Non-Parties to UNFSA
Boarding and Inspection	Authorized inspector of any party to the organization. If there are clear grounds for believing that the vessels has engaged in activities contrary to the conservation and management measures adopted by the organization, the inspecting State shall secure evidence and promptly notify the Flag State of the alleged violation.	Flag State authorities only, unless specifically authorized by the Flag State.
Investigation	The Flag State may fulfill without delay its obligation under Article 19 to investigate. The Flag State shall promptly inform the inspecting State.	Flag State authorities only, unless specifically authorized by the Flag State.
	The Flag State may authorize the inspecting State to investigate. Inspecting State shall without delay communicate the results of the investigation to the Flag State.	
Enforcement	The Flag State shall take <u>enforcement action</u> with respect to the vessel, if evidence so warrants. Evidence might be provided by either the investigation undertaken by the Flag State or the Inspecting State.	Flag State authorities only, unless specifically authorized by the Flag State.
	The Flag State may authorize the inspecting State to take such enforcement action as the <u>Flag State may specify</u> with respect to the vessel, consistent with the rights and obligations of the Flag State under the Agreement.	

Source: Compiled by the author from Article 21 of UNFSA.

The obligation to adopt non-flag boarding and inspection schemes has been characterized as secondary, because Article 21(15) of UNFSA “admits the possibility of non-application of the boarding and inspection provisions where an RFO has established an alternative mechanism which effectively discharges members’ obligation to ensure compliance with

conservation and management measures adopted by that RFO”.¹⁷⁷ In addition, non-flag boarding and inspections has had little practical development, even in the restricted scenario provided in UNFSA: established by RFMO and applicable to their members, or applicable to non-members that are parties to the UNFSA, in the case of regimes established for highly migratory or straddling stocks.¹⁷⁸

The role of trade or market-related measures has also been highlighted as a complementary control of irresponsible fishing. The use of eco-labeling, certificates of origin or certification schemes and the certification scheme provided in CITES¹⁷⁹ are suggested and currently used to ensure that the fish provided by non-authorized and non-cooperating vessels or States do not find a market, thereby undermining the profits of the irresponsible activity.¹⁸⁰ For the purpose of implementing Flag State responsibility, Port State responsibility and market measures, the usefulness of “listing techniques” (‘black’ or ‘negative’ lists of incompliant

¹⁷⁷ Rayfuse, *supra* note 50, at p. 343. Alternative measures suggested are, *inter alia*, on-board observer programmes, utilization of VMS, fish tracking and verification systems, fleet performance review instruments and catch documentation schemes (Report of the Review Conference, A/CONF.210/2006/15, *ibid*, Annex Outcome of the Review Conference, paragraph 42 at p. 39).

¹⁷⁸ See: Rayfuse, *supra* note 50, especially at p. 338-350.

¹⁷⁹ The Convention on International Trade in Endangered Species of Wild Fauna and Flora was signed in Washington D.S. on 3 March 1973 and amended at Bonn on 22 June 1979. To date, 169 States have ratified the Convention. The aim of the convention is to ensure international cooperation to establish worldwide controls over trade in endangered wildlife and wildlife products, in recognition of the fact that unrestricted commercial exploitation is one of the major threats to the survival of species. CITES uses the technique of lists: endangered species are listed in three appendices to the convention. The trade of the specimens in the appendices is subject to restrictions or conditions, which vary according to the appendix in which the species is listed. The provisions of CITES subject trade of Appendix I-listed species to the highest level of restrictions, and Appendix III-listed species to the least. The Parties to the Convention shall not allow trade in specimens listed in the appendices unless the conditions set are fulfilled; and the permit or certificate requirements are recognized by all member countries. Appendix I shall include all the species threatened with extinction which are or may be affected by trade. Appendix II shall include: (a) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival; and (b) other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control. Appendix III shall include all species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade. See: www.cites.org. See also: Gerard Emonds, *Guidelines for National Implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora*, IUCN Environmental Policy and Law Paper No. 17, 1981; Rosalind Reeve, *Policing International Trade in Endangered Species: the CITES Treaty and Compliance*. The Royal Institute of International Affairs, 2002.

¹⁸⁰ See: Laura Little and Marcos Orellana. “Can CITES Play a Role in Solving the Problem of IUU Fishing?: The Trouble with Patagonian Toothfish.” *Colorado Journal of International Law and Policy* 16 (1995), p 21-122.

vessels and ‘white’ or ‘positive’ lists of compliant vessels) has also been considered and used.¹⁸¹

2.2.3. International and regional cooperation

The duty to cooperate has risen as one of the pillars of solutions to common concern problems. Thus, the duty to cooperate for conservation and sustainable use of the marine living resources of the high seas has been reinforced in recent years. The main efforts aimed at the “institutionalization” of the duty to cooperate by requiring its exercise through regional fisheries bodies,¹⁸² and by reinforcing their role in global fisheries governance. This evolution will be analyzed in more detail in the next section.

Section 2 - Application of the high seas fisheries regime: regional cooperation through RFMOs

The LOS Convention adopts a ‘shared resources approach’ to regulate the high seas stocks, as opposed to an ‘international approach’ or a ‘national approach’. The shared resources approach recognizes the right of States to exploit marine living resources, but also the duty to conserve those stocks for the benefit of others. Fulfilling this responsibility requires unilateral action, but also, and most importantly, joint action of the States participating in the fishery, i.e., cooperation. The LOS Convention does not provide for one means of cooperation, although it encourages, and in the case of highly migratory species, requires cooperation through international or regional organizations. International or regional organizations are defined as

treaties, supervised by intergovernmental commissions or similar bodies which can regularly promulgate the necessary rules in a flexible and sustained

¹⁸¹ Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its sixth meeting, 7 July 2005, A/60/99, hereinafter UNICPOLOS 2005, paragraph 10(d), at p. 7 (Document available at DOALOS website <www.un.org/Depts/los>); OECD, *Fish Piracy, Combating Illegal, Unreported and Unregulated Fishing*, 2004, Key Observations and Findings, at p. 14.

¹⁸² Rayfuse, *supra* note 50, at p. 43.

manner, easily adaptable to changing scientific knowledge and advice and changing economic, social, and political circumstances.¹⁸³

RFMOs therefore appear as a balancing solution between the extremes of internationalization and nationalization of fisheries governance, or between the ‘international authority’ and the ‘creeping national jurisdiction’. They are, as well, a natural and suitable institutional arrangement to encourage and materialize the required cooperation among States.

International organizations can have a wide range of competences or jurisdictions. Therefore, a distinction must be made between an international or regional *fisheries* organization, or regional fishery body, and an international or regional fisheries *management* organization or RFMO. The former is an organization aimed at enhancing cooperation among States in the fisheries sector. The latter is “an intergovernmental fisheries organization or arrangement, as appropriate, that has the competence to establish fisheries conservation and management measures”.¹⁸⁴ It can be concluded that fishing States, or Coastal and fishing States, are under the specific duty to cooperate by agreeing upon, complying with, and enforcing conservation and management measures.¹⁸⁵ Thus, they are under the obligation of establishing a *management* organization or arrangement, and not other types of organizations.

It is probable that the cooperative instrument will not set particular conservation and management measures, but provide a framework where those decisions have to be made on a regular basis. Indeed, the conservation and management of living resources is a dynamic process that must be adjusted to the changing conditions of the environment, science advances and States’ interests. The management organizations can be global, regional, or subregional. It has been argued that, since single species are not generally distributed on a global scale, regional or subregional regimes will be sufficient, and indeed more efficient to achieve cooperation among concerned States on the conservation of a species or ecosystem. In addition, regional or subregional agreements should be easier to achieve because the parties concerned share a common interest in conservation within their region. For these

¹⁸³ Birnie and Boyle, *supra* note 3, at pg. 119.

¹⁸⁴ FAO IPOA-IUU, Article 6(c). See: LOS Convention, Articles 64(1) and 118, and UNFSA, Article 8 to 13 (especially 8(5) and 13).

¹⁸⁵ LOS Convention, Articles 63, 63 and 118. See: section 3.3 above.

reasons, RFMOs are considered the most suitable cooperative instrument for the management and conservation of high seas fish stocks. Post-UNCLOS instruments reaffirm and reinforce the role of RFMOs in international fisheries governance.¹⁸⁶ UNFSA, in particular, calls upon States to establish an organization or enter into other appropriate arrangements to ensure conservation and management of highly migratory and straddling stocks, where no such subregional or regional fisheries management or arrangement exists,¹⁸⁷ and identifies the functions which RFMOs are called to perform.¹⁸⁸ States, scholars, experts and NGOs agree that, in the current legal framework, the best means to achieve cooperation, and therefore conservation of the living resources of the high seas, is through RFMOs.¹⁸⁹

1. RFMOs: a need for reinforced cooperation

The conclusion that RFMOs are the best mean through which to achieve cooperation has not changed, although the performance of RFMOs has been assessed as insufficient. On the contrary, current trends not only reaffirm the role of RFMOs as the best vehicle for international fisheries governance, but also call for “strengthening” of these regional fisheries bodies. The first of such calls came from the 1987 Report of the World Commission on Environment and Development.¹⁹⁰ Agenda 21,¹⁹¹ the Johannesburg Plan of Implementation,¹⁹² and the resolution adopted by the 95th Inter-Parliamentary Conference held in Istanbul, Turkey, in 1996,¹⁹³ all highlight the importance of international and regional cooperation through fisheries bodies.

UNFSA calls upon States to strengthen existing subregional and regional fisheries management organizations and arrangements to improve their effectiveness in establishing

¹⁸⁶ UNFSA, FAO Compliance Agreement, FAO Code of Conduct for Responsible Fisheries and FAO IPOA-IUU.

¹⁸⁷ UNFSA, Article 8(5).

¹⁸⁸ UNFSA, Article 10.

¹⁸⁹ See: Report of the High-Level Panel of External Experts in Fisheries, *supra* note 122.

¹⁹⁰ Report on the World Commission on Environment and Development, 1987, paragraph 83.

¹⁹¹ Agenda 21, Chapter 17, paragraphs 17.57 to 17.60.

¹⁹² Johannesburg Plan of Implementation, *supra* note 128, chapter IV, paragraph 30(f).

¹⁹³ Resolution on Conservation of World Fish Stocks to provide an important source of protein and ensure the continued viability and economic stability of fishing around the World, adopted by the 95th Inter-Parliamentary Conference held in Istanbul, Turkey, 19 April 1996, paragraph 22.

and implementing conservation and management measures for straddling fish stocks and highly migratory fish stocks.¹⁹⁴ The 1995 Rome Consensus on World Fisheries urged Governments and international organizations to take prompt action to “strengthen and support regional, sub-regional, and national fisheries organizations and arrangements for implementing conservation and management measures”,¹⁹⁵ as does the Kyoto Plan of Action on the Sustainable Contribution of Fisheries to Food Security, signed the same year.¹⁹⁶ FAO and the Committee on Fisheries have also addressed in various meetings the role of regional fisheries bodies, and the need to strengthen them,¹⁹⁷ as has UNGA,¹⁹⁸ UNICPOLOS,¹⁹⁹ and the recent Review Conference on UNFSA.²⁰⁰ Scholars also see the need to strengthen regional fisheries bodies. As stated by Professor Hayashi,

[o]ne of the essential steps toward its implementation, whether or nor the [UN Fish Stock] Agreement comes into force in the near future, is the enhancement of regional cooperation. As the Agreement itself urges, existing regional organizations or arrangements must be strengthened, and where no such mechanism exists, relevant states must cooperate to establish a regional organization or arrangement.²⁰¹

Although all these documents stress the need to “strengthen” regional fisheries bodies, and particularly RFMOs, few explain what is considered a “strong” RFMO. Of course, several documents provide elements that have hindered the efficient performance of RFMOs and that should be modified, and also provide guidance on the desirable outcomes of that process. But a systematic description of the characteristics and roles of a strong RFMO, which may

¹⁹⁴ UNFSA, Article 13. It has been noted that Article 13, among others in the Agreement, does not refer to State Parties to the Agreement but, generally, to States, implying that the Agreement imposes this obligation even to non-parties.

¹⁹⁵ 1995 Rome Consensus on World Fisheries, paragraph 10.

¹⁹⁶ 1995 Kyoto Plan of Action on the Sustainable Contribution of Fisheries to Food Security, paragraph 2.

¹⁹⁷ See: 1997 and 1999 COFI meeting report; Report of the High-Level Panel of External Experts in Fisheries, *supra* note 122; FAO Fisheries Report No. 597. *Report of the Meeting of FAO and non-FAO Regional Fishery Bodies or Arrangement, Rome, 11-12 February 1999* (FIPL/R597-En), FAO, Rome, 1999, at p. 7 (available at FAO Fisheries and Aquaculture website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 January 2007).

¹⁹⁸ See, for example: UNGA resolution A/60/31, at paragraph 35, p. 9.

¹⁹⁹ See: UNICPOLOS 2006, A/61/156, *supra* note 112, at paragraph 7 (e), p.3.

²⁰⁰ See: Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165.

²⁰¹ Moritaka Hayashi. *The Straddling and Highly Migratory Fish Stocks Agreement*, in Hey (ed.), *supra* note 71, at p. 82.

effectively undertake sustainable management of fish stocks, is lacking. Furthermore, the interpretation of those roles might not be coincident for all stakeholders.

The analysis of the various documents and declarations outlined above identify three main areas where “strengthening” of RFMOs is required:

- the relation of RFMOs with the international instruments setting global standards or guidelines for high seas governance;
- the relation of RFMOs and its members; and
- the relation of RFMOs and the non-members.

These three points will be analyzed below.

1.1. RFMOs and their relation with international instruments

The first suggested way to strengthen RFMOs is to extend the mandate of existing RFMOs or establish new RFMOs to cover areas or species currently not managed by a regional organization.²⁰² Although currently 19 RFMOs has been established, they do not cover all oceans or all the species, and they focus primarily on commercially valuable stocks. The purpose of this measure is that every area of the ocean and every fish stock or species²⁰³ in the ocean has an authority with jurisdiction to establish binding conservation and management measures: the Coastal States, with respect to the EEZ, or a RFMO in respect to the high seas. Thus, fishing activities in the high seas would not be under the exclusive authority of the fishing vessel’s Flag State. This measure actually implies, more than strengthening individual RFMOs, strengthening the global governance system. However, as will be discusses below, the initiatives calling for the establishment of new RFMOs, or the

²⁰² Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, Annex, paragraph 18(c) at p. 33; UNGA Resolution 61/105, paragraph 66, at p. 15; UNGA Resolution 60/31, paragraph 57, at p. 12, and paragraph 71, at p. 14: incorporation of bottom fishing; UNICPOLOS 2005, A/60/99, *supra* note 181, paragraph 11(b), at p. 7; IUCN – The World Conservation Union, *Regional Fisheries Management Organizations: Practical Steps for Improvement*, Information Paper prepared for the Review Conference on the 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, 22 – 26 May 2006, available at IUCN - the World Conservation Union website <www.iucn.org>.

²⁰³ The scope of the RFMO is related to the objective of the organization, as seen below. Therefore, it might be argued that the final objective is to bring every species under the jurisdiction of an RFMO, or alternatively only every commercially exploited fish stock (disregarding the protection of the associated and dependant species).

extension of the mandate of existing RFMOs, to cover the marine areas and species not currently regulated, do not include proposals on mechanisms to promote and achieve timely and effective cooperation.²⁰⁴

A second measure suggested is to incorporate in the RFMO all interested parties.²⁰⁵ The main purpose is to ensure that all the “players” play the game according to the rules set by a RFMO, and that can only be achieved if all the relevant States participate in the organization. Generally, declarations call on States cooperating in the formation of a subregional or regional fisheries management organization or arrangement to inform other States which they know have a real interest in the work of the proposed organization or arrangement of such cooperation,²⁰⁶ to the States fishing in the high seas area or for a species covered by a RFMO to become a party of that RFMO, and to the RFMO to ensure its participation on a non-discriminatory basis.²⁰⁷

The participation in a RFMO of a State with a real interest in the fishery has been identified as a duty and right: duty because that is the way in which the State discharges its duty to cooperate under the LOS Convention; right because, provided that it has a real interest, the participation shall not be precluded or in other way discriminated against by the RFMO members.²⁰⁸ However, a ‘real interest in the fishery’ is not defined. It is clear that conducting fishing operations of significance in the region concerned at the time of establishing the RFMO qualifies as a real interest enabling the Flag State to participate in the negotiations and become a member of the organization.²⁰⁹ The practice of RFMOs confirms this, leaving ambiguous only the status of the States which have fished in the past, or wish to fish in the

²⁰⁴ See: section 4.2. below.

²⁰⁵ UNGA Resolution A/61/105, paragraph 64, at p. 14; UNGA Resolution A/60/31, paragraph 55, at p. 12; UNICPOLOS 2006, A/61/56, *supra* note 112, paragraph 8 i), at p. 5; IUCN – The World Conservation Union, *supra* note 202.

²⁰⁶ UNFSA, Article 9 (2).

²⁰⁷ UNFSA, Article 8 (3).

²⁰⁸ Molenaar, Erik Jaap. "The concept of "real interest" and other aspects of co-operation through regional fisheries management mechanisms." *International Journal of Marine and Coastal Law* 15.4 (Nov 2000): 475-531, at p. 495. Francisco Orrego Vicuña states that “although the 1995 Agreement provides that states having a real interest “may” become members of or participants in the mechanisms for cooperation, this is not to be understood as a mere discretionary option but as an expression of entitlement. In fact the same paragraph earlier refers to membership or participation as mandatory in that states shall in this way give effect to their duty to cooperate.” (Orrego Vicuña, *supra* note 8, at p. 208).

²⁰⁹ Orrego Vicuña, *supra* note 8, at p. 208.

future.²¹⁰ Also controversial is the situation of States which do not have a fishing interests, but a general interest in the sustainable management of the stock and the protection of the marine environment.²¹¹ Finally, the situation of non-State participants is also debatable,²¹² with the probable exception of fishing entities.²¹³ The position on this issue will probably depend on the role assigned to the RFMO, as will be outlined below.

The third measure suggested is to

review and adapt, where appropriate, [the RFMOs'] mandates, structures, and strategies to better play their increasingly important roles in the process of achieving sustainable fisheries development and, to discharge their responsibilities in implementing the recent series of international instruments concerned with fisheries.²¹⁴

It is widely believed that the recent international instruments, and especially UNFSA, FAO Compliance Agreement, and the FAO Code of Conduct, entail new responsibilities for RFMOs.²¹⁵ Therefore, one way to strengthen RFMOs is by ensuring that the mandates, institutions, and jurisdiction of these are adequate to deal effectively with the new challenges.

²¹⁰ Orrego Vicuña, *supra* note 8, considers that those States do not have a real interest in the fisheries and should be considered new entrants. Molenaar, *supra* note 208, considers that the interpretation is not shared by all the authors.

²¹¹ Erik Jaap Molenaar, *ibid.*

²¹² Erik Jaap Molenaar, *ibid.*

²¹³ UNFSA recognize the applicability of the Agreement, *mutatis mutandis*, to fishing entities referred to in Article 305(1)(c), (d) and (e) of the LOS Convention and, subject to Article 47, to any entity referred to as an "international organization" in Annex IX, Article 1, of the LOS Convention, as well as to any other fishing entity whose vessels fish on the high seas (UNFSA, Article 1(2) and 1(3)). In addition, several conventions establishing RFMO considered the possibility of fishing entities to become parties of the RFMO.

²¹⁴ FAO Fisheries Report No. 597, *supra* note 197. The Review Conference of UNFSA also "widely agreed that the improvement of regional organizations' functioning and alignment of their conventions and adopted measures with the Agreement's standards should be a priority" (Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 85, at p. 18). See also: paragraph 86; UNICPOLOS 2005, A/60/99, *supra* note 181, paragraph 7, at p. 4.

²¹⁵ Moritaka Hayashi, in the opening remarks of the Meeting of FAO and non-FAO Regional Fishery Bodies or Arrangements, held in Rome, Italy, 11-12 February 1999, stated that the international instruments (UNFSA, FAO Compliance Agreement and FAO Code of Conduct) "call on regional fishery bodies and arrangements to undertake a number of activities." He adds that "it is thus abundantly clear that regional fishery bodies and arrangements are called upon to play more and more important and wider roles in the conservation and management of resources. Indeed, their roles are now vital in the context of global fisheries governance." (FAO, Fisheries Report No. 597, *ibid.*, Appendix D, at p. 15-16). Article 1.2 of the FAO Code of Conduct states that "the Code is global in scope, and is directed toward members and nonmembers of FAO, fishing entities, sub regional, regional and global organizations, whether governmental or non-governmental, and all persons concerned with the conservation of fishery resources and management and development of fisheries, such as

The nature and extent of the “new mandate” of the regional bodies has not been fully addressed. It is generally accepted that regional bodies must endorse the guidelines set in international (sectoral) fisheries instruments, and specially Article 5 of UNFSA. Therefore, it is widely recognized that regional bodies must adopt measures to:

- ensure long-term sustainability of the stocks and promote the objective of their optimum utilization,²¹⁶
- consider ecosystem-based management and the precautionary approach,²¹⁷
- prevent or eliminate overfishing and excess fishing capacity,²¹⁸
- minimize fish discards, by-catch and catch by abandoned gear,²¹⁹
- protect biodiversity in the marine environment,²²⁰
- minimize or eliminate lost and discarded fishing gears and related marine debris,²²¹
- collect and share accurate data concerning fishing activities and national and international research programs,²²²
- promote and conduct scientific research,²²³
- implement effective monitoring, control and surveillance to enforce conservation and management measures.²²⁴

fishers, those engaged in processing and marketing of fish and fishery products and other users of the aquatic environment in relation to fisheries.” Article 4.1. adds that “All members and non-members of FAO, fishing entities and relevant subregional, regional and global organizations, whether governmental or nongovernmental, and all persons concerned with the conservation, management and utilization of fisheries resources and trade in fish and fishery products should collaborate in the fulfillment and implementation of the objectives and principles contained in this Code.” The IPOAs also address the regional organizations as entities responsible for their implementation.

