

**CURRENT LEGAL AND INSTITUTIONAL ISSUES RELATING TO THE
CONSERVATION AND MANAGEMENT OF HIGH-SEAS DEEP-SEA FISHERIES**

by

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Executive summary

This report analyzes the current regional and global legal and institutional framework relating to the conservation and management of high seas deep sea species and fisheries, identifies gaps and shortcomings therein and offers a range of solutions to address these.

The objectives and species coverage of the constitutive instruments of various existing relevant Regional Fisheries Management Organizations (RFMOs) and Arrangements indicate that (part of) the Fish Stocks Agreement is already applicable to discrete high seas fish stocks. Even though that state practice ‘merely’ consists of the texts of constitutive instruments, there seem to be no scientific, pragmatic or other factors apart from the issue of the allocation of fishing opportunities, that would necessitate RFMOs and Arrangements, in performing their functions, to explicitly or implicitly distinguish between straddling and discrete high seas fish stocks.

There is a need to establish new RFMOs or Arrangements with competence to manage deep sea species and fisheries. While negotiations to establish these in the Southern Pacific and the North-West Pacific are already underway, there are currently no RFMOs or Arrangements for the Central Atlantic, the South-West Atlantic, the Central Pacific, the North-East Pacific and for areas of the Arctic. The constitutive instruments of these RFMOs or Arrangements should relate to straddling fish stocks as well as to discrete high seas fish stocks and should be consistent with the Fish Stocks Agreement and other rules of international law, and in particular the precautionary approach to fisheries and the ecosystem approach to fisheries. Where appropriate and necessary, bodies dedicated to deep sea species and fisheries should be established. Existing RFMOs and Arrangements should be reformed to achieve a similar result.

At the global level, one of the most prominent gaps is the non-applicability of the Fish Stocks Agreement to discrete high seas fish stocks. Other relevant shortcomings relate to the regime for sedentary species, both on the continental shelves of coastal States and on the seabed beyond the limits of national jurisdiction (the Area). The report examines the advantages and disadvantages as well as the types of instruments (i.e. legally binding and non-legally binding) that could be developed to address these shortcomings.

COFI already agreed in 2005 on the need for non-legally binding guidance by FAO on the conservation and management of deep sea species and fisheries, presumably in the form of Technical Guidelines. However, in view of the possible urgency of the matter, FAO Members may also want to consider developing an international plan of action (IPOA), a Model Arrangement or a legally binding instrument (whether or not developed within FAO).

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1. PURPOSE, DEFINITIONS AND STRUCTURE OF THE REPORT

1.1 Purpose

This report was commissioned by the Food and Agricultural Organization of the United Nations (FAO) to serve as a background document for the FAO Expert Consultation on Deep Sea Fisheries in the High Seas, scheduled to take place in Bangkok, Thailand between 21-23 November 2006.

According to the applicable Terms of Reference (ToR),² the main purpose of this report is to:

discuss legal and institutional issues in the context of FAO's possible role or options that may be pursued by FAO in [the conservation and management of high seas deep sea fisheries], where appropriate, to promote effective conservation and management of high seas deep sea resources.

The options highlighted should aim at promoting a comprehensive conservation and management regime - one that ensures a consistent approach to conservation and management for high seas deep sea resources in light of relevant considerations including the ecosystems approach to fisheries.

This report strives to minimize overlap with the three other background documents that were prepared for the Expert Consultation.³

1.2 Definitions

In accordance with these ToR, 'deep sea' or 'deepwater' are taken as being off-shelf and generally greater than 200m. Moreover, the report will be confined to addressing 'high seas deep sea fisheries'. While these fisheries *only* take place on the high seas, the stocks of deep sea species that are targeted could either be 'straddling stocks' or 'discrete high seas stocks'. The very purpose of the Expert Consultation implies that high seas deep sea fisheries do not target highly migratory species, anadromous stocks or catadromous species, because relatively elaborate legal and/or institutional regimes are largely in place for these.⁴

