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The international legal regime for fisheries management

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THE INTERNATIONAL LEGAL REGIME FOR FISHERIES MANAGEMENT

Martin Tsamenyi*, Lara Manarangi-Trott**, & Shilpa Rajkumar***

INTRODUCTION

The international response to the growing depletion of the world’s fisheries stocks and the degradation of their habitats has been through the elaboration and adoption of four classes of instruments. First, globally binding fisheries treaties were adopted to address the conservation and management of fish stocks, particularly straddling fish stocks and highly migratory fish stocks. Second, international voluntary instruments have been adopted promoting a framework of principles and standards for responsible fisheries. Third, regional institutional framework for the management of tuna and tuna-like species was strengthened and expanded to be largely global in coverage. Fourth, global environmental treaties were adopted that, despite being negotiated outside the international fisheries management framework, provide useful tools and principles towards sustainable fisheries management.

Nevertheless major challenges facing the sustainable use of marine living resources today remain and continue to grow. These include:

- Overfishing, with the related issues of resource collapse and endangered species;
- Overcapacity, with the related issue of subsidies;
- Environmental impact of fishing;
- Illegal, unregulated and unreported fishing (IUU fishing);
- Poor selectivity and discarding;
- Absence of ecosystem-based fisheries management.¹

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¹ Serge M. Garcia and Ignacio de Leiva Moreno, *Global Overview of Marine Fisheries* [Symposium Paper presented at the Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem,]
The paper argues that while individually the four classes of responses do not meet the major challenges facing fisheries today, collectively they provide a very comprehensive and elaborate framework. What is required is more effective implementation of these instruments, through among other things the better coordination within and between national, regional and global institutions; efforts towards assisting developing countries, particularly small island developing States and Territories, with implementation through capacity building; improving data and information for improved decision-making. The paper concludes that there are sufficient instruments and tools to address the current major challenges of fisheries management. Effective implementation of the existing instruments, rather than negotiating additional instruments.

HISTORICAL CONTEXT: HOW DID WE GET TO WHERE WE ARE NOW?

The traditional legal framework for the management of the fisheries resources of the oceans was based on the principle of free access to the living resources. The doctrine associated with this approach was the freedom of the high seas, which was proclaimed by Hugo Grotius. Grotius sought to establish the inclusive interest of the whole community in the oceans, in opposition to the claims of some States for exclusive rights to areas of the oceans. At that time fisheries and their management were not considered to be priorities. Interest in the oceans was more for navigation and trade. Three nautical miles was widely accepted as the breadth of a States territorial sea. Consequently the bulk of the oceans were available for fishing under the privilege of freedom of fishing on the high seas.

Freedom of fishing had two implications for the management of fisheries. First, coastal States as such did not have any right to the fisheries resources of the oceans beyond the narrow limit of their territorial seas. Second and more importantly, the

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2 Hugo Grotius, *The Freedom of the Seas* (New York: Oxford University Press, 1916). Grotius wrote his doctrine in 1604-1605, but it was not widely published until 1868 as *Mare Liberum*, the 1916 publication cited here is the English translation of the Latin text. Grotius argued that the oceans were the common property of all, particularly in regard to freedom of navigation and trade. This argument refuted the sovereign claims by Spain and Portugal over parts of the ocean (Pacific Ocean and Gulf of Mexico were claimed by Spain and the Atlantic Ocean south of Morocco and the Indian Ocean were claimed by Portugal).

system did not promote effective conservation of the living resources of the oceans. Fishing States were reluctant to adopt effective conservation strategies because it was in their short-term national interest not to do so.

The Geneva Convention on the Conservation of the Living Resources on the High Seas 1958\(^4\) (High Seas Conservation Convention) was a half-hearted attempt to address this conservation issue. The Convention affirmed that "all States have the right for their nationals to engage in fishing on the high seas", subject to their treaty obligations, the rights and interests of Coastal States, and an obligation to co-operate for the purposes of conservation.\(^5\) This Convention was the first specific definition of conservation contained in a treaty, albeit in anthropocentric terms:\(^6\)

The expression ‘conservation of the living resources of the high seas’ means 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. Conservation programmes should be formulated with a view to securing in the first place a supply of food for human consumption.\(^7\)

This definition of conservation remains the only specific definition within the substantive articles of a treaty,\(^8\) although subsequent international fisheries treaties do provide objectives or principles of conservation and management.\(^9\) However, the implementation of the High Seas Conservation Convention proved problematic within the framework of the traditional high seas freedoms. Conflicting political considerations, limited institutional authority, disagreements about catch allocations, and problems of enforcement rapidly rendered the Geneva regime unworkable.\(^10\)

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\(^5\) See in particular Articles 1, 3 and 4 of the Geneva Fisheries Convention supra n. Conservation was defined in the text as "the aggregate of the measures rendering possible the optimum sustainable yield... so as to ensure a maximum supply of food and other marine products" (Art. 2). a clearly productionist as opposed to conservationist definition.

\(^6\) Birnie and Boyle, *International Law and the Environment* at p 436

\(^7\) Convention on Fishing and Conservation of the Living Resources of the High Seas, Article 2.

\(^8\) Birnie and Boyle, *International Law and the Environment*.

\(^9\) The LOS Convention, Article 61 and the UN Fish Stocks Agreement, Article 5.

\(^10\) See the excellent discussion of the Fisheries Convention's failings in Gosselin, "Marine Fisheries Law" supra n.2 at Chapter Eight.
LAW OF THE SEA CONVENTION – A COMPREHENSIVE FRAMEWORK FOR OCEANS GOVERNANCE?