²¹⁶ UNFSA, Article 5(a) and (b).

²¹⁷ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, Annex, paragraph 18(a) and (d) at p. 33; UNFSA, Article 5(c), (d) and (e) and Article 6; UNGA Resolution A/61/105, paragraphs 5 and 6, at p. 6; UNGA Resolution A/60/31, paragraph 4, at p. 5, and paragraph 58 at p. 13; UNICPOLOS 2006, A/61/156, *supra* note 112, paragraphs 83, 84, 85, 87 and 88, at p. 21-22; UNICPOLOS 2005, A/60/99, *supra* note 181, paragraph 7(b)(i), at p. 4; FAO Fisheries Report No. 597, *supra* note 197, paragraph 41(iii), at p. 7.

²¹⁸ UNFSA, Article 5(d); FAO, Fisheries Report No. 597, *ibid*, paragraph 41(xiii), at p. 8.

²¹⁹ UNFSA, Article 5(f); UNGA Resolution A/60/31, paragraph 51, at p. 11-12, and paragraph 53 at p. 12.

²²⁰ UNFSA, Article 5(g).

²²¹ UNGA Resolution A/60/31, paragraphs 78 and 79 at p. 15-16.

²²² UNFSA, Article 5(j).

²²³ UNFSA, Article 5(k).

²²⁴ UNFSA, Article 5(l); FAO, Fisheries Report No. 597, *supra* note 197, paragraph 41(xii), at p. 8; UNGA Resolution A/60/31, paragraph 47, at p. 11.

Some authors have seen the possibility of RFMOs playing a more active role in the regulation of fishing subsidies. And other proposals go even further, and add to the already broad and ambitious mandate more specific responsibilities in relation to marine protection, including biodiversity and genetic resources. In these views, RFMOs would not simply be instruments to facilitate cooperation required in Part V of the LOS Convention, but also in Part XII, the Convention on Biodiversity, and even to address issues not covered by multilateral treaties. Those proposals advocate for the replacement of RFMOs for “regional ecosystem management organizations”, “effective ecosystem conservation and sustainable use organizations”, “regional oceans management organizations” or “regional oceans governance organizations”.²²⁵ The more conservative trends emphasize the fisheries management mandate of RFMOs,²²⁶ while the later developments emphasize the interrelation between fishing activities, the marine environment, and biodiversity and the role that RFMOs might play for the effective and integrated regulation of the marine activities and its effects on the ecosystem. The above leads to the following question: what are the limits (if any) of the jurisdiction of RFMOs?

A fourth element identified for the “strengthening” of RFMOs is the cooperation and coordination among RFMOs, and between RFMOs and other international bodies, especially FAO.²²⁷ The coordination and cooperation is viewed as essential for achieving ecosystem-based management, when different RFMOs have jurisdiction over the same area or over the same species; as well as for ensuring the harmonization of the applicable management criteria.

²²⁵ IUCN, Kristina Gjerde, *L20 Manifesto on International Fisheries Governance*, October 2006, at p.1 (available at L20 A Leaders Forum website <www.l20.org/index.php>, L20 Library, International Fisheries Governance) (the document was presented as a conjectural Communique and background paper for discussion at the International Fisheries Governance meeting organized by L20, United Nations University, Centre for Global Studies and the Center for International Governance Innovation, held in Victoria, British Columbia, Canada, October 30-31, 2005); Greenpeace Briefing Paper prepared for the Review Conference on the UNFSA, New York, 22 to 26 May 2006 (available at Illegal Fishing Info website <www.illegal-fishing.info>, Political Processes, UN High Seas Processes, retrieved 31 January 2007).

²²⁶ UNICPOLOS 2006, A/61/56, *supra* note 112, paragraph 90, at p. 22-23.

²²⁷ FAO, Fisheries Report No. 597, *supra* note 197, paragraph 41 i), ii), vii) and viii) at p. 7; UNICPOLOS 2005, A/60/99, *supra* note 181, paragraph 7(b)(iii), at p. 4, and paragraph 19(b), at p. 11; UNICPOLOS 2006, A/61/156, *supra* note 112, paragraph 8(i), at p. 5. See also: paragraphs 79, 80 and 81, at p. 20; UNGA Resolution A/60/31, paragraph 59 at p.13.

Finally, a fifth element considered is the review or assessment of the performance of the regional fisheries organizations.²²⁸ It has been suggested as a voluntary review decided by each RFMO,²²⁹ a global and independent assessment under the responsibility of an existing international organization, particularly FAO or UNGA,²³⁰ or non-State organizations, such as NGOs or private corporations. The establishment of a new global body with review and oversight jurisdiction over all regional and global organizations, among other functions, has also been proposed.²³¹ In either case, the need to establish objective standards for the performance review has been stressed, and work has already been undertaken to identify the proper elements.²³²

Thus, these first “strengthening” elements seek to provide for a global governance regime covering all oceans and marine species. This would be applied nationally through the States, and regionally through RFMOs with the participation of all the interested States, with due consideration to the necessary inter-institutional coordination and linkages, and globally reviewed and assessed.

²²⁸ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 88, at p. 19; UNGA Resolution A/60/31, paragraph 60 at p. 13; UNICPOLOS 2005, A/60/99, *supra* note 181, paragraph 7(c), at p. 5; Report of the High-Level Panel of External Experts in Fisheries held in Rome, Italy, 26-27 January 1998, COFI/99/Inf.11, at p. 16; IUCN – The World Conservation Union, *supra* note 202.

²²⁹ FAO Fisheries Report No. 645. *Report of the Second Meeting of FAO and Non-FAO Regional Fishery Bodies or Arrangements, Rome, 20-21 February 2001* (FIPL/R645). FAO, Rome, 2001, at paragraph 20; and FAO Fisheries Report No. 778. *Report of the Fourth Meeting of Regional Fishery Bodies, Rome, 14-15 March 2005* (FIPL/R778-En). FAO, Rome, 2005, at paragraph 11: “However, a review of the non-FAO RFMOs could only be initiated by the governing councils of the organizations concerned, although FAO may be able to provide assistance in this regard.” (Both documents are available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007). See also: Molenaar, Erik Jaap. “Addressing regulatory gaps in high seas fisheries.(High Seas Fisheries Governance: Moving from Words to Action).” *International Journal of Marine and Coastal Law* 20.3-4 (Nov 2005): 533-570. at p. 551.

²³⁰ See: FAO Fisheries Report No. 780, *Report of the twenty-sixth session of the Committee on Fisheries, Rome, 7-11 March 2005* (FIPL/R780-En). FAO, Rome, 2005, at paragraph 111-113. (Document available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007) The competence of FAO to review FAO regional fishery bodies has been acknowledge (see: FAO Fisheries Report No. 778, *ibid*, paragraph 11 at p.2).

²³¹ IUCN, Kristina Gjerde, *supra* note 225, at p. 2. See also: UNICPOLOS 2006, A/61/156, *supra* note 112, paragraph 93, at p. 23 (although referring in particular to the implementation of the ecosystem approach).

²³² The recommendation was supported by a majority, but no consensus was reached, at the 26th Session of COFI (2005). The development of the standards or objective criteria has faced some difficulties. The 26th Session of COFI did not make any progress on the matter. However, it suggested that an invitation could be extended to RFMO members and other interested parties encouraging them to participate in the development of parameters for any such review process, possibly through an urgent expert consultation followed by a technical consultation. The High Seas Task Force has held a workshop on Measuring RFMO Performance and Flag State Performance Criteria in September 2005. See also: UNGA Resolution A/60/31, paragraph 60 at p. 13.

In this scheme, RFMOs have no true freedom to choose their mandate, objectives, and goals. They have a mandate imposed by international instruments, and objectives, goals and even time-frames imposed and assessed by the international community. Although some aspects might not be clear (yet), the role of the RFMOs is more and more decided by the international community rather than the member States. It seems, therefore, that the calls to strengthen RFMOs are, in reality, calls to strengthen the global fisheries governance system through (or using) the platform or structure provided by RFMOs. The documents and initiatives calling for the development of a ‘model’ RFMO confirm the proposed conclusion.²³³ The initiatives aimed at broadening the jurisdiction of RFMOs to the conservation of the integrity of the marine environment can also be seen as a confirmation of that conclusion. A well known aphorism calls to “think globally and act locally”. Is this a case of thinking and deciding globally and implementing regionally?

1.2. RFMOs and their relationship with members

The first and most important measure suggested to strengthen the RFMOs in respect to their relation to their members is to improve the decision-making process, in both their formal and substantive aspects. It is perceived that the decisions made by RFMOs do not adhere to science, that they lack timeliness, that RFMO members can avoid certain decisions, and that the management decisions adopted are not sufficiently rigorous.²³⁴ From a formal perspective, an effective decision-making process is searched for, which is, *inter alia*, widely accepted by RFMO members, timely and conservation oriented.²³⁵ However, the three criteria are very difficult to meet. The traditional consensus decision-making has the advantage of engaging the support of all States involved, while respecting the overarching principles of sovereignty, independence and equality of all States. As noted by one author, “a

²³³ IUCN proposes: “States should establish an independent panel to develop a model RFMO based on a comprehensive assessment of best practices worldwide, consisting of fisheries management experts and scientist, and taking into account geographic balance and the interest of developing and developed States” (IUCN - the World Conservation Union, *supra* note 202).

²³⁴ Ted L. McDorman. "Implementing existing tools: turning words into actions - decision-making processes of regional fisheries management organisations (RFMOs). (High Seas Fisheries Governance: Moving from Words to Action)." *International Journal of Marine and Coastal Law* 20.3-4 (Nov 2005): 423-457, at p. 425.

²³⁵ *Ibid*, at p. 430.

State does not want to place itself in the position of having to explain to its populations that a decision or obligations is being thrust upon it without the State's consent".²³⁶ However, the consensus-based decision-making process has also been criticized because it often leads to non-timely and insufficient outcomes with respect to conservation: "too little, too late".²³⁷ In other words, it allows the action of few (even one) States to frustrate the conservation efforts and the common interests of the organization and the entire international community. The adoption of complex mechanisms, where consensus or majority is alternatively required according to the nature of the decision, has also been proposed and applied. With these mechanisms, the less-sensitive decisions could be made without the consent of all States concerned.²³⁸ As useful as this approach can be, it does not solve the timeliness and conservation orientation of the 'substantial' or 'crucial' decisions, which are probably not only substantial for the parties, but also for the conservation of the stock.

Finally, the adoption of decisions by a majority or weighted majority has been recommended to properly address the conservation needs. In this case, the consideration of an objection procedure or 'opt-out clause' is also debated. Some authors consider it a way to adopt substantive measures without imposing them on a State that might not be in a position to implement it, either because of practical or legal reasons; and a practical and flexible way to increase conservation and compliance standards within the RFMO. Others consider that its implementation leads to the same undesirable results of the consensus-based procedures, and suggest to either eliminate the opt-out clause of the agreements or to condition it to the invocation of certain grounds and/or the implementation of alternative conservation measures.

It has also been suggested that the objection procedures be linked to dispute settlement procedures respecting an objection, the decision involved and the subsequent action by an objecting State.²³⁹ Another matter related to the timeliness of the decisions is the time needed for the adopted measures to enter into force. Although this aspect has not been widely

²³⁶ *Ibid.*, at p. 426.

²³⁷ *Ibid.*

²³⁸ *Ibid.*

²³⁹ *Ibid.*

addressed, one author identifies long periods of time for conservation and management measures to enter into force, which might be even longer if an objection procedure is triggered.²⁴⁰ Of course, the timeliness of the measure would depend on its nature and the emergency of the situation. Recent declarations support a decision-making process with a majority vote, without opt-out clauses, or with qualified opt-out clauses.²⁴¹ The trend in recent Agreements follows those recommendations. However, whether or not this is considered in the respective agreements, the practice of RFMOs is to seek consensus for the adoption of conservation and management decisions.²⁴²

From a substantive perspective, it has been stressed that the decision-making process must be based on the best knowledge available. And of course, the challenges imposed on RFMOs, and especially the adoption of the ecosystem and precautionary approaches, highlight the need to improve the knowledge and the science on which the decisions are made.²⁴³ As a consequence, another measure suggested is to improve science and to establish clear relations between science and the decision-making bodies. It has been suggested that for this purpose scientific advice must be independent of the member States so as to avoid political bias. The need for reliable and harmonized information has also been stressed.²⁴⁴ Finally, the need to provide for better linkages between the science advisory bodies and the governance bodies has also been highlighted.²⁴⁵ In this respect, it has been suggested that RFMOs should explain any departure between scientifically recommended measures and those actually adopted. Such justifications should be made on an official and public basis by the RFMO, or

²⁴⁰ FAO *Fisheries Circular* No. 995. Swan, Judith. *Decision-Making in Regional Fishery Bodies or Arrangements: The Evolving Role of RFBs and International Agreement on Decision-Making Processes*. Rome, FAO, 2004, at p. 22. Document available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007.

²⁴¹ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 85, at p. 18.

²⁴² McDorman, *supra* note 234.

²⁴³ UNGA Resolution A/60/31, paragraphs 64 and 67 at p. 14.

²⁴⁴ UNGA Resolution A/60/31, paragraphs 65 and 66, at p.14. The FAO Strategy for Improving Information on Status and Trends of Capture Fisheries is the most recent initiative to harmonize the information provided by different States and organizations, allowing for the development of global information tools (see *supra* note 119). Other FAO programmes, such as FIGIS and FIRMS, have the same purpose. In addition, several instruments have highlighted the importance of providing harmonized information on ecosystem indicators, as well as catches and fishing effort.

²⁴⁵ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 87, at p. 18-19.

through a procedure that allows a member of the RFMO to question whether the measure adopted is less rigorous than what is dictated by scientific evidence or advice.²⁴⁶

With respect to the decision-making process, a third measure suggested is to enhance the participation of all the relevant stakeholders, including industry and NGOs, in the RFMO meetings. The recommendation follows the developments of public participation in international environmental law, as recognized in Article 10 of the Rio Declaration: “environmental issues are best handled with the participation of all concerned citizens, at the relevant level”,²⁴⁷ and further elaborated:

This approach rests on the view that environmental protection and sustainable development cannot be left to governments alone but require and benefit from notions of civic participation in public affairs already reflected in existing civil and political rights. At its broadest, it can be represented as the application to environmental matters of arguments for democratic governance as a human right. At its narrowest it is an argument for improving the quality of government and promoting environmental responsibility on the part of the public.²⁴⁸

As has been noted, the exact scope of public participation remains rather vacuous, with a spectrum of possible options entailing different levels of participation, including:

- providing information to the public “if asked”;
- enacting community right-to-know legislation with reports publicly disseminated;
- establishing a community advisory or monitoring committee/council to actively discuss and seek out information;
- establishing mechanisms for the effective participation of the citizens in the administrative proceedings and decision-making processes; and
- broadened standing rules to expand citizen involvement in judicial proceedings.²⁴⁹

²⁴⁶ McDorman, *supra* note 234, at p. 435.

²⁴⁷ Principle 10 of the Rio Declaration adds: “At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.”

²⁴⁸ Birnie and Boyle, *supra* note 3, at p. 261.

²⁴⁹ David VanderZwaag. "The concept and principles of sustainable development: "rio-formulating" common law doctrines and environmental laws." *Windsor Yearbook of Access to Justice* 12 (Annual 1993): 39-80, at p.

The recommendations to enhance stakeholders' participation in RFMOs consider the availability of information regarding the decision-making process and the participation of the stakeholders as observers in the meetings of the parties.²⁵⁰ In that sense, they seek to enhance the transparency of the RFMO. But some suggestions go even further and promote an active participation of stakeholders, especially NGOs, in the decision-making bodies and subsidiary bodies. The standing of citizens in judicial proceedings, however, has not been specifically mentioned for fisheries management, although it has been suggested generally for environmental issues or matters of common concern.

A fourth measure is to provide the RFMO with sufficient financial and human resources to perform the variety of responsibilities assigned.²⁵¹ Finally, it has also been highlighted that the improvement of the decision-making process must be accompanied by the establishment of mechanisms to ensure compliance with, and enforcement of, the conservation and management measures adopted by the member States. Improved monitoring, compliance and surveillance through satellite monitoring systems, onboard observers, and joint inspection schemes, have been proposed for that purpose. Also, the need for the Flag States to consider severe sanctions in their domestic legislation has been pointed out,²⁵² and suggestions have been made for RFMOs to develop sanction schemes in order to enhance harmonized sanctions across the member States.

In sum, analysis of the elements which have been proposed as necessary to strengthen the function of RFMOs demonstrates that the main trend is for a less determinant political role of the single members in the decision-making process. Firstly, the decisions should be based on scientific knowledge and applying the precautionary approach. Secondly, and most importantly, consent is not required for all decisions of the organization; and according to

52. The options derived from Principle 10 (see *supra* note 247). VanderZwaag identifies other options that are, nevertheless, absent from the Rio formulation: alternative dispute resolution mechanisms and co-management approaches.

²⁵⁰ However, some RFMO allow votes to be taken by secret ballot or roll call (See FAO Fisheries Circular No. 995, *supra* note 240, at p. 21).

²⁵¹ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 89, at p. 19.

²⁵² It may be the case that the sanctions of the Flag State are not stringent enough, which would be a demonstration of lack of willingness or lack of commitment to effective management of the high seas fisheries.

some, non-consensus decisions must still be binding to opposing members. In the latter case, RFMOs can assume a supranational character: it is above the will of every individual member State. But even if a more conservative approach is adopted, and opt-out clauses are maintained but with further restrictions, the behavior of the individual member State will be strongly influenced by public exposition and the scrutiny of the international community. The transparency imposed on RFMOs, the participation of representatives of civil society in meetings as members or observers, are mechanisms directed to “expose” States’ behavior. In that sense, it can be argued that it is not the sovereignty of the States which has been affected, but their accountability. States have responsibilities to the international community, and they must fulfill those responsibilities. They can still choose the means, but those means and their effectiveness will be assessed and the State will face the scrutiny of the global community (and the potential shame of not protecting the global interest). What is said in respect to the participation of the State in a RFMO can also be said in respect to the sovereign rights of the State in the conservation and management of the natural resources and the marine environment of the EEZ, and even the natural resources and the environment in the marine and land areas under sovereignty. Although the States have sovereign rights for their exploitation and conservation, they also have the responsibility to conserve the environment for the benefit of humankind, including present and future generations.

1.3. RFMOs and their relationship with non-members

According to the principles enshrined in the LOS Convention, access to the high seas fisheries and the responsibility to conserve the marine living resources are global: it is a right and a duty recognized and imposed on every State.²⁵³ Thus, regime effectiveness depends on the participation of all the parties concerned, which are, at least potentially, all States.²⁵⁴ However, under the traditional principles of law of treaties, a governance mechanism based on a treaty is only binding on its members. Therefore, third States are not bound by RFMOs and by the decisions made by their organs. Non-member States might become free-riders, undermining the conservation efforts of the RFMO members. By doing that, not only the

²⁵³ LOS Convention, Articles 87 and 116.

²⁵⁴ That is the reason for the call to all States with an interest in the fishery to become members of the relevant RFMO. (See p. 35 above.)

interest of the RFMO and its members are affected, but also the interests of the international community in the conservation of natural resources.

This classical approach, and its conclusion, was changed by the provisions of UNFSA. According to UNFSA, where a subregional or regional organization, or arrangement has the competence to establish conservation and management measures for particular straddling fish stock or highly migratory fish stock, the States fishing for the stocks on the high seas and the relevant Coastal States shall give effect to their duty to cooperate by becoming members of such organization or participants in such arrangement, or by agreeing to apply the conservation and management measures established by such organization or arrangement.²⁵⁵ It also provides that all States with a real interest in the fishery may become parties to the RFMO or arrangement.²⁵⁶ Then, it regulates the effects of the membership in the organization or participation in the arrangement: only those States which are members of such an organization or participants in such an arrangement, or which agree to apply the conservation and management measures established by such organization or arrangement, shall have access to the fishery resources to which those measures apply.²⁵⁷ It further provides for enforcement measures taken by a State Party which is a member of a regional organization or arrangement against vessels flying the flag of a State Party to the Agreement, whether or not such State Party is also a member of the organization or a participant in the arrangement. This for the purpose of ensuring compliance with conservation and management measures for straddling fish stocks and highly migratory fish stocks established by that organization or arrangement.²⁵⁸ Finally, Part IX of UNFSA refers to non-parties to the agreement, providing in Article 33 that:

- States Parties shall encourage non-parties to this Agreement to become parties thereto and to adopt laws and regulations consistent with its provisions; and
- States Parties shall take measures consistent with this Agreement and international law to deter the activities of vessels flying the flag of non-parties which undermine the effective implementation of this Agreement.

²⁵⁵ UNFSA, Article 8.3. As stated by Balton, the agreement expands on the “duty of cooperate” found in the LOS Convention Articles by obliging States to “give effect” to that duty in a particular way (Balton, *supra* note 94, at p. 139).

²⁵⁶ UNFSA, Article 8.3.

²⁵⁷ UNFSA, Article 8.4.

²⁵⁸ UNFSA, Article 21.1.