The term 'straddling stocks' does not appear in the LOS Convention,⁵ and is only mentioned but not defined in the Fish Stocks Agreement.⁶ However, it is commonly understood to mean those stocks referred to in Article 63(2) of the LOS Convention, namely stocks which "occur both within the exclusive economic zone and in an area beyond and adjacent to the zone". Consistent with this wording, discrete high seas stocks are in this report understood to be stocks that occur exclusively on the high seas and therefore not within adjacent maritime zones of coastal States.⁷ Admittedly, however, the verb 'occur' does not always offer fisheries management authorities and others

² These ToR are a direct result of agreement within FAO's Committee on Fisheries (COFI) at its 26th Session (2005) as to the need of "convening technical meetings to develop a code of practice/technical guidelines" and "reviewing [the] legal framework needed to support conservation and management of deepwater fisheries" (Report of the Twenty-Sixth Session of the Committee on Fisheries (COFI), Rome, 7-11 March 2005 (*FAO Fisheries Reports* No. R780), at p. 15, para. 89). See also FAO Doc. COFI/2005/6 'Deep Sea Fisheries', in particular at p. 4, paras 22-24.

³ These focus on management, high seas marine protected areas and a review of deep sea resources and fisheries.

⁴ See Arts 64, 66 and 67 of and Annex I to the LOS Convention (United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982. In force 16 November 1994, 1833 *United Nations Treaty Series* 396;

<www.un.org/Depts/los>) and international organizations such as the present five 'tuna-RFMOs', the North Atlantic Salmon Conservation Organization (NASCO) and the North Pacific Anadromous Fish Commission (NPAFC).

⁵ See note 4 above.

⁶ Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 August 1995. In force 11 December 2001, 34 *International Legal Materials* 1542 (1995); <www.un.org/Depts/los>.

⁷ However, this does not necessarily mean that the range of distribution of that stock is exclusively within the regulatory area of a single RFMO or Arrangement.

sufficient guidance for the classification of stocks. It has been suggested that the discreteness or not of a stock may depend above all on the significance of transboundary effects of exploitation.⁸

The ToR use ‘fisheries’ and ‘(deep sea) resources’ almost interchangeably, but do not offer definitions for these terms. For the purpose of this report, deep sea fisheries are presumed to target ‘fish’.⁹ As the ToR advocate comprehensiveness, this report defines fish to include not only molluscs and crustaceans but also sedentary species¹⁰ as defined in Article 77(4) of the LOS Convention.¹¹ This definition is thus somewhat broader than that in Article 1(1)(c) of the Fish Stocks Agreement, which excludes sedentary species (but includes molluscs and crustaceans).

It should be realized, however, that the term ‘discrete high seas fish stocks’ loses its accuracy and thereby its usefulness when linked to the broad definition of fish proposed in this report. This is a result of the sovereign rights of coastal States over sedentary species on their (outer) continental shelves. Not only does the freedom of fishing on the high seas above these outer continental shelves not apply to sedentary species, but fishing for other species can also be constrained by coastal State regulation in order to avoid or mitigate impacts on sedentary species (see further subsections 4.2.1 and 4.2.6).

While the purpose of this report as well as of the Expert Consultation is to strive towards a comprehensive and effective regime for the conservation and management of *targeted* deep sea fish species on the high seas, the mere reference to the ecosystem approach to fisheries (EAF) in the ToR already indicates that issues such as by-catch and other impacts on the broader marine ecosystem must be an integral part of this regime. It must also be noted that presently no legally binding global instrument relevant to marine capture fisheries - not even the Fish Stocks Agreement - contains a definition of EAF.¹² This report therefore uses the definition of EAF incorporated in the FAO Technical Guidelines on ‘The ecosystem approach to fisheries’,¹³ namely:

An ecosystem approach to fisheries strives to balance various societal objectives by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries.¹⁴