In addition to its creation of a comprehensive multilateral treaty to regulate the use of the seas, one of the most fundamental results of the UNCLOS III negotiations and the State practice generated by it, has been the emergence of a new international law of marine fisheries. The treaty sources of this customary law regime are to be found in Part V of the Law of the Sea Convention (LOS Convention) setting out the exclusive economic zone (EEZ) concept and Part VII, section 2 entitled “Conservation and Management of the Living Resources of the High Seas.”

Essentially, the new marine fisheries law is a law of extended, regulated as well as politicised jurisdiction permitting a wide range of considerations to be taken into account by the coastal State when exercising its significantly expanded and relatively exclusive powers of ownership and control over the fisheries. In legal terms it displaces the old doctrine of high seas freedoms as far as most marine fisheries are concerned and to the extent that the high seas doctrine applies to fisheries not under coastal State control, the content of the doctrine has arguably been significantly altered by the EEZ concept.

Fisheries Management in the EEZ

The EEZ is defined as "an area beyond and adjacent to the territorial sea" which "shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured". Article 56 of the LOS Convention governs the jurisdictional competence of the coastal State in the EEZ. This is defined in terms of sovereign rights as opposed to sovereignty. The term sovereign right implies that:

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13 LOS Convention Article 55.

14 LOS Convention Article 57.
the coastal State does not have full sovereignty as on its land territory or in the
territorial sea but a right of jurisdiction that is related to certain purposes.
Beyond the jurisdiction so defined, there is no special basis for coastal State
rights, and the traditional rules developed for the high seas will continue to
apply. On the other hand, in so far as the specific purposes are concerned, the
coastal State is "sovereign": it has the exclusive right of decision in regard to
the rules which are to apply within the extended zone, and the exclusive right
to enforce the measures on which it has decided.  

The EEZ has been described as an inheritance by the coastal State from the rest of the
world: "Under the new regime of the seas, the world community has willed to the
Coastal States the bulk of living resources in waters off their shores".  

This is because the EEZ brings under national jurisdiction large tracts of ocean space that
previously belonged to the regime of the high seas. With this in mind, the LOS
Convention outlines in some detail how individual coastal States are to go about
fulfilling the expectations placed on them by the world community. The expectations
are couched in terms of two important obligations, namely (i) conservation; and (ii)
optimum utilization.

To discharge its conservation, the coastal State is required to ensure through proper
conservation and management measures that the maintenance of living resources in
the EEZ is not endangered by over-exploitation. The coastal State is required to
determine the allowable catch of the living resources in its EEZ. The allowable
catch is "that catch which when taken in any one year will best enable the objectives


\[\text{LOS Convention Article 61.}\]

\[\text{LOS Convention Article 61(2).}\]

\[\text{LOS Convention Article 61(1).}\]
of fisheries management (e.g. optimum long-term yield) to be achieved,"\(^\text{20}\) and represents "the capital that has been left by the world community to the coastal States".\(^\text{21}\)

The second obligation imposed on the coastal State with regard to the fisheries resources in its EEZ is that of the optimum utilization of the living resources in the EEZ,\(^\text{22}\) an obligation which reflects the 1970's concern of distant water fishing nations that Coastal States would drastically limit utilisation of the resources newly enclosed in their fisheries zones. Since these were up to 85-90\%\(^\text{23}\) of the world's resources and until then had been dominated in their exploitation by enterprises from a limited number of States, these States argued that it was necessary to establish an international obligation to ensure their utilisation. Consequently, the coastal State is required to determine its capacity to harvest the living resources of the EEZ.\(^\text{24}\) Where the coastal State does not have the capacity to harvest the entire allowable catch, it is required, through agreements or other arrangements to give other states access to the surplus of the allowable catch.\(^\text{25}\)

The EEZ provisions of the LOS Convention also contains specific provisions for straddling stocks\(^\text{26}\) and highly migratory species,\(^\text{27}\) and requires that the relevant States cooperate either directly or through appropriate organisations to ensure the conservation of such species.

**High Seas Fisheries Management under the LOS Convention**

\(^\text{20}\) See UNCLOS III, Geneva Session, Doc. GE 76.64093.


\(^\text{22}\) LOS Convention Article 62(1) .


\(^\text{24}\) LOS Convention Article 62(2) 

\(^\text{25}\) LOS Convention Article 62(2) .

\(^\text{26}\) LOS Convention, Article 63.

\(^\text{27}\) LOS Convention, Article 64.
The provisions of the LOS Convention on high seas fisheries are contained in Part VII, Section 2. Article 116 proclaims that all States have the right for their nationals to engage in fishing on the high seas. This right is subject to States’ treaty obligations and the obligations with regard to cooperation to conserve straddling stocks and highly migratory species. Article 117 imposes a duty on all States to adopt and implement conservation measures with respect to their nationals who fish on the high seas. Article 118 requires cooperation of States to achieve these conservation objectives. States are to cooperate to establish subregional or regional fisheries organizations.

In the decade following the adoption of the LOS Convention, problems of international fisheries came to the fore. Some of the problems can be attributed to the design and implementation of the LOS Convention itself, especially:

- the discretionary nature of conservation requirements in the EEZ, in particular, the policy flexibility given to coastal States in determining the allowable catch.
- the use of maximum sustainable yield (MSY) as the default biological reference point.
- the emphasis placed on the promotion of the optimum utilisation.
- the lack of clear guidelines on the framework for international cooperation to manage and conserve highly migratory species and straddling stocks.