The conference Chairman stated that the

agreement is crafted in such a way that the end result is that no one can fish in the high seas area covered by a regional organization except through the regional organization or by observing the conservation and management rules established by the organization.²⁵⁹

Several scholars noted that UNFSA profoundly innovated on high seas fisheries law and enhanced the regulatory framework to effectively achieve sustainable development of the high seas fisheries: “If widely accepted and properly implemented, the agreement will provide more specific rules by which to regulate fisheries and allocate increasingly scarce living marine resources”.²⁶⁰ Professor Orrego Vicuña seems to have a different opinion in this respect. After explaining that if a State entitled to participate in a regional organization refuses to participate or otherwise comply with the measures adopted by it, the consequence is that it will lawfully be excluded from such fisheries, applying the provisions regarding non-participation and even deterrence measures, he points out that

[w]hether this solution amounts to a denial of the freedom of such states to fish on the high seas, as has been argued, is debatable since the freedom to fish does not mean that it must be unregulated or done in a manner contrary to conservation and rational management. The whole evolution of the law of high seas fisheries has been pointing in this direction and the 1995 Agreement has only made explicit what was already well advanced in international law.²⁶¹

It has been discussed whether UNFSA provides for an objective regime and if it constitutes an exception to the *pacta tertiis* rule.²⁶² It is clear that the management regime set by RFMOs are ‘objective’ to the parties of UNFSA; the measures adopted by these organizations are

²⁵⁹ Statement by Ambassador Satya N. Nandan on “The United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks and its potential impact on Pacific island tuna fisheries,” Conference on Achieving Goals for Sustainable Living in the Aquatic Continent, Hawaii, 19-23 September 1995, as cited by Orrego Vicuña, *supra* note 8, at p. 209.

²⁶⁰ Balton, *supra* note 94, at p. 126.

²⁶¹ Orrego Vicuña, *supra* note 8, at p. 209.

²⁶² *Ibid*; Rosemary Rayfuse, *The United Nations Agreement on Straddling and Highly Migratory Fish Stocks as an Objective Regime: a Case of Wishful Thinking?* (1999) 20 Australian Year Book of International Law, p. 253-278; Erik Franckx, *Pacta Tertiis and the Agreement for the implementation of the Straddling and Highly Migratory Stocks Provisions of the United Nations Convention on the Law of the Sea*, (2000) 8 Tulane Journal of International and Comparative Law, p.49-81.

binding to the parties of UNFSA, even when not parties to that particular regime. “Signature and ratification of the FSA therefore constitutes a state’s specific consent to be bound by obligations in a treaty (establishing an RFO) to which it may not be a party”.²⁶³ Whether the provisions of UNFSA do apply to non-parties has been debated. Most authors conclude that the management measures adopted by a regional organization are not binding to non-members of that particular regime that are also non-parties to UNFSA:

[n]ot all States are obliged to comply with the conservation measures of RFMOs - only those that are members of the RFMO in question, or parties to UNFSA. Other states, if they so wish, may remain in non-compliance as long as that does not conflict with duties they have accepted or are bound to under general international law.²⁶⁴

This conclusion provides insight into the lack of participation in UNFSA. To date, 63 States have ratified the Agreement,²⁶⁵ demonstrating the failure of international law to address issues of global concern. As stated by Rayfuse,

the FSA also constitutes recognition of the need for a new approach and a response to a ‘change in paradigms’. It appears that while there may be significant, indeed, *prima facie* overriding, reasons of principle to rebut the application of the general third party rule, state practice to date does not adequately support this conclusion. Nevertheless, there is no reason why it might not, some day, come to do so.²⁶⁶

²⁶³ Rayfuse, *ibid*, at p. 259. FSA refers to UNFSA.

²⁶⁴ Olav Schram Stokke and Davor Vidas, *Regulating IUU Fishing or Combating IUU Operations?*, in OECD, *supra* note 181. Moritaka Hayashi shares this opinion: “The Agreement also affects the freedom of high seas fishing by excluding from fishing those states that are not members of, or do not cooperate with, regional fisheries organizations. This clearly constitutes a further limitation of the freedom of fishing as laid down in the LOS Convention. It is obvious, however, that this provision does not apply to non-parties to the Agreement. Nevertheless, states parties to the Agreement have the duty to take measures to deter the activities of the vessels of states non-parties and which undermine the effective implementation of the Agreement. Therefore, states that are not parties to the Agreement in practice may expect to face difficulties unless their vessels abide by the conservation and management measures prevailing in the region concerned.” (Moritaka Hayashi, *The Straddling and Highly Migratory Fish Stocks Agreement*, in Hey (ed.), *supra* note 71). See also: Rayfuse, *supra* note 262; Molenaar, *supra* note 208.

²⁶⁵ Information provided in the DOALOS website, <www.un.org/Depts/los/index.htm>, Convention and Agreements, retrieved 30 January 2007.

²⁶⁶ Rayfuse, *supra* note 262, at 278. FSA refers to UNFSA. In addition to the States’ consent to be bound by the provisions of UNFSA, the Agreement has other constraints in its application: it applies only to straddling or highly migratory fish stocks. According to this argument, for all other species that can be fished in the high seas, and all the non-parties to UNFSA, the loose provisions of the LOS Convention are the only rules for fishing activities in the high seas.

The analysis of recent developments might show that this day is closer. Professor Orrego Vicuña states:

the fact that a state may decide not to become a party to the 1995 Agreement does not necessarily mean that some of its provisions might not reach him in any event. This can happen first by means of the interpretation of the Convention on the Law of the Sea in respect of states parties to it; since the 1995 Agreement has been made in implementation of this Convention and the legal interactions between these two instruments are so closely related, it will be difficult in practice to dissociate the provisions of the 1995 Agreement from the interpretation of Articles 63, 64 and others that are relevant to high seas fisheries.²⁶⁷

Indeed, if there is a regional regime established to protect and conserve fish stocks which includes all relevant concerned States, and if the regime actually sets binding regulations for its members limiting their fishing activities, is it lawful for a third State to fish for that stock in the regime area without taking the regime into account? Common sense, equity principles and, more importantly, provisions of the LOS Convention do answer that question: it is not lawful. The behavior of third States is breaching the duty to cooperate as prescribed by the LOS Convention and recognized as customary international law. DOALOS confirms this interpretation noting that:

[i]n fact, it is difficult to see how a new entrant that refused to comply with an arrangement properly established in accordance with the Convention could claim a right to fish the stock in question or to fish in the area to which the conservation arrangement applies.²⁶⁸

Professor Orrego Vicuña continues the argument stating that:

the relevance of the 1995 Agreement in respect of non-parties may also be found in the eventual operation of customary international law. To the extent

²⁶⁷ Orrego Vicuña, *supra* note 8, at p. 214.

²⁶⁸ DOALOS, *supra* note 10, at p. 28. It must be noted, however, that DOALOS was referring to “conditions” for new entrants necessary according to proper conservation and management measures, and provided that they did not contravene the non-discriminatory provision of Article 119(3). It can be argued if a measure excluding new entrants from the fishery but allowing the activity for the members is non-discriminatory. The negative answer is implied in the following paragraph, which gives the example of a moratorium on fishing which would have to be observed by all States, including the member States, unless the new entrant could establish that the moratorium was a measure that could not be justified under Article 119 of the LOS Convention.

that some of its provisions, or even some of the related provisions of the Convention, might become rules of customary international law, they shall be applicable independently of these instruments.²⁶⁹

Indeed, the practice of States, RFMOs, and international organizations, in this regard, has been profuse and consistent in recent years, as can be observed by analyzing the international instruments and political declarations of recent years.

Article 7 of the 1995 FAO Code of Conduct refers to the management of transboundary fish stocks, straddling fish stocks, highly migratory fish stocks, and high seas fish stocks, where these are exploited by two or more States. It reiterates the duty of the relevant States to cooperate to ensure effective conservation and management of the resources, and the need to establish, when appropriate, a bilateral, subregional or regional fisheries management organization or arrangement for this purpose. It also reiterates the need for the relevant States to discharge the cooperation duty by becoming members of existing organizations or participants in the arrangement, using the same language as Article 8(3) of UNFSA. Finally, it adds that non-members should nevertheless cooperate in the conservation and management of the relevant fisheries resources by giving effect to any conservation and management measures adopted by such organization or arrangement. However, it does not reiterate the effects of non-participation, as prescribed in the UNFSA.

The 2000 IPOA-IUU defines illegal, unreported and unregulated fishing in Article 3. According to paragraph 3.3 unregulated fishing refers to fishing activities:

in the area of application of a relevant regional fisheries management organization that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization;²⁷⁰ or

²⁶⁹ Orrego Vicuña, *supra* note 8, at p. 214. Balton also argues that “the agreement elaborates on a framework of obligations built by the 1982 Convention that are generally accepted as reflecting customary international law. In time, perhaps soon, the provisions of the agreement may themselves achieve the same status”. (Balton, *supra* note 94, at p. 140).

²⁷⁰ IPOA-IUU, paragraph 3.3.1.

in areas or for fish stocks in relation to which there are no applicable conservation or management measures, and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.²⁷¹

Considering that the Article does not refer to States Party to UNFSA, nor applies exclusively to highly migratory and straddling stocks, it might be considered that, disregarding those circumstances, any fishing activity not respecting the conservation measures established by a regional organization is unregulated and therefore irresponsible and contrary to international law. However, the IPOA-IUU adds immediately afterwards that “notwithstanding paragraph 3.3, certain unregulated fishing may take place in a manner which is not in violation of applicable international law, and may not require the application of measures envisaged under the IPOA”.²⁷² It does not clarify, however, which are those certain unregulated fishing activities compatible with applicable international law. It must be noted that activities taking place “in the area of [...] a relevant regional fisheries management organization that are conducted by vessels [...] flying the flag of a State not party to that organization [...] in a manner that is not consistent with or contravenes the conservation and management measures of that organization” are qualified in the IPOA as ‘unregulated’, but not ‘illegal’ activities. However, there are no practical consequences of that distinction: both are generally considered activities in violation of applicable international law (where the exception is not addressed or defined) and the measures that might be adopted against them are the same.

The 2006 Final Report of the High Seas Task Force defines illegal, unreported, and unregulated fishing in the high seas in a less legalistic manner. For the Task Force, IUU activities include:

- Fishing in violation of international laws and obligations;
- Fishing of high seas fish stocks where there are no formal management arrangements in place but which is in contravention of the broader responsibilities of States under the law of the sea to conserve and manage the marine living resources of the high seas;
- Fishing conducted by vessels without nationality, or by those flying the flag of a State not party to a relevant regional fishery management organization (RFMO), or by a fishing

²⁷¹ IPOA-IUU, paragraph 3.3.2.

²⁷² IPOA-IUU, paragraph 3.4.

entity, in a manner inconsistent with, or which contravenes, the conservation and management measures adopted by the RFMO or broader international obligations;

- Fishing conducted by nationals of or vessels flying the flag of States that are parties to a relevant RFMO in contravention of the conservation and management measures adopted by that organization or relevant provisions of the applicable international law; and
- Fishing, including fishing within the area of a RFMO, which has not been reported, or has been misreported, to the relevant national/international authorities, in contravention of international laws and regulations.²⁷³

It is important to note that the High Seas Task Force definition does not include any reference to the ratification of UNFSA, nor applies exclusively to the highly migratory and straddling stocks; nor does it contain a clause similar to the provision found in the IPOA-IUU. Thus, the evolution of the concept as interpreted by the international community seems to extend the effects of regional fisheries management organizations to all States, irrespective of UNFSA ratification and their consent to be bound by those measures. This conclusion seems to be ratified by a series of political declarations calling upon the Flag State to make sure that their vessels comply with the conservation and management measures adopted by subregional or regional fisheries management organizations, and that non-cooperating States should abstain from fishing in the RFMO areas.²⁷⁴ It is beyond the scope of this paper to establish if State practice with respect to those instruments is sufficient to originate customary international law.

The conceptual development would be of little significance if it were not accompanied by practical measures to give effect to those concepts. In other words, the evolution of the concept would be of little significance if, in practice, there were no mechanism to ensure compliance with conservation and management measures adopted by a RFMO by non-cooperating non-members, or even enforcement mechanisms. A first means to pursue the responsibility of the non-cooperating States would be by referring to International Tribunals. However, member States will not be able to seek a binding dispute settlement procedure

²⁷³ High Seas Task Force (2006). *supra* note 81, Appendix 1 Box B, at p. 95.

²⁷⁴ Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, paragraph 76; UNGA Resolution A/60/31; UNGA Resolution A/59/25; FAO Fisheries Circular No. 959. Swan, Judith. *Regional fishery bodies and governance: issues, actions and future directions*. FAO, Rome, 2000, at p. 26 (Document available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007).

without the consent of the un-cooperative third State. And even if the consent of the State is given, either in a global declaration (such as UNCLOS or the compulsory jurisdiction of the ICJ) or for the specific case, it must be taken into account that the legally binding character of conservation and management measures adopted by RFMOs for non-members, non-parties to UNFSA, is a debatable issue. This even considering the developments of soft-law instruments outlined above. On the other hand, the provisions regarding enforcement, boarding and inspection set in UNFSA are, unarguably, only binding on UNFSA parties.²⁷⁵ Therefore, the un-cooperative Flag State is the only State with the right to board, inspect and enforce applicable law on vessels flying its flag (see table 1).

However, the application of unilateral measures consistent with international law might be sufficient to deter the fishing activities of non-members. Port State measures and market-based measures have risen as the principal mechanism to fight the non-compliant activities of non-cooperating non-members. There has been a call for RFMOs to strengthen the measures, and particularly Port State measures and market measures, against unregulated fishing. Unregulated fishing is understood as any fishing activity by non-members and non-cooperating States or fishing entities.²⁷⁶

The first measure suggested is for RFMOs to apply the Model Scheme on Port State Measures to Combat Illegal Unreported and Unregulated Fishing. Some calls have been made to adopt the FAO Port Model Scheme as a binding measure through a global agreement. The second measure suggested is for RFMOs and States to apply certification schemes and market-based measures. In recent years, it has been suggested that CITES may be used as a tool to fight IUU. FAO has addressed the inclusion of commercially-exploited marine living resources in CITES Appendices through several working groups and expert panels, and has recently signed a Memorandum of Understanding with CITES under which FAO and CITES will review and consult together on the scientific, legal, and technical

²⁷⁵ If the State is party to UNFSA, and the regime applies to highly migratory or straddling stocks, the members of a RFMOs have jurisdiction to board and inspect the vessel, but the Flag State remain responsible for investigation and enforcement of the presumed illicit activity, but the Flag State can at any time assume the charge and responsibility of prosecuting the infraction and apply the sanctions provided for in the domestic legislation (See table 1).

²⁷⁶ *High Seas Task Force (2006)*, *supra* note 81, at p. 64.

evaluation of commercially exploited aquatic species listed, or proposed for listing, in the CITES Appendices.

In summarizing the strengthening elements of RFMOs in respect to non-parties, it is clear that the trend is to recognize measures adopted by RFMOs as binding for all States, irrespective of their participation in the RFMO. As stated by one author, “only those who play by the rules may fish”.²⁷⁷ That goal is considered in UNFSA, but has also been developed through unilateral State practice, either as a Port State or as import State. Civil society, as a consumer, is also expected to play an important role in deterring unregulated fishing activities. It must be noted however that market-based measures might be easier to implement and have more possibilities to be effective when the fish stock is highly valuable, traceable and destined to high income markets. Tunas, cod, and Patagonian toothfish are examples of this situation. Its success in relation to small pelagic species, or their products, is probably less evident because the traceability is lower and their target markets are mostly developing States whose markets are generally less concerned about such issues.²⁷⁸

The system developed through both multilateral agreements and unilateral practices leave a key question unresolved: why are the RFMOs, and the States members of RFMOs, entitled to impose on other States rules under which they can fish in the high seas, and even whether they can fish in the high seas?

1.4. A new role for RFMOs?

The analysis of the initiatives to “strengthen’ RFMOs, as outlined above, reflect the ongoing efforts of the international community to achieve an effective governance regime for the high seas fisheries. This effort timidly started with the 1958 Geneva Convention, experienced a big shift with the LOS Convention, and further development with UNFSA and recent international environmental instruments. High seas fisheries governance seems to be at a crossroads, the outcome pending on how the States implement and empower RFMOs. Three

²⁷⁷ Balton, *supra* note 94.

²⁷⁸ Small pelagic fish is processed as fish meal, where the origin of the species and the species itself can not be identified.

different outcomes may be identified, where RFMOs perform a different role in the new era of international fishery governance: internationalization, accountability, and creeping jurisdiction.

The more innovative recommendations lead to a new form of ‘internationalization’ of the high seas fisheries, characterized by a prominent role of global standards and practices, the implementation of which is entrusted to regional organizations. The regional organizations are formed by States (Coastal States and fishing States) but also other relevant international actors, and the influence of each individual State in the cooperative effort is diminished: the RFMOs are expected to act in accordance with the global standards, and not with the individual will or particular interest of the member States. The mandate of RFMOs generally includes the protection of the marine environment and biodiversity, and the will of an individual State cannot stop the action of the organization. Enforcement measures are applied by the RFMO directly, or through the action of States implementing measures agreed in the respective agreements, or through unilateral measures. The work of the RFMO affects not only parties to it but also non-participants. In such a scheme, RFMOs are more than an instance to coordinate and conciliate the (economic) interests of fishing States, but are ‘trustees’ or stewards for the protection of the marine environment and its living resources, acting on behalf of the international community, including the interest of future generations. As trustees or stewards, they are responsible to the international community for their actions, and they also have a benefit to compensate for this burden: the exclusive exploitation of the resource.

The action of the RFMO, according to this first scheme, would only be valid if the RFMO actually follows the global rules and standards, which is not necessarily the case.²⁷⁹

²⁷⁹ It is worth noticing that the document “Regional Fishery Organizations or Arrangements as vehicles for good fishery governance”, presented at the Meeting of FAO and non-FAO Regional Fishery bodies or Arrangements, held in Rome Italy, 11-12 February 1999, stressed the need for the States to “act in good faith recognizing that the regional governance needs might not always be precisely congruent with national aspirations and goals.” (FAO Fisheries Report No. 597, *supra* note 197, Appendix G). The reference is made in relation to compliance by member States, but can also be regarded as a need to better understand the importance of the global goal of long-term sustainability. Erik Jaap Molenaar, in respect to measures adopted against a non-member of a RFMO, states that “it should be noted that the above line of reasoning does not hold if the non-participant wants in fact to participate in the RFMM but this is denied despite the presence of a “real interest”. The legitimacy of the measures with which it is faced would in that case be debatable.” (Molenaar, *supra* note 208, at p. 492 note 69)

Furthermore, the ‘global’ standards and principles should be set by the international community in the interest of the present and future generations, considering the benefit of all and every State, nation and community. But is that the case? In the current hyperactive and productive proliferation of guidelines and recommendations, whose interests are being protected?

Another interpretation of the process lies in realizing that the governance regime has not changed dramatically from the regime prescribed by the LOS Convention and the Law of the Treaty, and that the sovereign, independent and equal States are still called to collectively conserve the high seas fisheries resources through international instruments, binding on their members. The only difference is that the international community is now demanding compliance with, and implementation of, the duties and responsibilities assumed by States while signing and ratifying multilateral and regional agreements, or imposed on them through customary international law. The key elements, according to this interpretation would be the transparency of the RFMOs, the broad participation of non-members and non-State actors in the meetings of the parties, the assessment of performance, and the political, economic and ‘shame’ measures that can be adopted against States perceived as ‘non-compliants’.

The last perspective is to realize that, despite the efforts of environmentally conscious States, non-State organizations and the public, States are not willing to give away the powerful tools given to them by international law and the LOS Convention – and the opportunity to take a share in the exploitation of the already overexploited fishing resources – not even to achieve an objective that would be, in the long term, to their own benefit and the benefit of their children. The evolution of fisheries governance is then lead by power, and the current process is just a new form of ‘creeping jurisdiction’ or enclosure of the oceans: member States of a regional organization adopt measures that suit their own economic interest, exclude non-members from the fishery because they are in the situation to do so, and are willing to cooperate only if the negotiation benefits their own interests. If not, freedom to fish prevails

Therefore, he recognizes the need for the RFMO to act in accordance to the standards and rules set in international instruments.

as the unbeatable principle of international fisheries law. Despite the strong calls, patchwork of initiatives and isolated success stories, the tragedy of the commons will remain a tragedy.

Which road lies ahead for fisheries governance remains to be seen.

2. RFMOs and allocation: the Achilles tendon

The high seas fisheries regime has emerged from 25 years of development through a network of different international instruments. It has been stated that the existent international instruments and standards provide strong tools for the responsible and sustainable management of high seas fish stocks (including highly migratory, straddling and discrete stocks), and that the high seas regime only require the effective implementation of those instruments.²⁸⁰ However, implementation has proven hard to achieve and the results, so far, are insufficient. It is true that the implementation of various principles is not an easy task: they require more data, better understanding of the scientific processes and the relationships among the different species and between species and the ecosystems, high levels of technical capacity, sophisticated monitoring, control and surveillance systems, etc. However, the analysis of the current framework reveals that legal instruments do not address, or address only in broad terms, two key components of the cooperation process: the establishment of a new regime, and the allocation of fishing rights. And as will be proposed, those two aspects are actually manifestations of one issue: distribution of wealth, or the answer to the question: who gets the fish?