1.3 Structure

This report is structured as follows. The following section analyzes the current global legal and institutional framework relating to the conservation and management of high seas deep sea fisheries. Its subsections examine relevant global instruments and institutions. Section 3 focuses on the relevant regional legal and institutional framework, with subsections dealing with relevant regional fisheries management organizations (RFMOs) and Arrangements,¹⁵ their objectives, species coverage and relevant practice as well as relevant non-fisheries instruments. Based on the analyses of the global and

⁸ E.J. Molenaar, “The South Tasman Rise Arrangement of 2000 and other Initiatives on Management and Conservation of Orange Roughy”, 16 *International Journal of Marine and Coastal Law* 77-118 (2001), at pp. 85-89.

⁹ Marine mammals are thus excluded from the scope of this report.

¹⁰ See subsection 2.2.1.

¹¹ It is worth noting that UN Doc. A/61/154, of 14 July 2006, ‘Impacts of fishing on vulnerable marine ecosystems: actions taken by States and regional fisheries management organizations and arrangements to give effect to paragraphs 66 to 69 of General Assembly resolution 59/25 on sustainable fisheries, regarding impacts of fishing on vulnerable marine ecosystems. Report of the Secretary-General’, at p. 15, para. 45(d) discusses the harvesting of corals as an example of target species.

¹² Note however that the new NAFO Convention (NAFO/GC Doc. 06/3, note 140 below) contains a description of “an ecosystem approach to fisheries management” in the Preamble. Note also the ‘Report on the work of the United Nations Open-ended Consultative Process on Oceans and the Law of the Sea [(ICP)] at its seventh meeting’ (UN Doc. A/61/156, of 17 July 2006), which contains in paras 3-8 consensual elements on ecosystem approaches and oceans that the UNGA is invited to take into account when drafting its annual ‘Oceans’ resolution.

¹³ FAO Technical Guidelines for Responsible Fisheries No. 4, Suppl. 2 (FAO, Rome: 2003).

¹⁴ At p. 6.

¹⁵ As defined by Art. 1(1)(d) of the Fish Stocks Agreement. In this report, references to RFMOs include Arrangements, unless provided otherwise.

regional legal and institutional framework, Section 4 examines the need and options for reform at the regional and at the global level. Its subsections focus on establishing new RFMOs or Arrangements, reforming existing RFMOs and Arrangements, discrete high seas fish stocks, coastal State jurisdiction over the (outer) continental shelf and other non-legally binding guidance by FAO and legally binding instruments.

2. CURRENT GLOBAL LEGAL AND INSTITUTIONAL FRAMEWORK RELATING TO THE CONSERVATION AND MANAGEMENT OF HIGH-SEAS DEEP-SEA FISHERIES

2.1 General

As requested by the ToR, subsection 2.2 of this report addresses global fisheries instruments such as the LOS Convention, the Fish Stocks Agreement, the Compliance Agreement¹⁶ and the Code of Conduct¹⁷. The Johannesburg Plan of Implementation (JPOI) of the World Summit on Sustainable Development¹⁸ is not reviewed. While its various objectives and targets are certainly relevant - for instance those on marine biodiversity and the ecosystem approach¹⁹ - they do not explicitly deal with or refer to either deep sea species or deep sea fisheries. Moreover, even though the ToR only requires a review of “international fisheries instruments”, subsection 2.2.5 concisely discusses various relevant global ‘non-fisheries’ instruments such as the CBD,²⁰ the CITES Convention²¹ and the CMS²².

Finally, subsection 2.3 on relevant global institutions offers an overview of the competence of FAO, the United Nations (UN) and other global institutions that could play a role in the further development of the international legal regime for the conservation and management of high seas deep sea fisheries.