Problems also arose because too much of freedom of high seas fishing was left intact by the LOS Convention. There were problems of registration and re-registration of fishing vessels under flags of convenience and the non-participation in fisheries management regimes or opting-out of fishing regulations by flag States. Chapter 17 of Agenda 21 identified these problems as follows:

- inadequate monitoring and enforcement of effective conservation measures

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29 Agenda 21, Chapter 17.45
unregulated fishing,
overcapitalization,
excessive fleet size,
vessel reflagging to escape controls,
is insufficiently selective gear,
unreliable databases and
lack of sufficient cooperation between States.

INTERNATIONAL RESPONSES TO THE LOS CONVENTION INADEQUACIES

In the 1990s the international community responded to the inadequacies of the LOS Convention framework for sustainable fisheries management in two ways: (a) adoption of legally binding instruments to fill the gap in the LOS Convention and (b) elaboration of non-binding policy instruments to provide guidance in the implementation of the LOS Convention regime.

FAO Compliance Agreement – addressing the re-flagging problem

The problem of vessels reflagging was addressed by FAO in 1993 when it adopted The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement). The preamble to this agreement recognises that while all States have the right to fish on the high seas, this right is subject to relevant rules of international law and the duty to exercise effective flag State control in taking ‘such measures for their respective nationals as may be necessary for the conservation of living resources of the high seas’. The key obligations of the Compliance Agreement include:

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30 The FAO Compliance Agreement was approved on 24 November 1993 by Resolution 15/93 of the 27th Session of the FAO Conference, text appears in 33 International Legal Materials (ILM) 968-980 (1994). The Agreement entered into force on 24 April 2003 and the Parties are: Argentina, Barbados, Benin, Canada, Chile, Cyprus, Egypt, European Community, Georgia, Ghana, Japan, Madagascar, Mauritius, Mexico, Morocco, Myanmar, Namibia, Norway, Peru, Republic of Korea, St. Kitts & Nevis, St. Lucia, Seychelles, Sweden, Syrian Arab Republic, Tanzania, United States of America, Uruguay. Source: FAO Website: http://www.fao.org/Legal/treaties/012s-e.htm, accessed 8 July 2004.
• Each Party is to take measures 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;
• No Party is to allow any fishing vessel entitled to fly its flag to be used for fishing on the high seas without permission;
• A fishing vessel, which has been registered in another country and has undermined international conservation and management measures shall have its authorization cancelled. Such a vessel can only be authorized by a Party to the Agreement to be used for fishing on the high seas if any period of suspension by another Party has expired; and authorization for the vessel in question to fish on the high seas has not been withdrawn by another Party within the previous three years;
• Each party is to keep detailed records of vessels flying its flag and authorized to fish on the high seas; and
• Each party is to provide detailed information to the FAO with respect to each fishing vessel entered on its record. The FAO is to circulate periodically such information to other Parties.

The Compliance Agreement ‘marks a distinct move away from the concept of high-seas fishing as an unqualified right’ \(^{31}\) because the emphasis is on the State duties rather than on the right to freedom of fishing.

**UN Fish Stocks Agreement – a Broader Paradigm for the Management of Fisheries Targeting Straddling and Highly Migratory Fish Stocks**

The sixth session of United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, held in New York from 24 July to 4 August 1995, adopted 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* (UN Fish

The UN Fish Stocks Agreement complements the LOS Convention and provides an innovative and comprehensive regime for the conservation and management of straddling and highly migratory fish stocks.

The objective of the UN Fish Stocks Agreement 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. This objective is achieved through the incorporation of a number of key State obligations on States, including:

- application of the precautionary approach;
- assessment of the impacts of fishing, other human activities and environmental factors on target stocks and ecologically related species or dependent or associated stocks;
- adoption of conservation and management measures for ecologically related species or dependent or associated stocks, with a view to maintaining populations of such species at a level above that at which their reproduction may become seriously threatened;

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32 The text is found in A/Conf.164/37 (8 September 1995). The Agreement entered into force on 11 December 2001 and the Parties are: Australia, Austria, Bahamas, Barbados, Belgium, Brazil, Canada, Cook Islands, Costa Rica, Cyprus, Denmark, European Community, Fiji, Finland, France, Germany, Greece, Iceland, India, Iran (Islamic Republic of), Ireland, Italy, Luxembourg, Maldives, Malta, Marshall Islands, Mauritius, Micronesia (Federated States of), Monaco, Namibia, Nauru, Netherlands, New Zealand, Norway, Papua New Guinea, Portugal, Russian Federation, Saint Lucia, Samoa, Senegal, Seychelles, Solomon Islands, South Africa, Spain, Sri Lanka, Sweden, Tonga, Ukraine, United Kingdom on behalf of its Territories, United States of America, Uruguay. Source: UN Division for Ocean Affairs and the Law of the Sea <http://www.un.org/Depts/los/index.htm> updated on 16 January 2004, accessed on 8 July 2004.

33 UN Fish Stocks Agreement, Article 2

• minimizing pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species and impacts on associated or dependent species through the use of selective, environmentally safe and cost-effective fishing gear and techniques;
• protection of biodiversity in the marine environment;
• adoption of measures to prevent or eliminate overfishing and excess fishing capacity and to ensure that fishing efforts are commensurate with the sustainable use of resources;
• consideration of the interests of artisanal and subsistence fishermen;
• collection and exchange of data concerning all aspects of fishing activities as set out in Annex I of the UN Fish Stocks Agreement;
• Promotion of scientific research and development of appropriate technologies for fishery conservation and management;
• strengthening of regional fisheries organisations and arrangements, including regional cooperation in enforcement;
• implementation and enforcement of conservation and management measures through effective monitoring, control and surveillance, and through flag State duties and port State jurisdiction; and
• adoption of compatible measures for the conservation and management of straddling and highly migratory fish stocks within and beyond areas under national jurisdiction.