2.1 Establishing a RFMO: the inertia point

The high seas governance regime described above is constructed around RFMOs, which are envisaged as the vehicle to enhance cooperation among relevant States for the implementation of the regime. However, the regime still does not address the problem of how to make States cooperate in the first place; or why and how to establish new RFMOs. It might be thought that the problem is more theoretical than practical because of the wide

²⁸⁰ FAO Fisheries Report No. 780, *supra* note 230.

existence of regional bodies. However, only 19 of these actually have a mandate to establish conservation and management measures, and these 19 bodies do not cover all areas or all the species of the oceans. In addition, advances in technology and the need to find new sources of food will probably enable us to exploit new or undiscovered species. Therefore, the need to establish new regional bodies may be due to the exploitation of existing fisheries not covered by RFMOs, new species in an area not covered by RFMOs, or new species in an area covered by RFMOs.

The first two situations present the same difficulty: a regime must be established where none exists. In such a situation, the evolution of the high seas fisheries regulation does not provide for any element that facilitates the negotiation process; the legal obligation exists, and all the political declarations urge the States to cooperate effectively in establishing regional bodies to fill the regulatory gaps, but enforcement is practically impossible.

UNFSA provisions related to the establishment of new RFMOs repeat the LOS Convention's provisions, and add some guidelines. It prescribes that States shall make every effort to agree on compatible conservation and management measures within a reasonable period of time,²⁸¹ but does not define 'reasonable period of time'. If no agreement is reached, the only door open to the States is to resort to the dispute settlement procedure. UNFSA adds that, pending agreement, States shall make efforts to enter into provisional arrangements of practical nature.²⁸² However, those practical arrangements again rely on the consent of the parties concerned and therefore the political will, unless one of the parties resorts to the international courts and tribunals for their establishment. "No agreement, no management"²⁸³ is the underlying principle.

With respect to new fisheries, UNFSA provides that

²⁸¹ UNFSA, Article 7(3).

²⁸² UNFSA, Article 7(5).

²⁸³ William T. Burke, *Trends in International Law for High-Seas Fisheries Management*, in Ellen K. Pikitch, Daniel D. Huppert and Michael P. Sissenwine, (eds.), *Global trends: fisheries management*. Proceedings of the Symposium Global Trends, Fisheries Management, held at Seattle, Washington, USA, 14-16 June 1994, (American Fisheries Society, 1997) at p. 52.

States shall adopt as soon as possible cautious conservation and management measures, including, *inter alia*, catch limits and effort limits. Such measures shall remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the long-term sustainability of the stocks, whereupon conservation and management measures based on that assessment shall be implemented. The latter measures shall, if appropriate, allow for the gradual development of the fisheries.²⁸⁴

However, once again, the effective implementation of conservation measures relies on the will of the States. “No agreement, no management.”

One incentive for the establishment of a RFMO might be implicit in the current evolving governance regime: the distributional effect of establishing a RFMO. As has been analyzed in the previous section, according to Article 8(3) of UNFSA and the current developments in soft law, only States members of a RFMO, or otherwise applying the measures adopted by the RFMO, may have access to the fishery. Participation in, or compliance with, a RFMO has therefore the effect of allocation of fishing rights: only those who “play by the rules” may fish. Establishing a regional organization will then allow, or at least facilitate, the ‘exclusion’ of States not participating in the cooperative effort. If fisheries regulation, including both conservation and exploitation, will be in hands of the first States exploiting the fishery and establishing a RFMO, there is an evident incentive in establishing that RFMO.

However, as has been analyzed in a previous section,²⁸⁵ the effects of RFMOs on non-members are debatable. In addition, the regime also does provide for incentives to delay cooperation. In the first place, States participating in the negotiation process (either because they are Coastal States, or because they fish another stock concerned), may be willing to delay the negotiation process while they build a fishing fleet that allows them to participate in the fishery. Secondly, any State (participating or not in the fishery) may be willing to delay the negotiation process while it increases its fishing catches, and therefore increases its share in the stock once the regime is established and the allocation criteria is adopted. The selfish economic interests of some States make the negotiation process harder and promote an ‘Olympic run’ to fish, with potentially severe effects for the stocks.

²⁸⁴ UNFSA, Article 6(6).

²⁸⁵ See: Part I, Section 2, at 1.3.

The situation of the regulation of new species in an area covered by a RFMO presents, in general, the same constraints mentioned above. However, the negotiation processes can be facilitated because of the existence of a negotiation forum with the participation of the relevant States. The implementation of the ecosystem approach may justify the involvement of the existing RFMO.

Unless a good incentive for regulation is established, the process of creating a RFMO will probably be unsuccessful or delayed resulting in substantial damage of the stocks. The dispute settlement procedure is, apparently, not a suitable solution for the States. The international community has proposed a few other options for the development of a governance regime with respect to unregulated, new or exploratory fisheries. The extension of the jurisdiction of the Coastal State, especially in the case where no agreement can be reached, has been extensively discussed during the LOS Convention and UNFSA negotiations, and it has been widely rejected as an option. Some recent proposals argue in favor of the establishment of an international organization, which would have as a primary function to assess the performance of existing RFMOs, but would also have competence to regulate any unregulated fishery pending the establishment of the proper RFMO.²⁸⁶ Moratoria on specific harmful activities have been proposed and even adopted by the UNGA forum.²⁸⁷ However, drastic measures will probably not be accepted as a general rule. The precedent of the latest UNGA Resolution A/61/105 may constitute a more balanced and therefore feasible approach. The Resolution adopts a preventative approach and requires States to refrain from certain activities until proper regulation is established. Thus, the development of the fishing activity requires, first, the existence of a competent organization or arrangement, which constitutes a clear incentive for its establishment, where none exists. The preventative approach can be further developed to require mandatory development of an Environmental Impact Assessment for new fisheries, as has also been proposed; or the

²⁸⁶ IUCN Conjectural Communiqué presented at the L20 Conference on International Fisheries Governance, held in Victoria, British Columbia, Canada, October 2006.

²⁸⁷ See: UNGA Resolutions A/44/225 and A/45/197, and UNGA Resolution 61/105. See also: Section 1, 2.1 above.

maintenance of the current fishing efforts until proper assessments are undertaken. None of these solutions is an easy task in the international political fora.

2.2. Allocation of fishing rights among members of a RFMO

At the heart of the UNCLOS III negotiations was the fundamental principle of equity among States in the exploitation of natural resources and the distribution of the ocean's wealth. The establishment of an EEZ and, most importantly, the concept of the common heritage of mankind, were envisaged as mechanisms to achieve not only formal but also real equality among developing and developed States. The principle of equity also lies at the heart of environmental law, which is present in the concept of sustainable development considering both intergenerational and intra-generational equity.

Those principles were not explicitly addressed for the high seas fisheries regime. In this respect, the LOS Convention recognizes formal equity among States providing that “the high seas are open to all States, whether coastal or land-locked”²⁸⁸ and that “all States have the right for their nationals to engage in fishing on the high seas”.²⁸⁹ It further states that, in the establishment of conservation and management measures for the living resources of the high seas, States concerned shall ensure that they do not discriminate, in form or in fact, against the fishermen of any State.²⁹⁰ However, as discussed above, States have also the duty to cooperate, i.e. to act collective action, in the management and conservation of high seas stocks; and responsible management of high seas stocks require restriction of access. Therefore, in their cooperative efforts States must address the question of who gets what – the allocation of fishing rights.²⁹¹

As discussed above, the LOS Convention does not provide much guidance in this respect. Other international instruments, and particularly UNFSA, provide more insights into the

²⁸⁸ LOS Convention, Article 87(1).

²⁸⁹ LOS Convention, Article 116(1).

²⁹⁰ LOS Convention, Article 119(3).

²⁹¹ For the purposes of this paper, allocation of fishing rights includes the right to participate in the fishery, effort control mechanisms (restriction of number of vessels, size of vessels, periods for operation, etc.), and catch control mechanisms, i.e., national quotas.

questions. According to the LOS Convention, the regional organizations are to be established by Coastal States and States fishing in the high seas.²⁹² UNFSA reaffirms those provisions and further adds that States having a ‘real interest’ in the fisheries concerned may become members of such organizations or participants in such arrangements, and that the terms of participation in such organizations or arrangements shall not preclude such States from membership or participation; nor shall they be applied in a manner which discriminates against any State or group of States having a real interest in the fisheries concerned.²⁹³ In addition, all States have to discharge their duty to cooperate by becoming members of a RFMO, or otherwise applying conservation and management measures adopted by that RFMO. Therefore, a State willing to exercise the “freedom to fish in the high seas” should comply with the regulation set by the competent RFMO, and moreover apply for membership. And further, States that are not members of a RFMO or do not comply with the management and conservation measures adopted by the RFMO shall restrain from fishing for the stock and in the area regulated by that organization.

The provisions of UNFSA provide for a first allocation of fishing rights: only members of the RFMO may fish. The entitlement to participate in a RFMO (i.e., the criteria for this first allocation) relies on the concept of ‘real interest’, which is subject to various interpretations and has raised several controversies. In addition, it is questionable whether the criterion applies only to UNFSA parties, or more generally. Both aspects have been analyzed in another section of this paper. In addition, it has been mentioned that this first allocation decision constitutes a challenge for the establishment of new RFMOs.

Nevertheless, establishing the right to participate in the RFMOs does not preclude conflicts regarding allocation of fishing rights among members of RFMOs: we know the ‘who’, but we still don’t know the ‘what’.

²⁹² LOS Convention, Articles 63, 64 and 118. This is also an argument to limit the concept of ‘real interest’ to fishing States, excluding States willing to participate in the fishery (which should be treated as new entrants) and States with non-fishing interest in the fishery or the marine environment.

²⁹³ UNFSA, Article 8(3).

It is generally accepted that the LOS Convention provides little guidance for the allocation of fishing rights. According to some authors, criteria for allocation is to be found in Article 116(b), which establishes a ‘special interest of the coastal State’, and in Article 119(1), which recognizes ‘fishing patterns’ as one element to be considered in the establishment of conservation and management measures. The implications of these Articles, especially Article 116(b) are arguable. It is also generally accepted that UNFSA further develops allocation criteria in its Article 7, by adding the geographical distribution (i.e. zonal attachment) and fisheries dependency as criteria for establishing compatible management and conservation measures.²⁹⁴ A FAO Expert Consultation on the management of shared fish stocks held in 2002 concluded that up to now historical catches and zonal attachment have been the prime allocation criteria.²⁹⁵ To establish zonal attachment, different factors have been identified: spawning areas, distribution of egg and larvae, occurrence of juvenile and pre-recruit fish, occurrence and migration of the fishable part of the stock, history of the fishery including the distribution of catch and rate of exploitation and fishery regulation, and the state of exploitation of the stock.²⁹⁶

As outlined below, it is also recognized that due consideration has to be given to developing States while establishing conservation and management measures, including the allocation of fishing rights. UNFSA stipulates, generally, that States must recognize the special requirements of developing States in relation to conservation and management of highly migratory and straddling stocks. In particular, they must take into consideration the vulnerability of developing States which are dependent on the exploitation of living marine resources (including for meeting the nutritional requirements of their populations) and ensure access to fisheries by subsistence, small-scale and artisanal fishers, women fishworkers, and indigenous people in developing States, particularly small island developing States.²⁹⁷

²⁹⁴ Hoel and Kvalvik, *supra* note 66, at p. 350; J.F. Caddy. “An objective approach to the negotiation of allocations from shared living resources.” *Marine Policy* 20.2 (1996): 145-155, at p. 146-148.

²⁹⁵ FAO Fisheries Report No. 695. *Report of the Norway-FAO Expert Consultation on the Management of Shared Fish Stocks, Bergen, 7–10 October 2002*. FAO, Rome, 2002, available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007 (see: p. 9 and 10). See also: Hoel and Kvalvik, *supra* note 66, at p. 351.

²⁹⁶ Factors identified by ICES (1978), as cited by FAO Fisheries Report No. 695, *ibid*, at p. 9; and as cited by Hoel and Kvalvik, *supra* note 66, at p. 351.

²⁹⁷ UNFSA, Article 24(1) and 24(2)(a) and (b).

Political declarations of recent years also highlight the need to recognize the special requirements of developing States, and specially developing Small Island States in the conservation and management of high seas fish stocks.²⁹⁸

Also suggested, especially as supplementary criteria, are conservation efforts (fishing capacity control or reduction efforts, restocking, restoration of critical biological habitats, or cleanup of pollutants, where appropriate),²⁹⁹ engagement in research,³⁰⁰ and engagement in monitoring, control, and surveillance.³⁰¹ The pertinence of including negative factors, such as rates of discharge, has also been proposed as supplementary criteria. It has been also highlighted that the utilization of these supplementary criteria constitutes an incentive to unilateral responsible fishing practices and environmentally friendly behavior, because they would be reflected in the allocation process.³⁰² Furthermore, it has been proposed that allocation should be based on the costs of proper stewardship of the resource and the aquatic environment spelled out at UNCED and in Agenda 21, rather than just current fleet capacity and historical catch record.³⁰³

Useful as the allocation criteria are, and despite the attempts to develop a more specific, scientific and objective system for allocation, it must be recognized that allocation of fishing rights for the high seas stocks is, in essence, a power issue. The definition of which one or more criteria should be used to allocate fishing rights, the weight given to each criteria, as well as the relative value for each party that each factor implies, are to be settle by the participants in a negotiation process where ‘realpolitik’ cannot be avoided.³⁰⁴ The development of precise and binding criteria for allocation would imply a new decision on wealth distribution, an exercise that the international community refused to undertake in respect to high seas fisheries in 1982, and doesn’t seem ready to do now.

²⁹⁸ UNGA Resolution A/61/105, paragraphs 20 and 21 at p. 8; Review Report of the Review Conference, A/CONF.210/2006/15, *supra* note 165, Annex Outcome of the Review Conference, paragraph 32(i), at p. 37. See also: FAO Fisheries Report No. 695, *supra* note 295, p. 10-11 and 13.

²⁹⁹ Caddy, *supra* note 294, at p. 147-149; Olivier Thébaud. “Transboundary marine fisheries management. Recent developments and elements of analysis.” *Marine Policy* 21.3 (May 1997): 237-253, at p. 246.

³⁰⁰ Caddy, *ibid*, at p. 148.

³⁰¹ Caddy, *ibid*, at p. 148 and 152.

³⁰² Caddy, *ibid*, at p. 148-149.

³⁰³ Caddy, *ibid*, at p. 146.

³⁰⁴ Caddy, *ibid*, at p. 151.

It must be noted that the allocation process for straddling stocks presents additional difficulties. In fact, the process comprises two stages: the “determination of the stock components at the high seas, as well as the distribution of the high seas portion of the stock between states.”³⁰⁵ Thus, it might be considered that the sovereign rights of the Coastal State to adopt and implement management measures in its EEZ is withdrawn or reduced. In this respect, scholars consider that the problems are endorsed with the principle of compatibility established in Article 7 of UNFSA:

while safeguarding the interests of both the coastal State and the high seas, the principle of compatibility ensures that the measures adopted by the coastal State will not be applied as such on the high seas, and conversely that those devised for the high seas will not be applied as such in the EEZ. It is rather a question for each of these two ambits to take into account the measures adopted by the other, thus ensuring comparable or similar management criteria with a view to avoiding imbalances in a system that is considered as a whole.³⁰⁶

It has been further stated that:

[d]iscretionary fisheries decisions by the coastal state are not affected by the Agreement, either generally or in determining total allowable catches; nor can these decisions be subject to compulsory dispute settlement in the light of Article 297(3) of the Convention and Article 32 of the Agreement.³⁰⁷

Despite the legal disclaimer of sovereign rights, the fact is that if the Coastal State participates in the management regime, and therefore participates in the gathering of scientific data and research and in the discussion of proper levels of allowable catches, and in the proportion of those catches that should take place in the high seas, indirectly it is also agreeing in the total allowable catch that should be established for the EEZ. Therefore, albeit not legally accountable, it will be politically accountable to its partners and the international community as a whole.

³⁰⁵ Hoel and Kvalvik, *supra* note 66, at p. 350.

³⁰⁶ Francisco Orrego Vicuña. “The Law Governing High Seas Fisheries: In Search of New Principles.” *Ocean Yearbook* 18: 383-394, at p. 388.

³⁰⁷ Orrego Vicuña, *supra* note 152, at p.36.

Finally, it must also be noted that the allocation of quotas or fishing rights is not the only decision with distributional effects made within a RFMO. It must also take into account the costs of the RFMO, as well as the distributional effects of other conservation and management measures which are less studied.³⁰⁸

2.3. Allocation of fishing rights to new entrants

As discussed above, the main trend in high seas fisheries governance is that only members of RFMOs may fish for the stock in the area under its jurisdiction. But the LOS Convention grants all States the right for their nationals to engage in fishing activities in the high seas. Under the conservation and cooperation duty stipulated in the LOS Convention, those States, the so called ‘new entrants’, would have to exercise their right to fish in the high seas by becoming members of the competent RFMO, or otherwise apply the regime established by it. On the other hand, States members of a RFMO have also the duty to provide rules for participation which are consistent with the principle of freedom of the high seas, non discriminatory, and at the same time not undermine conservation efforts. However, participation of new entrants implies a reduction of the share of the participating States. If there is no need to reduce the share of participating States, it is because the stock is not fully exploited and, in that case, it will probably not be under a restricted regime; or the quota was increased, probably above recommended conservation levels, to accommodate the new entrant. Hence, the participation of a new member in a RFMO generates a “re-allocation” of shares.

For the allocation of fishing rights or participatory rights of new entrants, UNFSA provides specific guidance in Article 11. It must be noted that the criteria indicated are, to a great extent, the same criteria already identified to be used for the allocation of fishing rights among participants of a RFMO. According to Article 11:

In determining the nature and extent of participatory rights for new members of a subregional or regional fisheries management organization, or for new

³⁰⁸ Hoel and Kvalvik, *supra* note 66, at p. 353.

participants in a subregional or regional fisheries management arrangement, States shall take into account, inter alia:

- (a) the status of the straddling fish stocks and highly migratory fish stocks and the existing level of fishing effort in the fishery;
- (b) the respective interests, fishing patterns and fishing practices of new and existing members or participants;
- (c) the respective contributions of new and existing members or participants to conservation and management of the stocks, to the collection and provision of accurate data and to the conduct of scientific research on the stocks;
- (d) the needs of coastal fishing communities which are dependent mainly on fishing for the stocks;
- (e) the needs of coastal States whose economies are overwhelmingly dependent on the exploitation of living marine resources; and
- (f) the interests of developing States from the subregion or region in whose areas of national jurisdiction the stocks also occur.

Article 11(b) and (c) of UNFSA consider, as criteria for the allocation of fishing rights to new entrants, their respective interest, fishing patterns and fishing practices; their contribution to conservation and management of the stocks; and the collection and provision of accurate data and the conduct of scientific research. It is doubtful, though, that a new entrant can show those interests, practices and contributions, without having been engaged in unregulated fishing activities. The needs of coastal fishing communities and Coastal States mentioned in Article 11(d) and (e) are also considered as elements to determine the participatory rights of new entrants, although all Coastal States should have been original member of the RFMO. The reference to the interests of the developing States in the region or sub-region in Article 11(f) should be read jointly with Article 25 of the same instrument.

Although UNFSA provides several criteria for the determination of participatory rights, and does not directly provide for prioritization, the first criterion to be enumerated is the status of the stock. Thus, with respect to the fully or overexploited resources (which are the immense majority of the commercially exploitable resources),³⁰⁹ the real possibilities of participation

³⁰⁹ FAO has estimated that 52% of the marine fish stocks are fully exploited, 17% over exploited, 7% depleted and 1% recovering. The estimation is based on the assessment of 441 stock or species group for which information and assessments were available and reliable, representing 76% of the stocks or species group and 80% of the total marine catches in 2002 (FAO Fisheries Technical Paper 457, *Review of the State of World Marine Fishery Resources*, Rome, 2005, at p. 6. Document available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007).

for new entrants has been considered to be limited, if not excluded.³¹⁰ If, in addition, the described trends in respect to non-members of RFMOs are considered, fisheries regulation, including both conservation and exploitation, will be in hands of the first States exploiting the fishery and establishing a RFMO.³¹¹

The allocation of fishing rights to new entrants shows the difficult balance between contradictory but legitimate expectations and rights. Freedom to fish in the high seas, conservation needs, protection (and recognition) of conservation efforts, protection of established investments, protection of the right to development, intra-generational equity, economic efficiency, are all factors to be considered in the decisions to be made by the existing RFMOs. Theoretical proposals have tried to give solutions to this problem: the concept of common heritage of mankind and the establishment of an international Authority for the regulation of the fisheries resources of the high seas are the most extreme solutions to balance conflicting interests. Also, the establishment of a public auction system for high seas fisheries, as well as transferable quotas, has also been proposed. Those proposals, however, fail to consider the broad range of interests involved.

Addressing participatory rights in high seas fisheries is an essential task to ensure a sustainable, equitable and legitimate high seas governance regime. As noted by many

³¹⁰ Orrego Vicuña states that “[t]he most important criterion is the status of the stocks concerned and the existing levels of fishing effort, because if the stock is overfished or there is no surplus available quite obviously new entrants will not be allowed into the fishery.” He also notes that “from the outset of the [UNFSA] negotiations it was recognized that new entrants should be accommodated “to the extent possible” thereby implying that it would not always be possible to accommodate them and that the conditions for this so doing might be different. Some delegations has sought that conditions to this effect should be established on a case-by-case basis and taking into account the implications of a new fishery on fully utilized resources, or that new entrants should have the obligation to cooperate in good faith and comply with existing management measures. In another proposal, the allocation of any stock to new entrants should be subject to a waiting period, and allocation should only be made when the total allowable catch of a depressed stock exceeds the threshold level established; if the stocks have been fully allocated new entrants should only be accommodated to the extent that quotas are relinquished by existing participants, and in any event special consideration should be given to the interest of coastal states and developing countries.” (Orrego Vicuña, *supra* note 8, at p. 210-211).