2.2 Relevant global instruments

2.2.1 LOS Convention

As the ‘Constitution for the Oceans’, the LOS Convention *also* provides the basic international legal framework for high seas deep sea fisheries. Due to the present wide participation by States in the LOS Convention,²³ this framework has near-universal application. The LOS Convention recognizes the sovereignty, sovereign rights and jurisdiction of coastal States with respect to marine living resources within their maritime zones²⁴ and the right for all States for their nationals to engage in fishing on the high seas.²⁵ These rights are qualified by obligations owed to each other²⁶ and to the international community. The latter obligations are aimed at safeguarding such international community interests as conservation and optimum utilization of marine living resources and the protection and preservation of the marine environment, including rare or fragile ecosystems and habitats of depleted, threatened or endangered species and other forms of life.²⁷

¹⁶ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, Rome, 24 November 1993. In force 24 April 2003, 33 *International Legal Materials* 969 (1994); <www.fao.org/legal>.

¹⁷ Code of Conduct for Responsible Fisheries. Adopted by the Twenty-eighth Session of the FAO Conference, Rome, 31 October 1995, <www.fao.org/fi>.

¹⁸ The text of the JPOI is available at <www.unep.org>.

¹⁹ See *inter alia* paras 30-31.

²⁰ Convention on Biological Diversity, Nairobi, 22 May 1992. In force 29 December 1993, 31 *International Legal Materials* 822 (1992); <www.biodiv.org>.

²¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, D.C., 3 March 1973. In force 1 July 1975, 993 *United Nations Treaty Series* 243; <www.cites.org>.

²² Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 23 June 1979. In force 1 November 1983, 1651 *United Nations Treaty Series* 355; <www.cms.int>.

²³ As of 14 September 2006, there were 150 parties to the LOS Convention (information obtained from <www.un.org/Depts/los>).

²⁴ Arts 2(1), 49(1), 56(1)(a), 56(3) and 77 of the LOS Convention.

²⁵ Art. 116 of the LOS Convention. See also Art. 92(1).

²⁶ E.g. Arts 63(2) and 116(b).

²⁷ See e.g. Arts 61(2), 62(1), 117-119, 192 and 194(5) of the LOS Convention.

The LOS Convention does not impose restrictions on coastal State sovereignty within internal waters, territorial seas or archipelagic waters on this issue. However, in the case of deep sea stocks that *also* occur on the high seas (essentially straddling stocks), coastal States may be required to cooperate with other States pursuant to obligations under customary international law relating to transboundary resources and damage.

The sovereign rights of coastal States over marine living resources in their exclusive economic zones (EEZs) are subject to the obligation to conserve, the objective of optimum utilization and the obligation to cooperate with other States in relation to transboundary resources, which, for this report, concerns only straddling species.²⁸ These obligations and objectives are not, however, applicable to sedentary species.²⁹

The obligation to conserve marine living resources in Article 61 of the LOS Convention requires the coastal State, among other things, to determine the total allowable catch (TAC) by taking account of the best scientific evidence available. A large number of factors and considerations must be taken into account, including relevant environmental factors, the interdependence of stocks and the effects on associated and dependent species. While no reference is made to the EAF - let alone an obligation to pursue such an approach - these qualified obligations can be viewed as obligations to take account of several ecosystem considerations.

The right of all States for their nationals to engage in fishing on the high seas is subject to the obligations to conserve and to cooperate with other States, including - in relation to straddling stocks - coastal States.³⁰ The obligation to conserve in Articles 117 and 119 of the LOS Convention is elaborated in a similar fashion as Article 61 discussed above.

Article 77(1) of the LOS Convention recognizes a coastal State's sovereign rights over its continental shelf "for the purpose of exploring it and exploiting its natural resources". These natural resources consist of the non-living resources of the sea-bed and subsoil together with living organisms belonging to sedentary species, which are defined as "organisms which, at the harvestable stage, either are immobile on or under the sea-bed or are unable to move except in constant physical contact with the sea-bed or the subsoil".³¹ The legal continental shelf of a coastal State may extend beyond 200 nautical miles from the baselines.³² This is the so-called 'outer continental shelf'. The sovereign rights of a coastal State over its continental shelf are also important in case the coastal State has not established an EEZ or exclusive fishery zone (EFZ). This situation is very relevant for the Mediterranean Sea.