ADOPTION OF VOLUNTARY INTERNATIONAL FISHERIES INSTRUMENTS PRESCRIBING PRINCIPLES AND STANDARDS OF RESPONSIBLE FISHERIES

Following the adoption of the LOS Convention and in response to concerns about pressure on high seas fisheries, in part prompted by the various UN Resolutions relating to Driftnet fishing, 35 the FAO Committee of Fisheries in 1991 requested that FAO hold an international conference for responsible fishing. The International Conference on Responsible Fishing was held in Cancún, Mexico from 6 – 8 May

35 Such as the UN General Assembly Resolution 44/225, of 22 December 1989: reprinted in 29 ILM 1555 (1990), UN General Assembly Resolution 46/215 of 20 December 1991 (there were many)
The Conference statement, the Declaration of Cancún, noted in its preamble that the conservation measures for the high seas are inadequate in many areas and in some areas resources are overutilized. Fishing should be conducted under the principle of ‘responsible fishing’ that encompasses the sustainable utilization of fisheries resources in harmony with the environment [and] the use of capture and aquaculture practices which are not harmful to ecosystems, resources or their quality…

States should use sustainable utilization as the basis for sound fisheries management policies. In regards to high seas fisheries, the freedom to fish must be balanced with the obligation to cooperate with other States to ensure conservation and rationale management of the living resources, in accordance with the relevant provisions of the LOS Convention. In regards to data, States should improve scientific knowledge regarding the biology, abundance, distribution and fluctuation of fisheries resources, both in their own jurisdiction and on the high seas, and should promote and enhance collection of data necessary for the conservation and sustainable utilization of fisheries resources.

**Code of Conduct for Responsible Fishing – reiterating principles for fisheries management**

The Declaration of Cancún called upon FAO to draft, in consultation with relevant international organizations, an international Code of Conduct for Responsible Fishing. The Code of Conduct, which was adopted in October 1995, and it was the first of a generation of voluntary international fisheries instruments, has been described as representing ‘the most complete and up-to date expression of the principles of sustainable fisheries management and development and is likely to have

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37 Declaration of Cancún, Principle 2
38 Declaration of Cancún, Principle 12
39 Declaration of Cancún, Principle 3 and 4
40 Declaration of Cancún, Agreement I
substantial impact on fisheries management at both national and international levels.\textsuperscript{41}

The Code of Conduct provides principles and standards applicable to the conservation and management and development of all aspects of fisheries, i.e. the capture, processing and trade of fishery products, fishing operations, aquaculture, fisheries research and the integration of fisheries into coastal area management.\textsuperscript{42} These principles are summarised below:

- Implementation of management measures to ensure the sustainable use of marine living resources;
- Conservation of target species, species belonging to the same ecosystem or associated and dependent species;
- Prevention of over-fishing and excess fishing capacity;
- Support for fisheries management decisions with the best scientific evidence;
- Application of the precautionary approach to fisheries conservation and management;
- Protection of endangered species;
- Promotion of selective and environmentally safe fishing gear and practices;
- Protection and rehabilitation of critical fisheries habitats;
- Promotion of international cooperation to facilitate conservation and management of living aquatic resources, especially straddling stocks and highly migratory stocks, throughout their range of distribution;
- The adoption of compatible conservation measures in areas under national jurisdiction and on the high seas; and
- Development of effective monitoring, control and surveillance measures.

\textsuperscript{42} Code of Conduct, Article 1.3
To support implementation of the Code of Conduct, FAO was further requested in the Resolution that adopted the Code of Conduct to elaborate, as appropriate, technical guidelines aimed at supporting implementation of the Code, these are commonly known as the FAO Technical Guidelines for Responsible Fisheries.\textsuperscript{43}

\textbf{International Plans of Action (IPOAs): addressing specific issues}

These IPOAs were developed in order to manage the issues concerned with implementing the Code of Conduct. To-date, the FAO has developed four IPOAS, which are described below.

\textbf{The International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries 1999}

The International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (IPOA Seabirds) is designed to reduce the incidental catch of seabirds in longline fishing. All States whose fishers engage in longline fishing are expected to take a number of actions to reduce the incidental bycatch of seabirds. The actions include:

- assessment of whether a problem exists with respect to the incidental catch of seabirds in the longline fishery;
- developing a National Plan of Action for reducing the incidental catch of seabirds in longline fisheries;
- undertaking national reviews
- reporting requirements to FAO.

\textsuperscript{43} To date there are five technical guidelines relevant to data in fisheries management:

- #2 – Precautionary Approach to Capture Fisheries and Species Introductions (1996)
- #4 – Fisheries Management (1997)
- #8 – Indicators for Sustainable Development of Marine Capture Fisheries (1999)
International Plan of Action for the Conservation and Management of Sharks, 1999

The International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks) is designed to ensure the conservation and management of sharks and their long-term sustainable use. The IPOA-Sharks applies to States in the waters of which sharks are caught by flagged vessels of that State; States in whose waters foreign vessels catch sharks and any States whose nationals’ fish for sharks on the high seas. The measures that States are encouraged to consider and implement under the IPOA-Sharks are:

- to assess the status of shark stocks to determine whether a national plan of action is required;
- to adopt and implement a national plan of action (Shark-plan) in accordance with Appendix A of the IPOA-Sharks where significant threats to sharks are found;
- produce a periodic shark assessment report in accordance with Appendix B of the IPOA-Sharks for dissemination to FAO and the international community.