³¹¹ In an analysis of the duty to cooperate and new entrants, DOALOS stated that “[t]he result is that the first States to start fishing in a region have the opportunity to establish the nature of the organization or arrangement for giving effect to the obligations of conservation and management. Thus, by the time a new entrant arrives on the scene these States may, in accordance to Articles 118 and 119 have determined the catch and established conservation measures. If for the proper conservation and management of a particular resource it was necessary for States to establish conditions for new entrants to the fishery, then, provided that they did not contravene the non-discrimination provision of Article 119 (3), such provisions would have to be adhered to by any new entrant.” DOALOS, *supra* note 10, paragraph 91 at p.28.

authors, the regime is only going to work if all States (that is, the entire international community) agree upon its principles, upon its implementation mechanisms and its legitimacy.³¹² The experience so far has not shown to have satisfactorily addressed the subject. After analyzing the guidelines and practice of several RFMOs, it may be observed that:

[n]one of these approaches encourages new entrants, and each merely encourages unregulated fishing. Moreover, each of these approaches arguably discriminates in fact, if not in form, against new entrants and developing states which have not previously had the capacity, be it legal or practical, to engage in high seas fisheries.³¹³

³¹² FAO Fisheries Technical Paper No. 465, *supra* note 1, at p. 17-18, identifies 2 cores for a stable solution to the two player cooperative game (or cooperative regime building). The first requirement is that it be “Pareto Optimal”, i.e., that no changes can be made which would make both parties better off. The second requirement is that it satisfies the Individual Rationality Constraint, i.e., the payoffs arising from the solution make each and every player at least as well off as it would be under conditions of non-cooperation. A third requirement can also be added to these: ‘fairness’. However, beyond intuition, the exact interplay between these three requirements remains unclear.

³¹³ Rosemary Rayfuse. “Regional Allocation Issues or Zen and the Art of Pie Cutting.” Paper presented at the Conference Sharing The Fish, held in Perth, Western Australia, March 2006. Document available on the Conference website <www.fish.wa.gov.au/docs/events/ShareFish>, Conference Papers, retrieved on 5 February 2006.

PART II - IMPLEMENTATION OF THE CONSERVATION AND MANAGEMENT REGIME FOR HIGH SEAS FISHERIES IN THE SOUTHEAST PACIFIC OCEAN

Introduction

The previous Part of this paper describes the current developments in the legislative and policy aspects of the high seas fisheries regime, and particularly the need, and search for, effective cooperation through RFMOs. It also stresses that, despite the plethora of initiatives and efforts to strengthen the high seas fisheries regime, the competitive character of the regulated activity constitutes an obstacle for achieving effective cooperation. The unfeasibility, or at least difficulties, of making competitive actors cooperate has its clearest manifestation in the establishment of new RFMOs and the allocation of fishing rights.

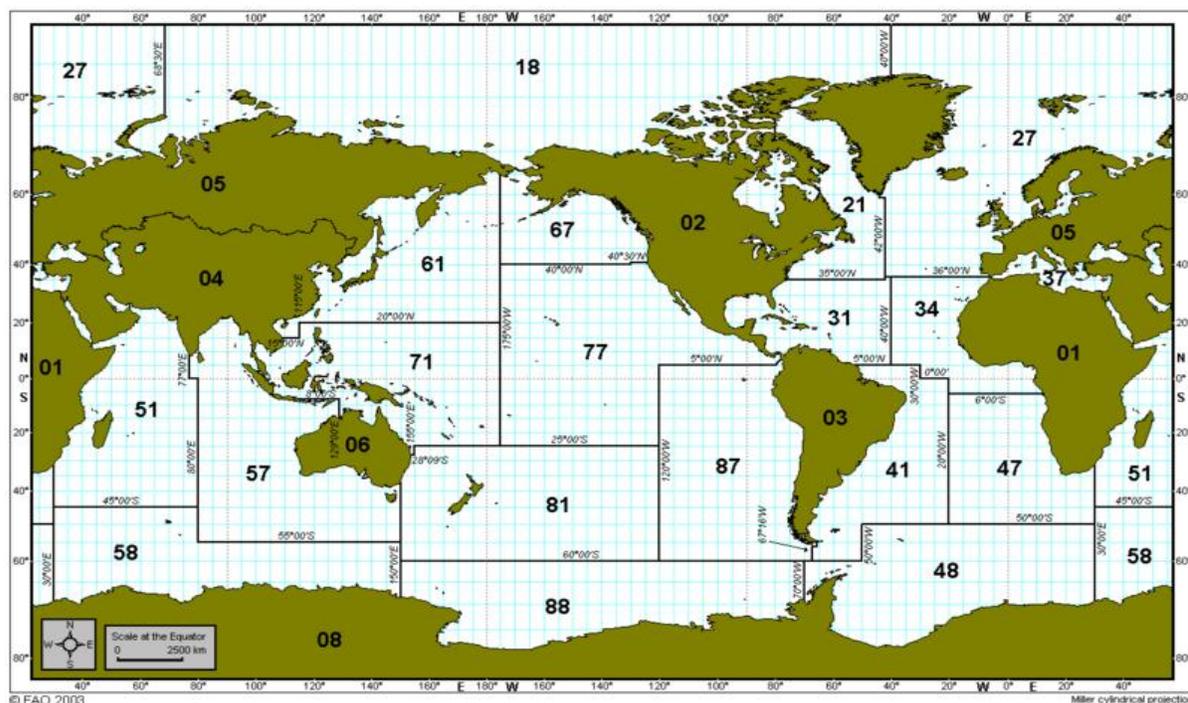
The difficulties described can be observed in the process currently taking place in the Southeast Pacific, an area which remains without a RFMO, and where several cooperative efforts have failed or had limited success. This Part describes the current status of the fisheries conservation and management regime for the high seas of the Southeast Pacific, from the perspective of Chilean interests. Special reference will be made to the conservation and management of the two main commercially exploited stocks of the high seas in the Southeast Pacific: swordfish and jack mackerel.

The aim of the present part is to exemplify how the theoretical framework provided by the international community for the high seas fisheries conservation and management regime, described in the Part I, still faces several practical problems of implementation that need to be address if the high seas fisheries regime, at a global level, is expected to be effective. It must be noted that a political analysis of the ongoing negotiation processes for the establishment of a conservation and management regime in the Southeast Pacific is beyond the purposes of this paper.

Section 1 - The need of a high seas fisheries regime for the Southeast Pacific: a description of the problem.

The Pacific Ocean is the largest and deepest of the world's five oceans.³¹⁴ Its 155,557 million square kilometers include the Bali Sea, Bering Sea, Bering Strait, Coral Sea, East China Sea, Gulf of Alaska, Gulf of Tonkin, Philippine Sea, Sea of Japan, Sea of Okhotsk, South China Sea, Tasman Sea, and other tributary water bodies. For statistical purposes, FAO has divided the Pacific Ocean into 7 areas: the Northeast (67), Northwest (61), Western Central (71), Eastern Central (77), Southwest (81), Southeast (87) and Southern Pacific (88).

Figure 1. FAO marine major fishing areas for statistical purposes



Source: FAO Fisheries and Aquaculture Department website, <<http://www.fao.org/fi/default.asp>>, retrieved 10 November 2006.

The Southeast Pacific, FAO statistical area 87, comprises 30.02 million square kilometers, extending from North Colombia to southern Chile, where it meets the Southern Ocean (FAO

³¹⁴ Data and statistics in the subsequent paragraphs are obtained from FAO Fisheries Technical Paper 457, *supra* note 309, unless otherwise indicated.

statistical area 88).³¹⁵ Colombia, Ecuador, Peru, and Chile face the Southeast Pacific, and for the latter three it is the only marine water off their coasts. The Southeast Pacific accounts for the second highest contribution to world fish production, after the Northwest Pacific region. In 2002, it produced more than 16% of the world marine captured fish and almost 11% of the total world fish production. The captures are highly dominated by small pelagics, followed by large pelagics, together representing more than 80% of the catches of the region. The main large pelagic fish captured in the high seas of FAO Statistical Area 87 are yellowfin tuna (*Thunnus albacares*), albacore (*Thunnus alalunga*), bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), swordfish (*Xiphias gladius*), and different species of sharks. The main small pelagic fish captured in the areas beyond national jurisdiction of the South East Pacific is Chilean jack mackerel (*Trachurus symmetricus*), followed by lower captures of chub mackerel (*Scomber japonicus*). In addition, some levels of Patagonian toothfish are captured in southern Chile. In recent years, jumbo flying squid (*Dosidicus gigas*) has been frequently captured in the high seas. Low levels of discrete species captures, and specifically alfonsino (*Beryx splendens*), have been reported in FAO Area 87.

The South East Pacific accounts also for one of the highest proportions of overexploited stocks or species groups, with *ca.* 50% of stocks overexploited, depleted or recovering.³¹⁶ In addition, *ca.* 30% of the stocks are fully exploited.³¹⁷

³¹⁵ The technical delimitation of FAO Statistical area 87 is the following: “All marine waters of the Southeast Pacific bounded by a line commencing from a point on the coast of South American Mainland at the border between Panama and Colombia at 7°12'39"N latitude and 77°53'20"W longitude; thence running on a rhumb line in a southwesterly direction to 5°00'N latitude and 79°52'W longitude; thence running due west along the parallel 5°00'N to the meridian 120°00'W; thence due south to 60°00'S latitude; thence due east along this parallel to a point at 67°16'W longitude; thence due north to 56°22'S latitude; thence due east to 65°43'W longitude; thence due north to 55°22'S latitude; thence in a northwesterly direction along a rhumb line and across the Beagle Canal to the border between Chile and Argentina; thence in a northerly direction along the Pacific coast of South America to the point of departure.” (CWP, Fishing Statistical Area. c1990-. CWP, Handbook of Fishery Statistics. *FIGIS Fishing Area Fact Sheets*. FAO - Rome. Updated Thu Jan 11 16:03:43 CET 2007. Available via FIGIS from: <<http://www.fao.org/figis/servlet/static?dom=area&xml=Area87.xml>>, retrieved 6 February 2007.)

³¹⁶ FAO Fisheries Technical Paper 457, *supra* note 309, at p 7. According to the assessment, the areas with the highest proportions (46-60%) of overexploited, depleted and recovering stocks are the southeast Atlantic, southeast Pacific, northeast Atlantic and, for tuna and tuna-like species, the Oceanic areas of the Atlantic and Indian Oceans.

³¹⁷ FAO Fisheries Technical Paper 457, *ibid.*

Within the South East Pacific region, there are three different areas which can be identified according to their distinctive topography, prevailing environmental conditions and, therefore, distribution and abundance of fisheries resources. The northern part of the area, off Colombia and Ecuador, has a tropical climate typical of low latitudes, with relatively low productivity. The main species targeted are tuna, shallow and deep-water shrimp, white fish (snapper, grouper and wreckfish), and small pelagic species (Pacific anchovy and Atlantic thread herring). Tuna, more specifically yellow fin (*Thunnus albacares*) and skipjack (*Katsuwonus pelamis*), are caught mainly within the limits of the EEZ of Colombia in the Eastern Pacific. However, catches in Colombia and Ecuador remain low, with total catches of marine resources of approximately 150,000 tonnes and under 500,000 tonnes respectively.³¹⁸ According to the Gross Domestic Product data for the fisheries sub-sector, fisheries does not play a very significant role in terms of national wealth generation; but “its impact is considerable in that it generates employment and income for those involved in the activities, provides food security, and promotes regional and local development.”³¹⁹

Further south, off Peru and northern and central Chile, the coastal areas are dominated by the Humboldt-Peru eastern boundary current system which generates the cold nutrient-rich coastal upwelling, a seasonal process that makes this region highly productive. Because of the environmental and oceanographic conditions, small pelagics, and especially Peruvian anchoveta (*Engraulis ringens*) and Chilean jack mackerel (*Trachurus symmetricus*), are by far the dominant species off Peru and northern and central Chile. The Peruvian and Chilean fisheries sector are important components of both States’ economies.³²⁰

In the southern area of the Pacific, off southern Chile and near the Southern Ocean, water masses are much colder and turbulent but still highly productive, with the coastal area influenced by the fresh water inflow of the fjords. Demersals and benthic invertebrates

³¹⁸ Based on statistical information of total landings (1994-2005) provided by CPPS, available at <www.cpps-int.org>, estadísticas pesqueras, retrieved 7 February 2007.

³¹⁹ FAO Country profile for Colombia, available on FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>. See also: FAO Country profile for Ecuador.

³²⁰ See FAO Country profile for Chile and Peru, available on on FAO Fisheries and Aquaculture website <www.fao.org/fi/default.asp>.

support the main fisheries activities in this area, in addition to a fast growing salmon farming industry.

The Chilean captures in the high seas have historically concentrated in the high seas area of the Southeast Pacific adjacent to its EEZ (FAO Statistical Area 87). The captures statistics for the last 8 years (1998-2005) are provided in Annex 2. This record shows that captures in the high seas have been predominantly directed to two marine resources: the highly migratory swordfish stock and the straddling Chilean jack mackerel stock.³²¹

Swordfish (*Xiphias gladius*)³²² is a highly migratory species included in Annex I of the LOS Convention.³²³ There are important fisheries for swordfish (*Xiphias gladius*) in the Atlantic and Pacific oceans, and lower levels of capture in the Indian Ocean. The main catch areas are the northwestern Pacific (FAO Statistical Area 61), the Mediterranean (FAO Statistical Area 37), and the Eastern Central Pacific (FAO Statistical Area 77). The captures in the Southeast Pacific Ocean (FAO Statistical Area 87) are relatively low, compared to other areas of the Ocean Pacific.³²⁴ The captures of swordfish in the Southeast Pacific have been traditionally

³²¹ The captures of chub mackerel, although high, are mainly captured as by-catch of jack mackerel (as they also are in the EEZ). Patagonian toothfish is also caught in the high seas, although the relative importance of the captures is low. Also low are the catches of southern blue whiting, Patagonian grenadier or hoki, and Antarctic icefish; although the catches of the resources are constant and have shown a slight increase in recent years.

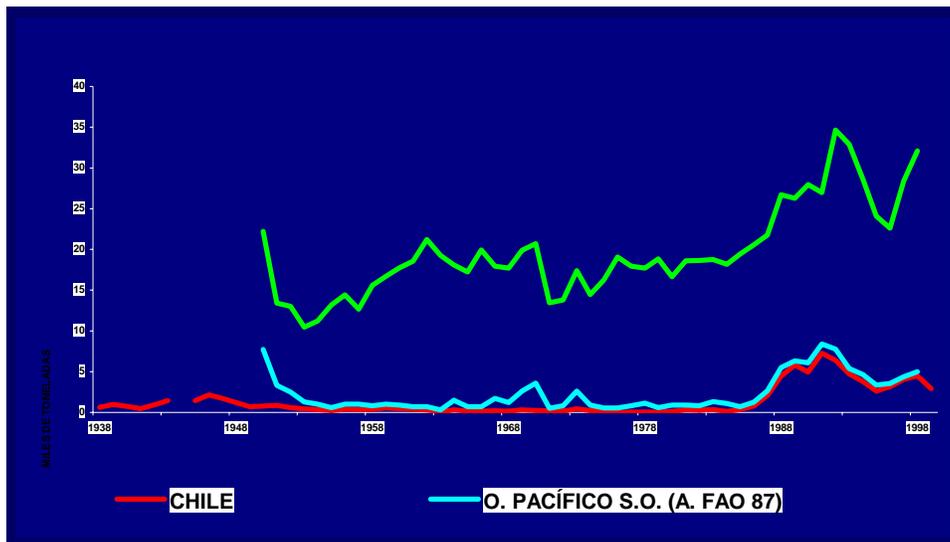
³²² Swordfish (*Xiphias gladius*) is an epi-and mesopelagic, oceanic species, usually found in surface waters warmer than 13°C, the optimum temperature range being 18° to 22°C in the northwestern Pacific Ocean. Based on records of forage organisms taken by this species, its depth distribution in the northwestern Pacific ranges normally from the surface to about a 550 m depth. It is believed, however, to descend occasionally into waters of 5° to 10°C, and to depths of at least 650 m. The swordfish is primarily a warm-water species and, generally speaking, its migrations consist of movements toward temperate or cold waters for feeding in summer and back to warm waters in autumn for spawning and overwintering. In the Pacific Ocean, spawning occurs in spring and summer (March through July) in the central part, in spring (September to December) in the western South Pacific, and year round in the equatorial Pacific waters. Adult swordfish are opportunistic feeders, known to forage for their food from the surface to the bottom over a wide depth range. Over deep water, they feed primarily on pelagic fishes, while in relatively shallow waters they take chiefly neritic pelagic fishes. Large adults often make feeding trips to the bottom where the temperatures may be 5° to 10°C, and feed on demersal fishes. Based on stomach contents of *Xiphias gladius*, there is evidence that the swordfish uses its sword to kill some of its prey, particularly squids and cuttlefishes, as shown by the slashes on the bodies of prey found in swordfish stomachs.

³²³ See: *supra* note 1.

³²⁴ Between 2000 and 2004, total swordfish captures in the Southeast Pacific fluctuated between 4.72% and 11.16% of the total world captures. In the same period, total swordfish captures in the Southeast Pacific Ocean represented between 15.62% and 31.76% of the total captures in the Pacific Ocean and adjacent seas. The participation of Latin American and Caribbean States in the catches for swordfish in the FAO Statistical Area 87 declined from 58% to 36% in that period (statistic information obtained from Global Production Statistics provided by FIGIS online query, available at FAO Fishery Information, Data and Statistics Unit (FAO-FIDI).

dominated by Chilean artisanal fishermen (see Figure 2). However, from 2000 the captures of foreign fleets, and especially Spain, increased some 564%, and have been kept at levels 500% higher, as shown in table 2.³²⁵ Swordfish, in the Southeast Pacific is considered to be in a fully exploited status.³²⁶

Figure 2. Captures of swordfish in the Pacific Ocean (FAO Statistical Areas 77 and 87), the South East Pacific (FAO Statistical Area 87), and captures by Chilean vessels, 1935-1999 (in thousands of tonnes).



Source: Subsecretariat for Fisheries, internal document, prepared with statistical information provided by FAO.

c2004-. **Collation, analysis and dissemination of global and regional fishery statistics.** *FI Programme Websites.* FAO - Rome. Updated Thu Jan 11 16:07:34 CET 2007. Available via FIGIS from:

<www.fao.org/figis/servlet/static?dom=org&xml=FIDI_STAT_org.xml>, retrieved 1 February 2007).

³²⁵ For 1999-2004 total catches on swordfish in the Southeast Pacific (FAO Statistical Area 87), see Annex 3. According to the statistical information contained in FAO Yearbook of Fishery Statistics 2004 (available on FAO website <www.fao.org/fi/default.asp>, FAO Information, Data and Statistics Unit (FAO-FIDI) Fishery Statistic Programme, Statistics Publications), Spain began fishing for swordfish in the Southeast Pacific Ocean in 1990. The captures remain below 1,000 tonnes, with the exception of 1991, 1992 and 1997, where the catches increased to 2,794, 2,435, and 2,039 tonnes respectively. From 2002 to this day, however, the catches increased to over 5,000 tonnes, as shown in table 2.

³²⁶ FAO Fisheries Technical Paper No. 495. *The state of world highly migratory, straddling and other high seas fishery resources and associated species* (Rome, 2006), at p. 16 (Document available at FAO Fisheries and Aquaculture Website <<http://www.fao.org/fi/default.asp>>, Publications, retrieved 20 February 2007). Fully exploited status means that exploitation is “at or close to an optimal yield level, with no expected room for further expansion” (FAO Fisheries Technical Paper 457, *supra* note 309, at p. 213).

Table 2. Reported captures of swordfish in the FAO Statistical Area 87, by Chilean and Spanish fleets, 1999-2000 (in tones).

	1999	2000	2001	2002	2003	2004
Chile	2,925	2,973	3,262	3,523	3,848	3,268
Spain	1,121	1,807	828	6,322	5,674	5,605
TOTAL	4,496	5,164	6,333	11,907	10,860	10,123

Source: Subsecretariat for Fisheries, prepared with statistical information contained in FAO Yearbook of Fishery Statistic, available on FAO website <www.fao.org/fi/default.asp>, FAO Information, Data and Statistics Unit (FAO-FIDI) Fishery Statistic Programme, Statistics Publications.

Chilean jack mackerel (*Trachurus symmetricus*) is a small pelagic species with wide distribution in the Southeast Pacific,³²⁷ and considered a straddling stock because of its presence in both the EEZ of Chile and Peru and the high seas. Historically, it has been the most important pelagic fishery for the Chilean economy, accounting for more than half of the total captures by Chilean vessels from 1992 to 1997. Chilean jack mackerel has traditionally been caught exclusively by Coastal States and particularly by Chile,³²⁸ with the exception of the former Soviet Union fleet fishing in the high seas adjacent to the Chilean EEZ between 1984 and 1992, when the catches of the latter accounted for 1/3 of the total catches in the area. In recent years, however, foreign fishing vessels, particularly vessels under Chinese flag, have started exploiting the stock with slow but constantly increasing catches, as shown in table 3. In addition to these, EU vessels have started to engage in fishing activities for jack mackerel in the last year.³²⁹ Jack mackerel is considered to be in a fully-exploited to over-exploited status.³³⁰

³²⁷ The Chilean jack mackerel distributed in the Southeast Pacific is considered by the Chilean Government and research institutions as one single stock. However, some scientists have sustained the theory of two stocks, a north stock off Peruvian and North Chilean coasts, and a south stock off Central and South Chilean coasts. Although it can be found between northern Peru and southern Chile, the main stock occurs off the coasts of central and south Chile, and can reach New Zealand waters. The distribution in the Pacific varies according to the environmental conditions and specially the El Nino phenomenon.