International Plan of Action for the Management of Fishing Capacity, 1999

The objective of the International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity) is to reduce excess fishing capacity in world fisheries. This is to be achieved through assessment plans to reduce capacity and the strengthening of national and regional organizations to better manage capacity issues. Priority is to be given to those fisheries and fleets which show the effects of over-capacity and over-fishing.

The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, 2001
The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing was adopted by consensus at the twenty-fourth Session the FAO Committee on Fisheries on 2 March 2001 and endorsed by the Hundred and Twentieth Session of the FAO Council on 23 June 2001. The commitments that FAO members have made under the IPOA-IUU include:

- Ratify and/or Implement the Law of the Sea Convention, UN Fish Stocks Agreement, FAO Compliance Agreement and the Code of Conduct;
- Enact national legislation to address all aspects of IUU fishing, including admissibility of evidence (including electronic evidence and new technologies);
- Implement flag States responsibility, including developing and keeping record of fishing vessels, effective fishing authorisation procedures, imposition of sufficiently severe penalties so as to discourage nationals engaging in IUU activities and avoiding subsidies to companies, vessels and people engaged in IUU fishing;
- Implement monitoring, control and surveillance (MCS) measures such by maintaining record of all vessel owners and operators, implementing a VMS, implementing an observer program, providing training and education to all persons involved in MCS operations and provide adequate funding for MCS operations;
- Bilateral and multilateral co-operation such as data exchange, co-operative investigation of IUU fishing, expertise and technology exchange, harmonisation of national measures and co-operation of MCS efforts; and
- Develop National Plans of Action as soon as possible but no later than three years after the approval of the IPOA-IUU to achieve the objectives of the IPOA-IUU to full effect.

Limitations of international voluntary fisheries instruments to meeting fisheries management challenges

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44 For more information: [http://www.fao.org/fi/default_all.asp](http://www.fao.org/fi/default_all.asp)
A key problem associated with voluntary instruments is their non-binding nature, which can and does significantly impede the effectiveness of the instruments due to the lack of legal force they carry. Thus far, efforts to achieve the fine balance between encouraging widespread and international participation and the effective implementation of the guidelines and measures outlined in these voluntary instruments have largely failed. A key-contributing factor to this problem, aside from the lack of legal weight, is the vagueness of concepts outlined in the voluntary instruments. Concepts such as “wise use”, “optimal utilization”, “ecosystems-based management” and the “precautionary approach” are still being debated and refined. Many other terms used in the instruments are also inadequately defined. This ambiguity creates difficulties in terms of the practical implementation of measures, and hence, dilutes the effectiveness of the instruments themselves.

The non-binding nature of the instruments discussed above is problematic in other ways. For instance, the lack of legal reporting requirements associated with the adoption of voluntary instruments has led to a plethora of plans of actions being developed by States eager to adopt instruments that impose significantly fewer onerous burdens upon them unlike legally binding instruments. These documents essentially reproduce the broad principles outlined in the Code of Conduct and other instruments instead of providing innovative and definite measures.

**CREATION AND EXPANSION OF THE REGIONAL INSTITUTIONAL FISHERIES MANAGEMENT REGIME**

One of the responses to international concerns for high seas marine fishery resources has been regional action, often through States cooperating to establish regional fisheries management organizations (RFMOs). RFMOs have been established from as early as 1946, and as recently as 2001 as implementations of the UN Fish Stocks Agreement. The RFMOs considered by this paper are listed with background information in Table 1.
Table 1. Summary of the main features of select regional fisheries management organisations

<table>
<thead>
<tr>
<th>Pre-LOS Convention</th>
<th>Establishment</th>
<th>Membership</th>
<th>Area of Competence</th>
<th>Main Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-American Tropical Tuna Commission (IATTC)</td>
<td>1949 Convention for the Establishment of an Inter-American Tropical Tuna Commission Antigua Convention, of 14 November 2003</td>
<td>Costa Rica, Ecuador, El Salvador, France, Guatemala, Japan, Mexico, Nicaragua, Panama, Peru, Spain, United States of America, Vanuatu, Venezuela.</td>
<td>Eastern Pacific Ocean</td>
<td>To ensure the long-term conservation and sustainable use of the fish stocks covered by this Convention, in accordance with the relevant rules of international law. To gather and interpret information on tuna; to conduct scientific investigation; to recommend proposals for joint action for conservation.</td>
</tr>
<tr>
<td>International Commission for the Conservation of Atlantic Tuna (ICCAT)</td>
<td>1966 International Convention for the Conservation of Atlantic Tuna</td>
<td>Angola, Algeria, Barbados, Brazil, Canada, Cape Verde, China, Croatia, Republic of Cyprus, European Community, France, Gabon, Ghana, Guinea Equatorial, Republic of Guinea, Honduras, Iceland, Ivory Coast, Japan, Republic of Korea, Libya, Malta, Mexico, Morocco, Namibia, Panama, Philippines, Russia, South Africa, Sao Tome and Principle, Trinidad and Tobago, Tunisia,</td>
<td>Atlantic Ocean including the adjacent seas</td>
<td>To study the populations of tuna and tuna-like fishes, to make recommendations designed to maintain these populations at levels permitting maximum sustainable catch.</td>
</tr>
</tbody>
</table>
Turkey, United Kingdom, United States, Uruguay, Vanuatu, Venezuela. Additionally, the Commission has also created a special status known as that of “Cooperating Party, Entity or Fishing Entity”, which is the current status of Chinese Taipei.
<table>
<thead>
<tr>
<th><strong>PRE-LOS CONVENTION</strong></th>
<th>RFMO</th>
<th>Establishment</th>
<th>Membership</th>
<th>Area of Competence</th>
<th>Main Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest Atlantic Fisheries Organisation (NAFO)</td>
<td>1978</td>
<td>Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries</td>
<td>Bulgaria, Canada, Cuba, Denmark (in respect of Faeroe Islands, Greenland), Estonia, European Community, France (in respect of Saint Pierre et Miquelon), Iceland, Japan, Korea, Republic of, Latvia, Lithuania, Norway, Poland, Russian Federation, Ukraine, United States of America.</td>
<td>North-West Atlantic Ocean</td>
<td>To contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the Convention Area</td>
</tr>
<tr>
<td>Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)</td>
<td>1980</td>
<td>Convention for the Conservation of Antarctic Marine Living Resources</td>
<td>Argentina, Australia, Belgium, Brazil, Chile, European Community, France, Germany, India, Italy, Japan, Republic of Korea, Namibia, New Zealand, Norway, Poland, Russian Federation, South Africa, Spain, Sweden, Ukraine, United Kingdom, United States of America, Uruguay.</td>
<td>Southern Ocean</td>
<td>To conserve Antarctic marine living resources; to ensure that all harvests and associated activities in the area in which this Convention applies shall be conducted in accordance with the provisions of this Convention.</td>
</tr>
</tbody>
</table>

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<tr>
<th><strong>POST-LOS CONVENTION</strong></th>
<th>RFMO</th>
<th>Establishment</th>
<th>Membership</th>
<th>Area of Competence</th>
<th>Main Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Ocean Tuna Commission (IOTC)</td>
<td>1993</td>
<td>Agreement for the Establishment of the Indian Ocean Tuna Commission Under aegis of FAO (Article XIV of the FAO Constitution)</td>
<td>Australia, China, European Community, Eritrea, France, India, Japan, Republic of Korea, Madagascar, Mauritius, Malaysia, Oman, Pakistan, Seychelles, Sudan, Sri Lanka, Thailand, United Kingdom and Vanuatu</td>
<td>Indian Ocean and adjacent seas north of the Antarctic Convergence</td>
<td>To promote cooperation among Members with a view to ensuring, through appropriate management, the conservation and optimum utilisation of stocks … encouraging sustainable development of fisheries based on such stocks</td>
</tr>
<tr>
<td>Commission for the Conservation of Southern Bluefin Tuna (CCSBT)</td>
<td>1994</td>
<td>Convention for the Conservation of Southern Bluefin Tuna</td>
<td>Australia, Republic of Korea, Japan, New Zealand. Additionally the fishing entity of Taiwan has membership of the Extended Commission.</td>
<td>Atlantic Ocean, Pacific Ocean and Indian Ocean</td>
<td>To ensure, through appropriate management, the conservation and optimum utilization of southern bluefin tuna</td>
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<tr>
<th><strong>POST-UN FISH STOCKS AGREEMENT</strong></th>
<th>RFMO</th>
<th>Establishment</th>
<th>Membership</th>
<th>Area of Competence</th>
<th>Main Functions</th>
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<tr>
<td>Organization</td>
<td>Year</td>
<td>Convention Title</td>
<td>States or Organizations</td>
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<tr>
<td>Western and Central Pacific Fish</td>
<td>2000</td>
<td>Convention on the Conservation and Management of Highly Migratory Fish Stocks in</td>
<td>Australia, Cook Islands, Federated States of Micronesia, Fiji, Republic of Kiribati,</td>
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<td>Stocks Commission (WCPFC)</td>
<td></td>
<td>the Western and Central Pacific Ocean</td>
<td>Republic of Marshall Islands, Nauru, New Zealand, Niue, Papua New Guinea, Samoa,</td>
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<td></td>
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<td>Solomon Islands, Tonga, Tuvalu.</td>
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<td>Additionally Chinese Taipei signed an Arrangement for the Participation of Fishing</td>
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<td>Entities.</td>
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<td></td>
<td>To ensure, through effective management the long-term conservation and</td>
<td>Western Central Pacific Ocean</td>
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<td></td>
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<td>sustainable use of highly migratory fish stocks in the western and central Pacific</td>
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<td>Ocean in accordance with the 1982 UN Nations Convention on the Law of the Seas</td>
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<td>and the 1995 UN Fish Stocks Agreement.</td>
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<tr>
<td>South East Atlantic Fisheries</td>
<td>2001</td>
<td>Convention on the Conservation and Management of Fishery Resources in the South</td>
<td>Economic Community, Namibia, Norway</td>
<td></td>
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<tr>
<td>Organization (SEAFo)</td>
<td></td>
<td>East Atlantic Ocean</td>
<td>South East Atlantic Ocean</td>
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<td></td>
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<td>To ensure the long-term conservation and sustainable use of the fishery resources in</td>
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<td></td>
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<td>the Convention Area through the effective implementation of this Convention.</td>
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RFMOs were established to meet regional fisheries management challenges

Despite establishment at different times in history, the general pattern for RFMOs tended to begin with two or more countries nationals exploiting the same fisheries stock, either on the high seas and/or within areas of national jurisdiction. Over time signs of resource scarcity became apparent and scientific advice was that the stocks are approaching or are likely to be approaching maximum sustainable limits and hence management action is advised. Owing to the stock being exploited by multiple States and fishing activities traversing multiple jurisdictions the response has been international negotiation and ultimately some form of agreement or Convention being adopted. These Conventions tend to prescribe the establishment of a Commission Secretariat and a members forum as the governing body: a RFMO. These RFMOs have a diverse range of mandates, functions, structures and financial resources; nevertheless they have been created to solve a variety of fisheries management challenges, such as sustainability or optimum utilization, and continue to act in response to fisheries management challenges.