³²⁸ The Peruvian catches of jack mackerel are considerably lower than the Chilean catches. Between 2000 and 2004, the catches were near the 200,000 tonnes, with the exception of 2001 where the catches increased to 723,733 tonnes (Global Production Statistics provided by FIGIS online query, supra note 324. See also: FAO Fisheries Technical Paper 457, supra note 309, at p. 136).

³²⁹ The information was provided by the EU delegation at the Second International Meeting for the establishment of the South Pacific RFMO (see below, at Section 3, 1.3). According to the knowledge of the author, the captures have not been reported to FAO, any other international or regional organization, or to the Coastal State.

³³⁰ FAO Fisheries Technical Paper 457, supra note 309, Table D-15, at p. 233; FAO, supra note 326, at p. 39 and 46. Fully exploited means that exploitation is “at or close to an optimal yield level, with no expected room

Table 3. Reported jack mackerel (*Trachurus symmetricus*) captures in the high seas of the Southeast Pacific Ocean (FAO Statistical Area 87).

Country	2000	2001	2002	2003	2004	2005
China	0	0	76 261	94 690	131 020	n/i
Republic of Korea	0	0	0	2 196	9 227	n/i
Chile	361	0	53081	445406	296709	272160
Total	361	0	129342	542292	436956	

Source: Subsecretariat for Fisheries, prepared with statistical information contained in FAO Yearbook of Fishery Statistic, available on FAO website <www.fao.org/fi/default.asp>, FAO Information, Data and Statistics Unit (FAO-FIDI) Fishery Statistic Programme, Statistics Publications.

Both swordfish and jack mackerel are shared resources while they occur in the high seas. They are currently being fished by both the Coastal State and Distant Water Fishing States (DWFS). The exploitation of both species is already “at or close to an optimal yield level, with no expected room for further expansion” (fully-exploited), or “exploited at above a level which is believed to be sustainable in the long term, with no potential room for further expansion and a higher risk of stock depletion/collapse” (over-exploited).³³¹ Thus, the machinery of the international policy and legislative regime outlined in Part I must be effectively implemented so as to ensure the long-term sustainable use of those stocks. How this may be accomplished, if at all, will be analyzed in the following sections.

Section 2 - Chile’s approach to the implementation of the high seas fisheries regime for straddling stocks and highly migratory stocks

The first section will analyze how Chile has implemented the obligations and requirements set by the international framework described in the Part I, for the conservation and management of swordfish and jack mackerel in the high seas. However, and in order to understand the conservation and management regime for these two species in the high seas, a

for further expansion”; overexploited means that the stocks are “exploited at above a level which is believed to be sustainable in the long term, with no potential room for further expansion and a higher risk of stock depletion/collapse exploitation” (FAO Fisheries Technical Paper 457, *ibid*, at p. 213).

³³¹ FAO Fisheries Technical Paper 457, *ibid*, at p. 213.

broader analysis of the current domestic regulation for high seas fisheries is required. In addition, a description of the conservation and management of the stocks within the EEZ is required. Thus, the first part of this section will focus on the general regime for conservation and management of high seas fisheries; and the second will analyze its application to swordfish and jack mackerel, both in the EEZ and in the high seas.

1. Chile and the general framework for the conservation and management of high seas fisheries

Chile ratified the LOS Convention in 1997³³², and the FAO Compliance Agreement in 2003; it has not signed or adhered to UNFSA, which taken together with the two former, constitutes the legislative framework for high seas fisheries regime. For the implementation of the FAO Compliance Agreement, the Ministry of Economy has enacted specific domestic regulation which is contained in Supreme Decree No. 360, of 2005.

In addition, Chile has adopted a national plan for IUU, and is preparing the national plans for sharks, seabirds, and fishing capacity. Chile has also played an important role in the fight against IUU, being one of the founders of the international voluntary monitoring, control, and surveillance working group and serving as its Secretariat, as well as participating in the work of the High Seas Task Force.

1.1. Implementation of Flag State responsibilities with respect to the FAO Compliance Agreement

Chilean industrial vessels fishing in any area of the high seas require a license issued by the Subsecretariat for Fisheries, which must be registered in a special section of the National Industrial Fisheries Register. The procedure for issuing the license ensures the fulfillment of the obligations contained in the FAO Compliance Agreement and, in particular, that no licence is issued to a vessel previously engaged in IUU fishing. Thus, the Chilean Authorities may deny license to vessels previously registered in another State and which have engaged in fishing activities undermining international conservation and management measures, unless

³³² The LOS Convention was ratified on August 25, 1997, promulgated by Supreme Decree No. 1393 of 1997, of the Ministry of Foreign Affairs, and published in the Official Gazette on November 18, 1997.

the following conditions have been met: the “ownership of the fishing vessel has subsequently changed, and the new owner has provided sufficient evidence demonstrating that the previous owner or operator has no further legal, beneficial or financial interest in, or control of, the fishing vessel.”³³³

Furthermore, the Chilean vessels authorized to fish in the high seas must fulfill the following conditions and requirements:

- Install a satellite monitoring device on board, which must be kept in working conditions and activated during navigation. The satellite signals are sent directly to the enforcement authorities;
- Inform catches, by species and fishing area, to the National Fisheries Service. The catches must be certified by an external auditor. The catches must be informed to the National Fisheries Service disregard the fishing area or the landing port;
- Accept on board scientific observers designated by the Subsecretariat for Fisheries to gather biologic and fisheries information;
- Maintain a copy of the license on board;
- Maintain in every moment and in a distinguishable manner, the Flag and identification according to an internationally accepted system, and respond to any request of identification by duly authorized officers;
- Inform departure or arrivals on national or foreign ports to the National Fisheries Service.
- Properly identify and mark fishing gears;
- Comply with conservation and management measures established for the stock in the fishing area, either by Chilean authorities for national fishing vessels, or by competent RFMOs or arrangements;
- Where appropriate, comply with the catch certifications schemes adopted by RFMOs or competent authorities; and
- Provide any other information required by the National Fisheries Service in the exercise of its enforcement jurisdiction.

The domestic regulations establish the obligation for Chilean Authorities to provide the FAO with the information required in Article VI of the FAO Compliance Agreement on a biannual basis. Although this implementing regulation entered into force on 25 November 2006, to date no information has been sent to the HSVAR of FAO. It must be noted, however, that catch information is periodically provided to FAO. The domestic regulation excludes the

³³³ FAO Compliance Agreement, Article III(5)(c).

application of the FAO Compliance Agreement to the vessels of less than 18 meters in length³³⁴, as authorized in Article II(2) of the Agreement. However, catches of those vessels in the high seas must be reported to FAO.

The fishing activities of Chilean nationals with vessels flying the Flag of other States are not addressed in the domestic legislation.

1.2. Extended conservation and management measures for highly migratory and straddling stocks

In the first section of this paper it has been explained that implementation of management and conservation measures within the EEZ for species that have a broader range of distribution is useless, especially in the case of highly migratory or straddling stocks, because fishing activities in the ‘unregulated’ high seas area adjacent to the EEZ undermine the effectiveness of the measures implemented within the EEZ. To address this specific problem, the General Act for Fisheries and Aquaculture provides that the Ministry of Economy, subject to report of the Subsecretariat for Fisheries and in consultation with the Ministry of Foreign Affairs, may establish conservation and management measures for ‘common stocks’ and ‘associated species’ present both in the EEZ and the high seas.³³⁵ The terms ‘common stocks’ and ‘associated species’ have been regarded as referring to highly migratory and straddling stocks. Thus, the implementation of Article 165 to a specific highly migratory or straddling stock means that Chilean vessels fishing for those stocks in the area of the high seas adjacent to the EEZ must comply with the same conservation and management measures established for the EEZ.

Some authors have considered Article 165 as an attempt to unilaterally extend the Chilean jurisdiction to the high seas. The criticism is groundless, because the provision is aimed at establishing conservation and management measures applicable to Chilean vessels. The Flag

³³⁴ The threshold corresponds to the limit established for artisanal vessels, according to Article 52(b) of the General Act for Fisheries and Aquaculture.

³³⁵ Article 165, paragraph 1, of the General Act for Fisheries and Aquaculture reads: “El Ministerio mediante decreto supremo, previo informe de la Subsecretaría y consulta al Ministerio de Relaciones Exteriores, podrá establecer normas de conservación y manejo sobre aquellas poblaciones comunes o especies asociadas existentes en la zona económica exclusiva y en la alta mar.”

State jurisdiction on the vessels flying their flag in the high seas is an established principle of international law. Furthermore, it is an application of Article 117 of the LOS Convention which requires the States to take such measures in respect with their nationals as may be necessary for the conservation of the living resources in the high seas. The provision also allows prohibiting or regulating the landing of catches or its products, if the fish was harvested in violation of conservation measures adopted for the respective stock.³³⁶ These prohibitions or regulations might apply to foreign fishing vessels, but they constitute an application of Ports State sovereignty, which is generally recognized in international law and thus not an extension of Chilean jurisdiction to the high seas.

1.3. Chile as a Port State

Chile prohibits access to its ports to foreign fishing vessels for the purpose of landing or transshipment of species subject to conservation measures in the EEZ. The measure was applied as early as 1990 and still remains in place. In recent years, and due to the increasing concern about the effects on conservation of fishing activities undertaken by foreign vessels, the Chilean Government decided to strengthen its policy regarded access to its ports. According to this policy, stipulated by the 2004 Supreme Decree No. 123 of the Ministry of Economy, access by distant waters fishing vessels to maritime terminals for logistical work, resupply, and repairs, presupposes the concurrence of five conditions:

- Firstly, the Flag State of the vessels undertaking the fishing activity shall exercises an effective jurisdiction allowing it to properly assume its responsibilities in respect to those vessels;
- Secondly, such State shall cooperate with Chile, as a Coastal State, in the conservation of the straddling and highly migratory resources from the adjacent high seas, when such species are common or associated with the ones existing in Chile's EEZ;
- Thirdly, that cooperation must be expressed in the negotiation, adoption and application of conservation measures compatible with those that are applied to the resources in the marine areas under national jurisdiction;

³³⁶ Article 165, paragraph 2 (continuation) reads: "Dictadas que sean estas normas podrá prohibirse o regularse el desembarque de capturas o productos derivados de éstas, cuando éstas se hayan obtenido contraviniendo dichas normas."

- Fourthly, the vessels undertaking this fishing activity should permanently use, inside and outside Chile's EEZ, a compatible satellite positioner connected with the Chilean system (when required by the regulations or decisions from competent national authorities); and
- Finally, the vessel must be submitted to the same controls and inspections to which the national ships are submitted to in regard to fisheries conservation, marine environmental protection and maritime security.³³⁷

The Supreme Decree is consistent with the developments of international fisheries law and, particularly, with the FAO Model Scheme for the Port State Control of Foreign Fishing Vessels. However, it must be noted that the national policy for port access does not address the access to ports by support vessels, departing in this respect from the current international recommendations, and potentially affecting the effectiveness of Port State measures.

2. Chile's regime for the conservation of jack mackerel and swordfish

As outlined in the previous section, both swordfish and jack mackerel are traditional fisheries for the Chilean fleet, with its origins back in 1940. The increase fishing activity over both resources lead to the early establishment of regulations to ensure the long term sustainability of the activity.

The current regulatory framework for fishing activities is contained in the General Act for Fisheries and Aquaculture, in force since 6 September 1991, and Act No. 19713, in force since 26 January 2001. The regulation considers four different management regimes, which include the open access regime, the fully exploited regime, the stock recovery regime and the stock in incipient development (new fisheries) regime. However both the swordfish and jack mackerel stocks are declared in a fully exploited regime, and therefore the following analysis will focus on that regime.³³⁸

An industrial vessel owner wanting to engage in fishing activities requires a fishing license issued by the Subsecretariat for Fisheries, which must also be registered in a National

³³⁷ Supreme Decree No. 123 of 2004, available in Spanish language at the website of the Chilean Subsecretariat for Fisheries <www.subpesca.cl>.

³³⁸ The following is a simplified description of the regime intended for the purpose of this paper, only.

Industrial Fisheries Register administered by the National Fisheries Service. The licenses are issued for each vessel, and identify the nautical characteristics of the vessel, the gear utilized by it, and the species and area it is entitled to fish. The license is non-transferable. The licenses are only issued for vessels registered in Chile, and factory vessels are prohibited. Artisanal fishermen and their vessels do not require a license, but they must be registered prior engaging in fishing activities in the National Artisanal Register, also administered by the National Fisheries Service. This registration allows them to fish species for which they have registered, and in the region of their residence. Artisanal fishermen must be Chilean citizens or foreigners with permanent residence in Chile.

When a fish stock reaches a fully exploited status, the Fisheries Authority shall declare it in a fully exploited regime. In a separate act issued on a periodical basis, the Authority may suspend the issuing of new licenses and suspend the registration of artisanal fishermen and vessels for the stock declared in that regime.³³⁹ However, the industrial vessels that have already been licensed, and the artisanal fishermen and vessels already registered, may continue their fishing activities. In addition, the industrial owner of a vessel may sell the vessel along with the license. Artisanal fishermen and vessels, however, can not transfer registrations.³⁴⁰ The fully exploited regime corresponds to a system of fishing effort, or input, control. Both swordfish and jack mackerel are declared in a fully exploited status and are managed according to that regime.³⁴¹

³³⁹ A stock can be declared in a fully exploited status and regime according to two different sets of provisions depending on the character of the fishing industry, i.e., if it is exploited predominantly by industrial vessels or artisanal fishermen. The regulation differs in the Authority competent to declare the regime, and some secondary effects of it. However, in both cases, the main effect is that the issuing of new authorizations for industrial fishing vessels and new registrations for artisanal fishermen and vessels is suspended.

³⁴⁰ Act No. 19.849 created the institution of 'registration replacement', which allows transference of the registration in limited situations. However, the entrance into force of the institution has been suspended.

³⁴¹ The artisanal fishery of swordfish was declared fully exploited in 1991 (Transitory Article 6 of the General Act for Fisheries and Aquaculture. The declaration was renewed by Resolutions No. 1530 of 1991, No. 1280 of 1992, No. 1225 of 1994, No. 2167 of 1996, No. 2616 of 1999 and No. 3629 of 2004, all issued by the Subsecretariat for Fisheries. The last renewal is in force until 31 December 2009). The industrial fishery of jack mackerel was declared fully exploited in several regions of the State as early as 1986, and later on, the same regime was applied to the stock in other regions of the State. To this day, jack mackerel is declared as fully exploited in the whole range of its distribution. The suspension of licenses has been declared every year, without exception.

The regime, as explained, suffered a change in 2001. That year, Act No. 19.713 incorporated a new management measure called ‘maximum limit catch per owner’, which consists in distributing the total allowable catch allocated to the industrial sector among the authorized vessel owners, according to criteria set by the Act. Thus, the measure has the effect of an individual transferable quota. The regime applies to most stocks declared fully exploited and managed according to that regime, including jack mackerel. However, swordfish is excluded from its application. This measure was initially adopted for the period ending 31 December 2002, but was renewed up to 31 December 2012 through Act No. 18.849.³⁴²

The new management measure was a response to the jack mackerel crisis of 1998-2000. Despite the management and conservation efforts, in 1998-2000 the jack mackerel stock suffered a decline and a disturbing change in the catch sizes. The situation forced the Authorities to practically ban the most important fisheries stock for three years, allowing catches only through regulated catches for human consumption, and through the development of several research activities aimed to assess the status of the stock. The crisis showed the need for additional management tools to effectively address the severe overcapacity of, and over-investment in, the industrial fleet of that time. The implementation of these new management tools has since resulted in the reduction of the operating industrial fleet in *ca.* 60%.

In addition, and disregarding the regime which applies to a specific stock, the Ministry of Economy and the Subsecretariat for Fisheries may establish conservation measures, including total allowable quotas, bans, gear restrictions or regulations, minimum size or weight of catch (and a tolerance percentage), allowable percentage of bycatch, and marine parks. Swordfish and jack mackerel are both subject to specific conservation measures.³⁴³

³⁴² The allocation system was considered only for the industrial sector, and the artisanal sector remained with an effort control and a global allowable catch. However, Law No. 18.849 also incorporated a new conservation and management measure for the artisanal sector: the artisanal extraction regime (Article 48 A of the General Act for Fisheries and Aquaculture). Although it is based on the same concept, distribution of the total allowable quota among the authorized participants in the fishery, the regulation of the artisanal extraction regime differs substantively from the industrial measure. Because artisanal fishermen do not undertake substantial jack mackerel fishing activities in the high seas, the explanation of the artisanal extraction regime is omitted.

³⁴³ In the case of swordfish, vessel size restrictions, gear size regulation, and minimum size of capture have been established. The access to some fishing areas is prohibited to large vessels. Vessels of more than 28 meters of length must operate west of the line drawn at a distance of 120 nautical miles, measured from the normal or

Considering the highly migratory status of swordfish and the straddling character of jack mackerel, and that the exploitation of those stocks in the high seas might undermine the conservation measures adopted for the conservation and sustainable exploitation of the stock in the EEZ, the Chilean Government exercised the authority provided in Article 165 of the General Act for Fisheries and Aquaculture for both species.³⁴⁴ As has been explained, the application of Article 165 means that Chilean vessels must comply with the conservation and management regime established for swordfish and jack mackerel, irrespective of the area where the fishing activities take place. In the case of jack mackerel, subject to the management measure ‘maximum limit catch per owner’, the implementation of that Article means that any catch of jack mackerel will be discounted from the quota allocated to a vessel owner, even if this catch was taken on the high seas.

The restrictions imposed for the conservation and management of swordfish and jack mackerel, and applicable to the Chilean fleet fishing in the high seas, would constitute a discrimination against Chilean nationals if no measure is taken against foreign vessels fishing for these stocks without observance of any regulatory measure, or of compatible regulatory measures. For this reason, Chile has developed the policy of access to Chilean Ports. According to that policy, foreign fishing vessels fishing for jack mackerel or swordfish in the high seas are not allowed to access Chilean Ports for landing or transshipment. In addition, they are not allowed to access Chilean Ports for logistical purposes, unless the conditions set in Supreme Decree No. 123 are met.

straight baselines (Supreme Decree No. 293 of 1990, of the Ministry of Economy). The same Decree regulates the size of the fishing gears: the fishing nets used by any vessel can not be longer than 2,470 meters; the vessels up to 24 meters in length must use nets equal or smaller than 83,722 m², or use a maximum of 1,200 hooks in each fishing maneuver; the vessels of more than 24 meters in length must use nets equal or smaller than 125,574 m², or a maximum of 2,000 hooks in each fishing maneuver. The regulation also establishes a minimum size of capture, allowing a percentage of small size fish in each landing. The minimum size of capture is 106 centimeters, measured between the first and second dorsal fin with a 30% tolerance measured in numbers of specimens per landing. However, no more than 10% of the landed specimens can be smaller than 100 centimeters (Resolution No. 406 of 1997, modified by Resolution No. 1639 of 1998, both of the Subsecretariat for Fisheries). In the case of jack mackerel, the current applicable conservation measure is minimum size of capture. The minimum size is 26 centimeters (Supreme Decree No. 458 of 1981, of the Ministry of Economy), with a 35% tolerance measured in number of specimens per landing (Resolution No. 2203 of 1996, modified by Resolution No. 1639 of 1998, both of the Subsecretariat for Fisheries).

³⁴⁴ For swordfish, the Ministry of Economy enacted Supreme Decree No. 598 of 1999; for jack mackerel, Supreme Decree No. 361 of 13 July 1999.

Section 3 - Regional cooperation for the conservation and management of highly migratory and straddling stocks in the Southeast Pacific Ocean

The current Chilean regulations provide for an appropriate framework for the regulation of Chilean fishing activities for swordfish and jack mackerel in the high seas. It ensures conservation of both stocks throughout the range of their distribution. However, and as has been noted, the stocks have been exploited not only by Chilean vessels but also by DWFS. Thus, unilateral conservation and management measures adopted by the Chilean Authorities are not enough, and the need to implement the duty to cooperate prescribed by Article 118 of the LOS Convention arises. The cooperative regime for the regional conservation and management of swordfish and jack mackerel occurring in the high seas, or the lack of it, will be analyzed in this section.

The area of the high seas of the Southeast Pacific is currently not under the jurisdiction of a RFMO.³⁴⁵ However, there are a few RFMOs with a certain influence in the area which must be mentioned at this point. The Inter-American Tropical Tuna Commission (I-ATTC) members, by signing the Antigua Convention, have extended the jurisdiction of the RFMO covering a considerable part of the South East Pacific for the regulation of tuna and tuna-like species.³⁴⁶ The Antigua Convention is, however, not yet in force.³⁴⁷ Therefore, the regulatory area of the IATTC Convention does not cover high seas areas adjacent to the Chilean EEZ, nor does the commission regulate swordfish.³⁴⁸ In addition, it must be noted that CCAMLR

³⁴⁵ Organización Latinoamericana de Desarrollo Pesquero (OLDEPESCA) and CPPS do not have the jurisdiction to establish conservation and management measures in their regulatory areas.

³⁴⁶ The area of application of the Convention (“the Convention Area”) comprises the area of the Pacific Ocean bounded by the coastline of North, Central, and South America and by the following lines: i. the 50°N parallel from the coast of North America to its intersection with the 150°W meridian; ii. the 150°W meridian to its intersection with the 50°S parallel; and iii. the 50°S parallel to its intersection with the coast of South America (Antigua Convention, Article III). The Convention covers the fish stocks of tunas and tuna-like species and other species of fish taken by vessels fishing for tunas and tuna-like species in the Convention Area (Antigua Convention, Article I(1) and Article II).

³⁴⁷ The Convention is open for signature at Washington from November 14, 2003, until December 31, 2004, and shall enter into force 15 months after the deposit of the seventh instrument of ratification or accession of the Parties to the 1949 Convention. At the time of writing, only 4 parties to the 1949 Convention (El Salvador, Korea, Mexico and EU) have ratified the Antigua Convention.

³⁴⁸ The 1949 I-ATTC Convention regulates yellowfin (*Neothunnus*) and skipjack (*Kaisuwonus*) tuna, the kinds of fishes commonly used as bait in the tuna fisheries, especially the anchoveta, and of other kinds of fish taken by tuna fishing vessels (1949 Convention, Article II(1)). The area of jurisdiction is ‘the waters of the eastern

exercises jurisdiction on the Southern Ocean, and the Western and Central Pacific Fisheries Commission has jurisdiction on the South West Pacific, both surrounding the high seas areas of FAO Statistical Area 87. The Galapagos Agreement, covering the FAO Statistical Area 87, has also been signed, but has not yet entered into force.

Disregarding the absence of a specific regional organization, the South East Pacific Ocean is not an unregulated ocean. The provisions of multilateral agreements, and specifically the LOS Convention, UNFSA, and the FAO Compliance Agreement all apply to the fishing activities taking place in these waters; as do the recommendations and guidelines for responsible fishing practices set by the various soft law instruments outlined above. However, and as has been stated in Part I, the effective application of those instruments and guidelines for the conservation and management of high seas fisheries depends on effective cooperation, and particularly on the existence and effective performance of a RFMO.

1. The search for a cooperative regime

As a party to the LOS Convention, Chile has promoted international cooperation through several means at the bilateral and multilateral levels. The results of those attempts have been diverse. Cooperation has been generally reached in order to exchange statistical or scientific information, or even develop joint research programmes. This primary level cooperation is a useful tool to achieve common scientific knowledge and build trust among the participants of the cooperative exercise. It is not, however, the actions required by the specific cooperation duty establish for fishing States and Coastal States in respect to highly migratory and straddling stocks. Secondary level cooperation has not been achieved, and the establishment of RFMOs has been a slow process. The various initiatives undertaken in this regard are briefly outlined below.

Pacific Ocean fished by the nationals of the contracting parties' (1949 IATTC Convention, Article II(1)). No further details are given to establish the regulatory area of the RFMOS. The Commission has not adopted management and conservation measures with respect to swordfish, but it applies trade measures (catch certification scheme) to swordfish, among other species covered by the Convention.

1.1. Bilateral and multilateral negotiation processes: conflict yields first steps in cooperation

The cooperative initiatives began in 1990 with the first unilateral measures related to ports were adopted by Chile. The then European Community opposed the measure, but after bilateral consultations, exchanged notes, and the establishment of a bilateral technical commission,³⁴⁹ no common ground for agreement could be found. On 19 April 2000, the EC requested consultations with Chile pursuant the Rules and Procedures Governing the Settlement of Disputes and Article XXIII of the General Agreement on Tariffs and Trade 1994 (GATT 1994) regarding the prohibition on unloading of swordfish in Chilean ports established on the basis of Article 165 of the General Act for Fisheries and Aquaculture, and Decree 598 of 15 October 1999.³⁵⁰ Later, on 6 November of the same year, the EC began the adversarial process by requesting a WTO panel against Chile in regard to the restricted access to the Chilean ports.³⁵¹ The EC asserted that its fishing vessels “operating in the South East Pacific are not allowed under Chilean legislation to unload their swordfish in Chilean ports either to land them for warehousing or to transship them onto other vessels.”³⁵² The EC considered that, as a result, “Chile makes transit through its ports impossible for swordfish.”³⁵³ The EC claimed that the above-mentioned measures are “inconsistent with Articles V:1-3 and XI:1 of the GATT 1994 and, as a result, nullifies benefits accruing to the EC under that agreement.”³⁵⁴ At its meeting of 12 December 2000, the Dispute Settlement Body of the WTO established a panel further to the request of the EC. Australia, Canada, Ecuador, India, New Zealand, Norway, Iceland and the US reserved their third-party rights.³⁵⁵ Chile, on the other hand, requested the establishment of a Special Chamber of ITLOS to determine whether or not the EC had fulfilled its obligations of cooperation and

³⁴⁹ Marcos Orellana, *The EU and Chile Suspend the Swordfish Case Proceedings at the WTO and the Intern Tribunal of the Law of the Sea*, February 2001, available at <www.asil.org>, ASIL insight.

³⁵⁰ Request for Consultations by the European Communities, Chile – Measures affecting the transit and importation of Swordfish, WT/DS193/1-G/L/367. Document available on World Trade Organization website <www.wto.org>, Disputes, dispute case DS 193, all documents.

³⁵¹ Request for the Establishment of a Panel by the European Communities, Chile – Measures affecting the transit and importation of Swordfish, WT/DS193/2. Document available on World Trade Organization website <www.wto.org>, Disputes, dispute case DS 193, all documents.

³⁵² *Ibid.*

³⁵³ *Ibid.*

³⁵⁴ *Ibid.*

³⁵⁵ See: World Trade Organization website <www.wto.org>, Disputes, dispute case DS 193.

conservation in relation to highly migratory species in international waters. In particular, Chile requested the Special Chamber to decide:

- whether the EC had complied with its obligations under the Convention, especially Articles 116 to 119 thereof, to ensure conservation of swordfish, in the fishing activities undertaken by vessels flying the flag of any of its member States in the high seas adjacent to Chile's EEZ;
- whether the EC has complied with its obligations under the LOS Convention, in particular Article 64 thereof, to co-operate directly with Chile as a coastal State for the conservation of swordfish in the high seas adjacent to Chile's EEZ and also to report its catches and other information relevant to this fishery to the competent organization and to the Coastal State;
- in relation to the foregoing, whether the EC had challenged the sovereign rights and duty of Chile, as a coastal State, to prescribe measures within its national jurisdiction for the conservation of swordfish and to ensure their implementation in its ports, in a non-discriminatory manner, as well as the measures themselves, and whether such challenge would be compatible with the LOS Convention; and
- whether the obligations arising under Articles 300 and 297(1)(b) of the LOS Convention, i.e., the obligation to settle disputes following the procedures established in the LOS Convention and the duty to fulfill in good faith the obligations assume under the Convention, exercising the respective rights, jurisdictions and freedoms in a manner which would not constitute an abuse of rights, as also the general thrust of the LOS Convention in that regard, have been fulfilled in this case by the EC.³⁵⁶

The EC response to the Chilean claim requested the Tribunal to decide:

- whether the Chilean Decree 598 which purports to apply Chile's unilateral conservation measures relating to swordfish on the high seas is in breach of, *inter alia*, Articles 87, 89 and 116 to 119 of the LOS Convention;
- whether the "Galapagos Agreement" signed in Santiago de Chile on 14 August 2000 was in keeping with the provisions of the LOS Convention and whether its substantive provisions are in consonance with, *inter alia*, Articles 64 and 116 to 119 of the LOS Convention;
- whether Chile's actions concerning the conservation of swordfish are in conformity with Article 300 of the LOS Convention and whether Chile and the EC remain under a duty to negotiate an agreement on cooperation under Article 64 of the LOS Convention; and
- whether the jurisdiction of a special chamber extends to the issue referred to in the third claim of Chile.³⁵⁷

³⁵⁶ ITLOS Order on Constitution of chamber, case concerning the conservation and sustainable exploitation of swordfish stocks in the South-Eastern Pacific Ocean (Chile/European Community), 20 December 2000. Document available on ITLOS website <www.itlos.org>, Proceedings and Judgements, case No. 7.

³⁵⁷ *Ibid.*

In March 2001, the parties signed a provisional arrangement which includes a joint research program, access to Chilean Ports for the vessels participating in the research programme, the creation of a multilateral conservation forum for the Southeast Pacific, and the suspension of both judicial procedures.³⁵⁸ Both the suspension and the provisional arrangement are still in force to this day (the last agreement of the parties, submitted to both WTO Panel and ITLOS, suspend the procedures until 1 January 2008). Some biological information on the fishery has been gathered under joint research programme, and four multilateral meetings have been held. In the last multilateral meeting participated Chile, EC, Peru, Japan, and Chinese Taipei. Republic of Korea, People's Republic of China, Colombia and Ecuador were invited but did not attend. However, these efforts have not produced a consensus on management and conservation measures applicable to the stock on neither the bilateral nor the multilateral levels.³⁵⁹

During these struggles with swordfish, the jack mackerel fishery was exploited exclusively by national fishermen. Additional management measures were adopted by the Government in order to ensure the conservation of the fishery and improve its economic and social impacts. However, in 2002 fishing vessels flying China's flag, as well as few vessels with Korea's and Vanuatu's flags, were seen in the area adjacent of the EEZ of Chile. Recalling Article 63 of the LOS Convention, Chile invited the main fishing nation, the People's Republic of China, to a bilateral meeting seeking the establishment of a cooperative management arrangement or regime. Three meetings have been held in the past years, and a fourth meeting is scheduled for the first half of 2007. However, no substantial cooperation has been achieved so far.

In parallel with these initiatives, Chile has also has also undertaken certain initiatives to establish a RFMO for the region. The first attempt was made under the umbrella of the

³⁵⁸ Orellana, *supra* note 349.

³⁵⁹ For more information, see: World Trade Organization website <www.wto.org>, Disputes, dispute case DS 193; <www.itlos.org>; ITLOS website <www.itlos.org>, Proceedings and Judgements, case No. 7, Lesley Murphy, *EC and Chile reach agreement on 10-year swordfish dispute*, International Fisheries Bulletin No. 4, 2001, available at <www.oceanlaw.net>; and John Shamsey, *ITLOS vs. Goliath: the International Tribunal for the Law of the Sea Stands Tall with the Appellate Body in the Chilean-EU Swordfish Dispute*, 12 Transnational Law and Contemporary Problems, 2002, pg. 513-540.

Permanent Commission of the South Pacific (CPPS),³⁶⁰ which resulted in the signature of the Framework Agreement for the Conservation of the Marine Living Resources of the High Seas of the South East Pacific, or ‘Galapagos Agreement’. The second, and most recent attempt is being currently conducted with a broader participation of States and a wider geographical scope of application.

1.2. The Galapagos Agreement: an attempt to formalize cooperation

After several years of negotiation, on 14 August 2000, the member States of CPPS (Colombia, Ecuador, Peru and Chile) signed in Galapagos Island, Ecuador, the Framework Agreement for the Conservation of the Marine Living Resources of the High Seas of the South East Pacific, commonly known as the ‘Galapagos Agreement’.³⁶¹

The Agreement applies to the marine living resources of the Southeast Pacific high seas areas, but with special reference to highly migratory and straddling fish populations.³⁶² In the first meeting of the State Parties, to be held not later than 3 months after the Agreement enters into force, the Parties shall identify the priority species for the adoption of management and conservation measures. The definition of regulated species, the inclusion or exclusion of stocks, will be established by the States Parties through an Annex to the Agreement.³⁶³ The area covered by the Agreement is the high seas of the Southeast Pacific Ocean,

encompassed by the outer limits of the coastal States’ national jurisdiction zones and a line traced along the complete length of the 120 west meridian of longitude, from the 5 north parallel of latitude to the 60 south parallel of latitude. It does not apply to the zones under national jurisdiction corresponding to oceanic islands belonging to any of the coastal States, but it shall also include

³⁶⁰ Initials for the Spanish name of the Commission: ‘Comisión Permanente del Pacífico Sur’.

³⁶¹ The aim of the agreement is the conservation of the marine living resources of the high seas of the South East Pacific Ocean, with special reference to the straddling stocks and highly migratory stocks. The Agreement also provides for the establishment of a regional fisheries conservation and management organization; pending its constitution, its functions should be performed by the Meeting of the Parties to CPPS and its General Secretariat.

³⁶² Galápagos Agreement, Article 2. The Galápagos Agreement, in its original version, is available at the CPPS website <www.cpps-int.org>, Convenios, Tratados Regionales. A translated text of the Galápagos Agreement is available in Internet Guide to International Fisheries Law website <www.intfish.net>, Treaties.

³⁶³ Galapagos Agreement, Article 4.

the areas of high seas surrounding and adjacent to these oceanic islands, within the limits described.³⁶⁴

Figure 3. Area of Galapagos Agreement



Source: adapted from Meltzer, *supra* note 1, Global Overview – Straddling Fish Stocks, at p.577.

The Agreement has been ratified by Chile, Ecuador and Peru.³⁶⁵ Considering that the lack of ratification by Colombia impeded the entrance into force of the Agreement, on 27 November 2003 the parties signed an Amendment Protocol of the Agreement, requiring only three ratifications for its entry into force. The Amendment Protocol also required three ratifications for its entry into force. To date, the Protocol has been ratified only by Chile and Ecuador.³⁶⁶ The failure of CPPS initiative to establish a fisheries organization for the South East Pacific is rooted in several issues of conflicting national policies, including varying relative importance of the fisheries sector for the national Governments as well as outstanding maritime boundary issues.

³⁶⁴ Galápagos Agreement, Article 3.

³⁶⁵ Chile deposited the instrument of ratification on 12 November 2001, Ecuador on 11 June 2002 (Executive Decree No. 2613 of 2002), and Peru on 1 August 2003 (Supreme Decree No. 78 of 2003).

³⁶⁶ Chile ratified the Protocol on 22 March 2004 and Ecuador on 25 June 2004.

The ‘Galapagos Agreement’ faces not only internal problems, as the international community has raised several criticisms, and even protest,³⁶⁷ with regard to the agreement and the management system provided for the South East Pacific. It is even regarded by some as incompatible with UNFSA, and particularly with Article 8(3) which provides that “States having a real interest in the fisheries concerned may become members of such organization or participants in such arrangement”.³⁶⁸ As analyzed above, participation in a RFMO of a State with a real interest in the fishery has been identified as a duty and right: duty because that is the way in which the State discharges its duty to cooperate under the LOS Convention; and right because, provided that it has a real interest, the participation shall not be precluded or in any other way discriminated against by the RFMO members. The Galapagos Agreement, on the contrary, was negotiated and signed exclusively by the Coastal States. Thus, *prima facie*, it does not recognize that right of States with a real interest, even when ‘real interest’ is interpreted in a narrow sense requiring current engagement in fishing activities.

It must be noted however that the Agreement remains open for signature of interested States for a period of 12 months once it enters into force. After that period has passed, any interested State can accede to the Agreement.³⁶⁹ Interested State is the State “involved in distant-water fishing which have an established interest in specific fishery resources in this subregion, including qualified inter-governmental organization”;³⁷⁰ and established interest is “the interest demonstrated by a State whose nationals habitually fish for one or more fish populations within this Agreement’s area of application and whose participation may fall

³⁶⁷ As mentioned above, the European Union requested the Special Chamber of ITLOS to decide whether the “Galapagos Agreement” signed in Santiago de Chile on 14 August 2000 was in keeping with the provisions of the LOS Convention and whether its substantive provisions are in consonance with, *inter alia*, Articles 64 and 116 to 119 of the LOS Convention. See: Part II, section 3, 1.1, above.

³⁶⁸ See: Molenaar, *supra* note 229: “The intention of Chile, Ecuador and Peru (all non-parties to, as well as non signatories of, the Fish Stocks Agreement) to bring the Galapagos Agreement into force is illustrative of the lack of broad international support as the Galapagos Agreement is widely regarded as highly incompatible with the Fish Stocks Agreement.”; Orrego Vicuña, *supra* note 306, at p. 390: “In contrast with these trends, a weaker agreement was signed in Santiago on August 14, 2000 by the countries of the South-East Pacific, bearing the name of the Galapagos Islands Agreement. This Agreement reaffirms the interest of coastal States in the fishing activities on the high seas, but does not seem to have clearly understood the manner how the compatibility of measures adopted under national jurisdiction with those adopted for the high seas is ensured. Problems concerning participation are also apparent. This confusion is also at the heart of the decision of this group of countries not to sign the 1995 Agreement.”

³⁶⁹ Galapagos Agreement, Article 16.

³⁷⁰ Galapagos Agreement, Article 1(3).

within the scope of this interest.”³⁷¹ The latter expression may be assimilated to ‘States with a real interest’, where real interest is understood in the narrow interpretation, predominant in the practice of RFMOs. It also considers the alternative of signing *complementary instruments* through conventions, protocols or annexes, with the *concerned States*, aimed at addressing specific matters required for the implementation or development of the provisions of the Agreement, taking into account the nature of the regulated species.³⁷² Concerned parties include parties to the Agreement (whether coastal or otherwise) but also other DWFS with an established interest in the fisheries.³⁷³ In addition, the Agreement recognizes the possibility of these complementary instruments to refer to “other areas of application, according to the nature, characteristics, displacement and ecological relationships of the fish populations regulated by such instruments.”³⁷⁴

The Galapagos Agreement does not restrict participation to Coastal States and, on the contrary, follows the practice of other RFMOs and is even more inclusive than other organizations that require, for example, an invitation of the State Parties adopted by consensus or other similar mechanisms. In addition, the system is even more flexible than other RFMOs, providing for a framework for the development of a set of particular arrangements addressing specific issues on a case by case basis. The framework, though, would provide a set of common standards and guidelines for those specific cooperative regimes. However, the consistency of the Galapagos Agreement with UNFSA and generally the international developments of fisheries law, and therefore its acceptance by the international community, depends on the implementation of the Agreement by the State Parties once it enters into force.³⁷⁵

³⁷¹ Galapagos Agreement, Article 1(4).

³⁷² Galapagos Agreement, Article 1(15).

³⁷³ Galapagos Agreement, Article 1(5).

³⁷⁴ Galapagos Agreement, Article 3(2).

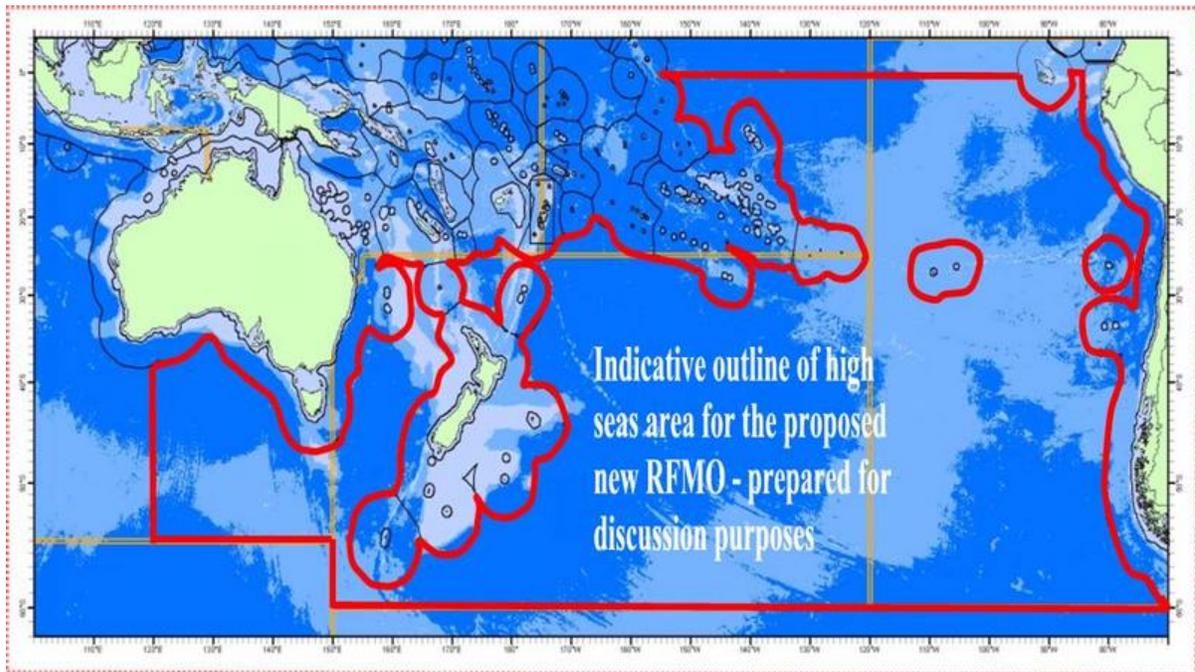
³⁷⁵ Report of the Secretary-General of the United Nations A/58/215,5 August 2003, *The status and implementation of the Agreement for the Implementation of the Provisions of the United Nations Convention for the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (the Fish Stocks Agreement) and its impact on related or proposed instruments throughout the United Nations system, with special reference to implementation of Part VII of the Fish Stocks Agreement, dealing with the requirements of developing States*, paragraph 34 d), at p. 13: “The Galapagos Agreement signatories are South East Pacific Coastal States. Once in force, the Agreement will be open to high seas fishing States. The Agreement applies to straddling and highly migratory fish stocks but

1.3. The proposed South Pacific RFMO: new beginnings rooted in UNFSA

Realizing that the Galapagos agreement might not become a reality in a reasonable period of time, the Chilean Government has undertaken another initiative to establish a RFMO for the area of concern by joining an already ongoing initiative of Australia and New Zealand leading to the establishment of a RFMO for the South Pacific. The proposed area of jurisdiction includes the area between the eastern boundary of the Southern Indian Ocean Fisheries Agreement; the northern boundary of the convention area of the Commission for the Conservation of the Antarctic Living Marine Resources (CCAMLR); the limit of the maritime jurisdictions of South American states. The northern limit has not yet been identified. The eventual species covered by the proposed RFMO are the resources of fish, molluscs, crustaceans and other sedentary species within the Area, but excluding sedentary species subject to the fishery jurisdiction of Coastal States pursuant to Article 77(4) of the LOS Convention; and highly migratory species listed in Annex 1 of the LOS Convention. Thus, and according to the current state of negotiation, the proposed RFMO does not provide a cooperative framework for the conservation and management of swordfish.

without reference to the Fish Stocks Agreement. In advance of involvement by high seas fishing States, the eventual relationship between the two agreements is unclear.”