RFMOs have evolved to include principles of sustainability

The RFMOs that were established post-LOS Convention, particularly those that implement the UN Fish Stocks Agreement (WCPFC and SEAFO), have included within their constituent Conventions as part of the principles to be considered in the formulation of conservation and management measures principles of sustainability, such as the precautionary approach, conservation of biodiversity and minimizing impacts of fishing.

RFMOs that were established pre-UN Fish Stocks Agreement, such as ICCAT and CCSBT, while not containing such principles of sustainability within their Conventions have adopted resolutions that ensure the consistency of their measures and rules of procedure with international legal instruments such as the UN Fish Stocks Agreement. IATTC has taken one step further by adopting on 14 November 2003, the Convention for the Strengthening of the Inter-American Tropical Tuna Commission Established by the 1949 Convention between the United States of
America and the Republic of Costa Rica (Antigua Convention). The Antigua Convention was adopted as a means to strengthen the IATTC and to bring it to date with relevant provisions of international law. CCAMLR is the exception to the pre-LOS Convention RFMOs, it was established as a part of the Antarctic Treaty system and its constituent Convention contains principles of ecosystem-based management, and it is still seen as a good model of how to implement ecosystems-based management.

**Common membership**

Many of the major States are Parties to the major tuna RFMOs, hence despite having no formal global coordination mechanism for the management of tuna stocks, there can be some consistency between measures adopted and the rules of procedures within these RFMOs ensuring few gaps in the global management of tuna fisheries (See Table 1).

**External to the UN system**

Most RFMOs are external to the UN system, and hence have been able to find ways to include the non-State party Taiwan as a member in the Commission (see Table 1). However IOTC is a FAO body, and being an FAO body, IOTC’s membership is restricted to those countries or regional economic integration organisations that are members of the UN (or one of its specialised agencies) and are fishing for tuna in the

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45 Antigua Convention, The Convention is open for signature from November 14 2003 until December 2004 and shall enter into force after the deposit of the seventh instrument of ratification or accession of the Parties to the 1949 Convention. To date the Convention has been signed by Costa Rica, France, Guatemala, Mexico, Nicaragua, Peru and United States. Additionally Chinese Taipei has signed (in accordance with Article XXVIII of the Antigua Convention relating to fishing entities).

46 The Antigua Convention is silent on the relationship between it and the 1949 Convention, except that members of the Commission agree to maintain and to strengthen the IATTC as established by the 1949 Convention (Article VI(1)) . The objective of the Antigua Convention, is consistent with the objective of the UN Fish Stocks Agreement, and it is ‘to ensure the long-term conservation and sustainable use of the fish stocks covered by this Convention, in accordance with the relevant rules of international law.’ (Article II).

Indian Ocean: such rules prevent Taiwan from becoming a member of IOTC. This is a real issue because Taiwan a global major fishing entity and the UN Fish Stocks Agreement affirms that a prerequisite for effective management of a fishery is that all who fish should become involved in the management of the fishery. The absence of Taiwan as a member of IOTC is a factor that will prevent the Commission from adequately addressing current major fishery challenges.

Limitations of regional institutional framework to meet fisheries management challenges

Several factors limit the effectiveness of RFMOS on their own to provide effective framework for the sustainable management of marine living resources. The key ones are discussed below:

Lack of principles of sustainability in constituent Conventions

The lack of conservation principles or guidelines for developing conservation measures in the constituent Conventions of RFMOs established prior to the UN Fish Stocks Agreement means that unless the members of that organisation agree to they are not obliged to consider principles of sustainability when adopting conservation and management measures.

Few options to deal with non-parties

Few RFMOs include all the participants in a fishery. Despite having significant principles and tools that could be used to address current fisheries management challenges, only those States who have agreed to be bound to an international Convention are obliged to apply its measures. This is a major challenge facing international fisheries management.

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48 IOTC Agreement 1993, Article IV. The current membership consists of Australia, China, European Community, Eritrea, France, India, Japan, Republic of Korea, Madagascar, Mauritius, Malaysia, Oman, Pakistan, Seychelles, Sudan, Sri Lanka, Thailand, United Kingdom and Vanuatu: from Anon, IOTC>about IOTC> [website] (IOTC, July 23 2003 [cited 27 Jan 2004]); available from http://www.iotc.org/English/about.php?&.
Decision-making frameworks

Many of the RFMOs that were established prior to the UN Fish Stocks Agreement allow for States to opt-out or object to implementing conservation and management measures agreed within the Commission. Furthermore some Commissions are required to adopt their management resolutions by consensus, which can take advantage of uncertainties in scientific advice and lead to a watering down of management actions.

Fortunately more recently established RFMOs have had the opportunity to look at the decision-making constraints of better-established RFMOs and take steps to avoid these. However it remains to be seen whether WCPFC and SEAFO will be able to find a balance between full participation in their Commissions and effective management for the long-term conservation and sustainable use of their respective stocks.

Lack of a formal global coordination mechanism

Despite the common membership of many RFMOs, there is a lack of a formal global coordination mechanism to adequately address fisheries management challenges such as IUU fishing. Many of the IUU problems occur because vessels can freely move between oceans and different management regimes and have the option to pick and choose measures with which they will apply.