Figure 4. Area of the proposed South Pacific RFMO



Source: Proposed South Pacific RFMO website <www.southpacificrfmo.org>.

Negotiations are currently under way and are in their initial phase. In February 2006, the first international meeting took place, with the participation of 26 States and regional economic integrated organizations, including Coastal States and States with a historical fishing interest in accordance with FAO statistics. In addition, 11 international and regional fisheries organizations and eight non-governmental organizations and industry groups participated as observers. The second meeting was held in Hobart, Australia, in November 2006, during which the Chairman of the Conference presented a draft Agreement text and a draft interim measures text.³⁷⁶ The third international meeting will be held in Chile between April 30 and May 4, 2007. In addition to the international meetings of the interested States, two working groups have been established to support the development of the South Pacific RFMO and to support the Chair of the Conference during the inter-sessional period: the science working group, whose mandate is to provide scientific information according to a list of task assigned

³⁷⁶ The information provided in this paragraph and the draft Agreement text and draft interim measures text are available on the proposed South Pacific RFMO website <www.southpacificrfmo.org>.

by the participating States during the first meeting; and the data and information working group, whose mandate is to provide advice on data management, including confidentiality, security, collection and dissemination and data needs.

The current negotiation process follows closely the developments of international fisheries law, and particularly the provisions of UNFSA. Indeed, it has been stated that the result of the process aims to be considered a 'model RFMO'. However, the negotiation process has encountered many of the problems related to regime-building which have been outlined in Part I. During the second international meeting held in Hobart, Australia, in November 2006, progress was made on the terms of the draft agreement text, but the Parties failed to agree on the substantial conservation and management measures proposed by the draft agreement on interim measures presented by the Conference Chairman, i.e.:

- Collect and share, in a timely manner, complete and accurate data concerning fishing activities for non-highly migratory fishery resources; as well as current and future data in respect of landings of transshipments of non-highly migratory fishery resources; and to report such data to the Interim Secretariat,³⁷⁷
- Refrain from fishing activities that risk causing significant damage to vulnerable marine habitats;³⁷⁸ and
- Ensure that fishing activities in the area do not increase from current levels, and that fishing activities for new fishery resources or in new areas within the area of the proposed RFMO do not commence until conservation and management measures are in place under the Agreement to be negotiated.³⁷⁹

According to the report of the meeting, “[i]t was not possible to reach agreement on [such] interim measures at this Meeting but the Meeting agreed that the matter would be discussed further, with the aim of reaching agreement on such interim measures, at the Third International Meeting.”³⁸⁰ Thus, the third meeting to be held in Chile in May 2007 provides another opportunity to implement effective conservation and management measures for the

³⁷⁷ Daft Resolution concerning fishing activities for non-highly migratory fishery resources in the high seas in the South Pacific Ocean, prepared by the Chair of the International Consultations on the Establishment of the proposed South Pacific RFMO, paragraphs 5 and 7. Document available at the proposed South Pacific RFMO website <www.southpacificfmo.org>, second international meeting.

³⁷⁸ *Ibid.*, paragraphs 9(i)(ii).

³⁷⁹ *Ibid.*, paragraph 10.

³⁸⁰ Report of the Second International Meeting on the Establishment of the proposed South Pacific Regional Fisheries Management Organisation, available at the website of the proposed South Pacific RFMO <www.southpacificfmo.org> second international meeting, paragraph 11.

fish stocks of the South Pacific, and particularly for jack mackerel. In the meantime, however, catches keep increasing over an already fully to overexploited stock.

2. Regional cooperation through RFMOs: theory vs. practice

The previous sections provided a summary of the current situation regarding cooperative regimes for the high seas of the Southeast Pacific Ocean. This description provides a good case study to realize the lacuna between theory and practice when it comes to establishing a high seas fisheries regime, and to analyze the roots of that inconsistency.

The international community, in various fora, calls upon States to “fill the gaps” of the high seas fisheries governance system by establishing new RFMOs with jurisdiction over areas or species currently not under the jurisdiction of a RFMO, or to extend the mandate of existing RFMOs for the same purpose. The need to adopt these measures is unanimous among States. However, when it comes to implement them through the establishment of regional regimes, the States’ resolve diminishes, and such cooperative efforts face several problems which are outlined below.

A first obvious observation arising from the experience of the Southeast Pacific is how negotiation processes to conserve high seas fisheries are influenced by many non-fishing factors. The difficulties encountered by the entry into force of the Galapagos Agreement are an example of such a situation. The presence of bilateral or regional non-fishing issues may obstruct the negotiation aimed at establishing a conservation and management regime for the high seas, which is, nevertheless, in the interest of the whole international community.

The experience in the Southeast Pacific also demonstrates that there is a lack of a preventative approach in the current regime. This because the current regime is built to provide for an efficient governance system once a RFMO has been established, but does not provide for effective interim mechanisms to protect the stocks while the organization is being established. Despite the years spent in negotiations, and the various initiatives endorsed, the swordfish and jack mackerel stocks remain without a specific conservation and management

regime in the high seas. “No agreement, no management”³⁸¹ is, still, the principle underlying this high seas fisheries regime.

In previous sections of this paper, it has been suggested that UNGA Resolution A/61/105 contains an interesting precedent, in that it actually changes this principle to “no management, no fishing”. This resolution might be an incentive for States participating in the negotiation process for the establishment of the South Pacific RFMO to agree on a conservation and management regime. However, it must be noted that UNGA Resolution A/61/105 addresses only one of the activities with potential negative impacts on the conservation of marine resources and marine environment: bottom fisheries in vulnerable marine ecosystems, including seamounts, hydrothermal vents and cold water corals. Therefore, it does not directly address the conservation needs of pelagic jack mackerel and swordfish stocks. In addition, the non-binding character of the Resolution may influence its effectiveness.

The experience thus far also demonstrates that the allocation of participatory or fishing rights is at the root of the problems faced by the implementation of the policy and legal framework. Establishing a RFMO has, in the current framework, a distributional effect: only those who participate in the RFMO can fish. In addition, the possibilities of joining the fishery at a later stage are uncertain because of the unclear status of new entrants in the fisheries regime. Thus, it becomes paramount to participate in the regime building from the beginning. This feature has a twofold effect: on one side, it acts as an incentive to establish a RFMO in order to exclude, or at least facilitate exclusion, of non-members to the fishery. On the other side, certain States may want to delay the establishment of an organization in order to “build” the real interest that entitles them to participate, and even to increase their catch history so as to increase their future participation rights in the fishery once the RFMO is established. The last factor has been proposed as the reasons behind the failure of the second international meeting for the establishment of a South Pacific RFMO to adopt interim measures. According to some observers, the main reasons for this failure was the objection by some States to ‘freeze’ their current fishing activities, a measure that constitutes itself allocation of participatory

³⁸¹ Burke, supra note 283, at p. 52.

rights, and that would determined future allocations, including allocation of quota shares.³⁸² Thus, the current system promotes an environmentally adverse practice by both Coastal States and DWFS as the only rational behavior, to increase the effort in the fisheries to levels well beyond the maximum sustainable yield for future benefit of higher quotas.

Also important to note, is the power relation in the negotiation process, which is a corollary of the previous features. Traditionally, it has been considered that Coastal States have a long-term interest in the sustainability of the resources that occur both in the EEZ and in the adjacent high seas (and particularly straddling stocks), while the DWFS not necessarily share that long-term interest because they are better equipped to move to other areas of the high seas if the resource is depleted. Assuming this hypothesis is correct, Coastal States stand to loose more if they do not agree on a conservation and management regime. Thus, DWFS are in a superior position to negotiate an agreement. This superior position is probably going to be reflected in the allocation of fishing rights among participants. It has been presented, as an hypothesis, that “the states that stand to lose more by not getting an agreement, are the ones who are willing to sacrificed most to get one.”³⁸³ As previously noted, the States that stand to lose more by not reaching an agreement are the Coastal States in whose EEZs the stock also occurs. Thus, the position of power of the DWFS in the negotiation process will probably imply that the allocation decisions will favored them. Otherwise, they simply do not agree to establish or follow the conservation and management regime. “No agreement, no management.” Several authors have stressed that the current international fisheries legal framework, and especially UNFSA, provides for a delicate balance between the interests and rights of the Coastal Stats and the DWFS. However, in practice, the balance does not necessarily exist.

In this regard, another feature worth of note is the influence that the international pressure for responsible environmental practices has on the behavior of States and even private

³⁸² WWF International stated: “It is clear that some governments seem bent on delaying any decision to cap levels of fishing so that they have the opportunity to rapidly expand their fishery exploitation, to the point that by the time we get any precautionary management measures in place, commercial fish stocks will have collapsed.” (See: <www.iucn.org>, “European Community pulls the rug on South Pacific negotiations”, News, 10 November 2006).

³⁸³ Hoel and Kvalvik, *supra* note 66, at p. 355.

companies. The ‘shame measures’, especially when coupled with market measures, can serve as powerful incentives towards conservation and effective cooperation. In this respect, the action of NGOs and organized civil society is valuable, as has been demonstrated in the negotiation of the South Pacific RFMO.

Despite the efforts undertaken, and due to the constraints outlined above, the South East Pacific remains without an effective governance regime that ensures the conservation and sustainable management of straddling and highly migratory stocks. The consequences of the failure of a group of States participating in the process, however, effect the entire international community. The explanation thereof, and, eventually, the way forward, could be explained through the concepts of game theory. In Part I, it has been noted that the management of shared stocks, and particularly the allocation of fishing rights, corresponds to a competitive zero-sum game, where no cooperation among the players will occur. However, a zero-sum game in game theory is an isolated exercise of controlled variables. In reality, the problems of allocation of fishing rights are joined by several other factors that may change the payoff matrix and, thus, alter the conclusion. So far the experience of the Southeast Pacific seems to reflect just competition. Perhaps the key for success in the process is to break the inertia point by changing the position of the players in the game, i.e., to change the paradigm of the players from the current apparent state of competition, to a state of cooperation required by the international framework. The elements outlined above – international expectations, iterative games, non-members, non fishing elements – can be the basis of that paradigm shift. Some incentives are already found in the current regulatory framework, and other incentives may be “created” in the current process. The challenge for the participants, and for the whole international community, is to create enough incentives so as to achieve timely, effective and long-term cooperation based on a win-win situation.

Conclusions

This paper has described the developments of the high seas fisheries regime, from the qualified right to fish in the high seas codified in the LOS Convention to the current, and evolving, regime. This current regime is characterized by a strong global framework providing for legal rules and soft-law guidelines and standards to achieve conservation of fish stocks, living marine species and their ecosystem. It is also characterized by the trust given to regional cooperative mechanisms, the RFMOs, to implement those global instruments for particular species and areas. Special attention has been given to the need to provide these RFMOs with sufficient power to achieve that goal for the benefit of the international community. The regime is further characterized by an “enclosure of the oceans”, in the sense that fishing activities can only take place through the regional management organizations with jurisdiction for the conservation and management of the respective stocks. Additional efforts have been given to “close the net” of fishing activities, by providing several disincentives for activities that take place outside the regime, i.e., unregulated fishing activities. The effective control of Flag States, control over beneficial owners, Port State measures, trade measures, monitoring, control and surveillance measures, have all been proposed and used for this purpose.

However, less attention has been given to the problem that lies under the management of shared resources: allocation of fishing rights. Harvesting shared resources is, by its nature, a competitive activity; and cooperative regimes are unlikely to be effective among competitive parties. Some guidelines have been drawn in this respect, but it is also recognized that the problem is, essentially, of a political nature. The establishment of precise rules in this regard would imply a political decision regarding distribution of wealth, a decision that the international community refused to make in 1982 and is, apparently, still not willing to make today.

The allocation of participatory or fishing rights is present in both the establishment of a RFMO and its operation, and with respect to participants and new entrants. It is, however, an especially acute problem for the establishment of a RFMO because a lack of agreement on

this matter implies a lack of management, leaving the stocks unprotected from excessive fishing activities. Furthermore, the only rational behavior of Coastal States and DWFS in this case is to increase their fishing effort, thereby seriously threatening the conservation of stocks.

The fact that this crucial aspect of management is left mainly to negotiation means also that, despite the global principles and rules developed to govern high seas fisheries, power relationships among participants have a crucial role in the establishment and operation of an high seas fisheries regime.

Constraints on the development of a high seas fisheries regime are exemplified with the experience of swordfish and jack mackerel in the Southeast Pacific. Despite the unilateral measures adopted by Chile as a Port State, and several initiatives in various bilateral and multilateral fora, both stocks of the Southeast Pacific remain without a cooperative conservation and management regime. Although the various initiatives have been, so far, unsuccessful because of different reasons, the underlying problem of allocation of fishing rights – the distribution of wealth – is present in all of them.

The challenge for the participating States, and the whole international community, is to find the proper incentives that will foster a change in the paradigm of the participants, from a competitive activity to a win-win situation. Some incentives have already been created, but more needs to be done in this respect.

ANNEX No. 1

Brief explanation of Prisoner's Dilemma, non-zero sum games and zero-sum games

The 'Prisoner's Dilemma' is a type of non-zero sum game in which two players can "cooperate" with or "defect" (i.e. betray) the other player. The prisoner's dilemma is explained as follows:

two prisoners who escaped and participated in a robbery have been recaptured and are awaiting trial for their new crime. Although they are both guilty, the Gotham City district attorney is not he has enough evidence to convict them. To entice them to testify against each other, the D.A. tells each prisoner the following: "if only one of you confesses and testifies against your partner, the person who confesses will go free while the person who does not confess will surely be convicted and given a 20-year jail sentence. If both of you confess, you will both be convicted and sent to prison for 5 years. Finally, if neither of you confess, I can convict you both of a misdemeanor and you will each get 1 year in prison." What should each prisoner do?

(Wayne L. Winston. *Operations Research. Applications and Algorithms*. Duxbury Press, Wadsworth Inc., 1994 (Third Edition), at p.850).

The 'Prisoner's Dilemma' is summarized in the following payoff matrix:

	Prisoner B Confess	Prisoner B Don't confess
Prisoner A Confess	-5,-5	0,-20
Prisoner A Don't confess	-20,0 (win much – lose much)	-1,-1

(Winston, *ibid*)

Zero-sum games are a special case of constant sum games, in which "for any choice of strategies, the sum of the rewards to the players is zero." The 'Prisoner's Dilemma' game is a non-zero-sum game because some outcomes have net results greater or less than zero. Informally, in non-zero-sum games, a gain by one player does not necessarily correspond with a loss by another.

ANNEX No. 2

Captures in the High Seas of FAO Statistical Area 87 by Chilean fishing vessels (in tonnes) – 1998 to 2005

SPECIES	YEARS							
Finfish	1998	1999	2000	2001	2002	2003	2004	2005
Jurel Jack mackerel <i>Trachurus symmetricus</i>	18768	17177	361	-	53081	44610	296709	272162
Pez espada Swordfish <i>Xiphias gladius</i>	2069	1923	930	759	1587	1976	992	1431
Bacalao de profundidad Patagonian toothfish <i>Dossistichus eleginoides</i>	1399	5267	2365	1327	1788	2519	1401	1061
Caballa Chub mackerel <i>Scomber japonicus</i>	-	20	88	-	3849	68348	83324	49960
Merluza de tres aletas Southern blue whiting <i>Micromesistius australis</i>	14215	5036	2726	6709	6439	6495	8657	-
Merluza de cola Patagonian grenadier; hoki <i>Macruronus magellanicus</i>	361	181	23	1308	2810	670	1351	44
Draco rayado Antarctic icefish <i>Champscephalus gunnari</i>	-	398	327	812	192	841	1047	1
Tiburón; marrajo Shortfin mako; mackerel shark <i>Isurus oxyrinchus</i>	159	139	158	157	158	114	147	211
Azulejo Blue shark <i>Prionace glauca</i>	1	-	227	190	488	334	278	244
Vidriola; Toremo; Palometa Yellowtail amberjack <i>Seriola lalandi</i>	-	4	29	58	54	44	23	12
Dorado de altura Common dolphinfish; mahi mahi <i>Coryphaena hippurus</i>	-	-	-	-	8	-	5	2
Atún aleta amarilla Yellowtail tuna <i>Thunnus albacares</i>	11	5	3	1	13	21	17	57
Atún aleta larga Albacore; white tuna <i>Thunnus alalunga</i>	-	-	1	5	40	1	8	6
Atún ojos grandes Bigeye tuna <i>Thunnus obesus</i>	4	5	10	-	4	4	9	10
Marlin Striped marlin <i>Tetrapturus audax</i>	-	-	-	-	10	4	1	6
Merluza común South Pacific hake; Chilean hake <i>Merluccius gayi gayi</i>	6	-	-	-	-	-	-	-
Merluza del sur; merluza austral Antarctic hake; queen hake <i>Merluccius australis</i>	-	2	-	1	-	-	1	-
Silver hake <i>Merluccius bilinearis</i>	-	-	-	-	-	-	-	347
Alfonsino Alfonsin <i>Beryx splendens</i>	144	-	-	-	2	11	-	5

<i>Raya volantin</i>	4	4	-	-	-	-	-	-
<i>Skate</i>								
<i>Dipturus chilensis</i>								
Palometa; Dorado	-	-	-	4	14	2	-	-
Yellowtail								
<i>Parona signata</i>								
Pejerrata; Grandero	-	-	3	-	1	-	-	1
Southern grenadier; Banded whiptail								
<i>Coelorhynchus chilensis</i>								
Congrio dorado								4
Golden ling								
<i>Genypterus blacodes</i>								
Pejezorro								1
Thresher shark								
<i>Alopias vulpinus</i>								
Pez sol	-	-	-	-	-	1	2	18
Opah								
<i>Lampris guttatus</i>								
Non classified	31	5	-	4	30	32	25	38
Mollusk	1998	1999	2000	2001	2002	2003	2004	2005
Jibia, Calamar rojo	-	3	-	-	-	-	366	1308
Fly jumbo squid								
<i>Dosidicus gigas</i>								
Crustacean	1998	1999	2000	2001	2002	2003	2004	2005
Langosta enana	-	22	5	1	-	-	-	-
Valparaíso spiny lobster								
<i>Projasus bahamondei</i>								

Source: Table No. 3 was prepared with the statistical information provided by Servicio Nacional de Pesca, Gobierno de Chile, Anuarios Estadísticos de Pesca 1998-2005, available at <www.sernapesca.cl>; biological information provided by Instituto de Fomento Pesquero at <www.ifop.cl>; scientific names of species provided by Subsecretaria de Pesca, available at <www.subpesca.cl>.

ANNEX No. 3

Captures of swordfish in the FAO Statistical Area 87, by nations, 1999-2000 (in tones).

	1999	2000	2001	2002	2003	2004
Chile	2,925	2,973	3,262	3,523	3,848	3,268
China						56
Colombia			1			1
Ecuador			617	508	263	1
Japan	404	355	1,267	1,267	878	521
Korea, Republic of	3					
Peru	42	20	356	278	80	28
Spain	1,121	1,807	828	6,322	5,674	5,605
Taiwan Province of China	1	9	2	9	117	300
Uruguay						343
TOTAL	4,496	5,164	6,333	11,907	10,860	10,123

Source: Subsecretariat for Fisheries, prepared with statistical information contained in FAO Yearbook of Fishery Statistic, available on FAO website <www.fao.org/fi/default.asp>, FAO Information, Data and Statistics Unit (FAO-FIDI) Fishery Statistic Programme, Statistics Publications.

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1945 Charter of the United Nations

1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora
CITES

1979 Convention on the Conservation of Migratory Species of Wild Animals

1982 United Nations Convention on the Law of the Sea

1992 Convention on Biological Diversity

1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas

1995 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

2000 Framework Agreement for the Conservation of the Marine Living Resources of the High Seas of the South East Pacific

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1995 Rome Consensus on World Fisheries adopted by the FAO Ministerial Conference on Fisheries, Rome, 14-15 March 1995

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FAO IPOA for reducing incidental catch of seabirds in long-line fisheries,

FAO IPOA for conservation and management of sharks, and

FAO IPOA to prevent, deter and eliminate Illegal, Unreported and Unregulated (IUU) fishing.

2000 UN Millennium Development Goals <http://www.un.org/millenniumgoals/>

2001 Doha Declaration adopted at the Ministerial Conference of the WTO

1995 Jakarta Mandate on Marine and Coastal Biological Diversity

2001 Reykjavik Declaration on Responsible Fisheries, adopted at the Conference on Responsible Fisheries in the Marine Ecosystem, held in Reykjavik, Iceland, 1-4 October 2001, organized with the Government of Iceland and co-sponsored by the Government of Norway

Political Declaration and Implementation Plan adopted at the 2002 World Summit on Environmental and Development held in Johannesburg

2005 Saint John's Ministerial Declaration, adopted at the Conference on the Governance of High Seas Fisheries and the UN Fish Agreement – Moving from Words to Action held in St. John's, Newfoundland and Labrador, Canada, May 1-5, 2005.