THE ROLE OF GENERAL ENVIRONMENTAL INSTRUMENTS IN SUSTAINABLE FISHERIES MANAGEMENT

Traditionally, global international environmental instruments dealing with renewable natural resources were designed to operate as checks on the over-exploitation of species or on the destruction of habitat of high conservation value. This objective has been achieved through, for example, the regulation and prohibition of the taking of designated species, the protection of habitat by the creation of protected areas and the regulation of international trade in endangered species. During the 1980s a change in the approach to conservation began to occur as it became apparent that effective conservation depends on the adoption of strategies which take into account the
interrelationships between individual species, their gene pools and the ecosystems on
which they depend. Another development has been the acceptance and promotion of
the value of components of biological diversity, not only as resources to be exploited,
but also as part of the network that is necessary to sustain the quality of life on earth
for current and future generations. The global environmental instruments most
relevant to fisheries management issues include:

- the Convention on Trade in Endangered Species of Flora and Fauna 1973
  (CITES);
- the Convention on the Conservation of Migratory Species 1979 (CMS);
- the Convention on the Conservation of Biological Diversity 1992 (CBD)
- the Convention on Wetlands 1971 (Ramsar Convention).

These instruments provide additional tools, which address a broad range of issues and
challenges relating to the conservation and management of fisheries resources and the
marine environment in general. Although none of the broader marine environmental
instruments listed above explicitly address fisheries issues, they provide a broad
framework within which fisheries issues can be addressed effectively.

For example, The Jakarta Mandate, developed under the CBD specifically addresses
marine biodiversity conservation and management including the sustainable use of
marine living resources. The work plan developed to implement the objectives of the
Jakarta Mandate has identified key issue areas and a range of operational objectives
for achieving the sustainable use and conservation of marine living resources in with
and beyond EEZs. The suggested activities listed in the work plan for mariculture are
potentially applicable to fisheries activities and resources.

The CMS also has broad applicability to fisheries issues through its framework
approach and its requirements for Parties and participating States to undertake
conservation measures aimed at not only migratory species but also the habitats and
species upon which they may be dependant. In addition, there is a range of
commercially fished species that could potentially be suitable for listing under the
CMS although efforts to have such species listed have so far failed. The flexibility of
the CMS framework has however enabled the development of and adoption of a range of issue-specific MoU and subsidiary agreements. Of the thirteen MoU and subsidiary agreements currently in place under the CMS umbrella, six apply to marine species including marine turtles, pinnipeds, cetaceans and seabirds. There is potential for commercially fished species to also be covered by such agreements.

**EVALUATION OF THE INTERNATIONAL LEGAL AND INSTITUTIONAL REGIME – A LOOK TO THE FUTURE**

While individually instruments examined in this paper do not meet the major challenges facing fisheries today, collectively they provide a very comprehensive and elaborate framework for addressing the major challenges facing the sustainable use of marine living resources:

- The LOS Convention resolved a number of critical issues of oceans governance including providing a jurisdictional framework for the governance of oceans space and resources within, and environmental space;
- Global Fisheries Agreements were adopted to fill the gaps in the LOS Conventions fisheries management and enforcement regime for straddling fish stocks and highly migratory fish stocks and better defining flag State responsibilities on the high seas;
- Regional Fisheries Management Organizations have been strengthened by the adoption of the UN Fish Stocks Agreement and include in the consideration of conservation and management measures principles of sustainability;
- International Environmental Treaties provide further tools to address a broad range of issues and challenges relating to the conservation and management of marine living resources and the marine ecosystem in general;
- International voluntary fisheries instruments further reiterate principles and standards for responsible fisheries encouraging their application to all
fisheries, and address particular challenges of the implementation of these principles through IPOAs and now Strategies.

What is required is the effective implementation of these instruments, through among other things the better coordination within and between national, regional and global institutions; efforts towards assisting developing countries, particularly small island developing States and Territories, with implementation through among others capacity building; improving data and information for improved decision-making. This conclusion is consistent with the Johannesburg Plan of Implementation that was adopted at the 2002 World Summit on Sustainable Development. Sustainable fisheries and ensuring the sustainable development of the oceans…

requires effective coordination and cooperation, including at the global and regional levels, between relevant bodies, and actions at all levels...49

Further, the Johannesburg Plan of Implementation encourages the following implementation actions:

- to ratify or accession to and effective implementation of the relevant United Nations and, where appropriate, associated regional fisheries agreements or arrangement;50
- to promote the implementation of chapter 17 of Agenda 21;51
- to implement the Code of Conduct and the relevant IPOAs and technical guidelines of the FAO;52
- to promote the conservation and management of the oceans through actions at all levels, giving due regard to the relevant international instruments;53 and
- to implement the Ramsar Convention, including its joint work programme with the CBD.54

49 Johannesburg Plan of Implementation, para 30
50 Johannesburg Plan of Implementation, para 31 (b)
51 Johannesburg Plan of Implementation, para 30(b)
52 Johannesburg Plan of Implementation, para 31 (c and d)
53 Johannesburg Plan of Implementation, para 32(b)
54 Johannesburg Plan of Implementation, para 32 (e)
What is clear from the foregoing analysis is that there are sufficient international instruments and tools to address the current major challenges of fisheries management. Effective implementation is the constraining factor. Ultimately there should be an international response towards effective implementation. Pending such implementation, an international moratorium should be called to halt any further elaboration of international instruments, voluntary or binding.