The provisions of the LOS Convention leave no doubt that coastal States have exclusive access to the sedentary species on their continental shelves and that they are not subject to the obligation to conserve them. The exclusive focus on exploitation is also reflected in the key role accorded to the words "harvestable stage" in the definition of sedentary species. Part XII of the LOS Convention on the protection and preservation of the marine environment does not resolve that defect. Even the relatively specific obligation on ecosystems and habitats under Article 194(5) is clearly not intended for the exploitation of target species. This is not to say, however, that coastal States may not be subject to relevant obligations under general international law, for instance pursuant to the CBD. Finally, Article 78(2) stipulates that the exercise of the sovereign rights of the coastal State "must not infringe or result in any unjustifiable interference with navigation and other rights and freedoms",

²⁸ Arts 56(1)(a), 61(2), 62(1) and 63-67 of the LOS Convention.

²⁹ Arts 56(3), 68 and 77(4) of the LOS Convention.

³⁰ Arts 116-119 of the LOS Convention.

³¹ Art. 77(4) of the LOS Convention.

³² Art. 76 of the LOS Convention.

which includes the freedom of high seas fishing. No further guidance is provided as to how the justifiability of interference with high seas fishing should be assessed (see also subsection 4.2.6).³³

A few comments on the regime of the Area are also warranted. This regime is primarily formed by Part XI of the LOS Convention, the 1994 Implementation Agreement³⁴ and the acts of the International Seabed Authority (ISA). The LOS Convention defines ‘Area’ as “the sea-bed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction”; ‘activities in the Area’ as “all activities of exploration for, and exploitation of, the resources of the Area”; and ‘resources’ as “all solid, liquid or gaseous mineral resources *in situ* in the Area at or beneath the sea-bed, including polymetallic nodules”.³⁵ While it may have been generally assumed that the regime of the Area and the principle of the common heritage of mankind did not apply to *any* marine living resources of the Area, the current debate on marine genetic resources has highlighted doubts on this assumption for the reason that many States - in particular developing States - reject it.³⁶ If this uncertainty also necessitates reform of the international legal framework for the purpose of this report, is discussed in subsection 4.2.1.

It is finally important to point out the obvious, namely that the LOS Convention does not use a separate category of deep sea stocks or species. Apart from shared and straddling stocks, the other categories of stocks or species are based on life-cycle characteristics (anadromous stocks and catadromous species) or are in various ways implicitly or explicitly defined (highly migratory species, marine mammals and sedentary species). From a systematic perspective, it would therefore not be a problem to add a new category of deep sea species or stocks based on similar characteristics, on listing in an Annex or on a definition. This could be done by means of an amendment to, or an Implementation Agreement of, the LOS Convention.

2.2.2 Fish Stocks Agreement

As is already evident from the full title of the Fish Stocks Agreement, it applies exclusively to straddling fish stocks and highly migratory fish stocks and therefore not to discrete high seas fish stocks.³⁷ Furthermore, even though the Fish Stocks Agreement applies in part also within EEZs and EFZs, it does not apply in marine areas under coastal State sovereignty (i.e. internal waters, territorial seas and archipelagic waters).³⁸ As the negotiations on the WCPFC Convention³⁹ have shown,⁴⁰ this poses actual or potential problems in relation to highly migratory fish species in sizeable archipelagic waters. But for deep sea stocks or species this is probably less of a problem. As pointed out in

³³ For a discussion see E.J. Molenaar, “Addressing Regulatory Gaps in High Seas Fisheries”, 20 *International Journal of Marine and Coastal Law* 533-570 (2005), at pp. 557-563. See also L.A. Kimball, “Deep-Sea Fisheries of the High Seas: The Management Impasse”, 19 *International Journal of Marine and Coastal Law* 259-287 (2004), at pp. 275-277, 279-281 and 286;

³⁴ Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, New York, 28 July 1994. In force 28 July 1996, 33 *International Legal Materials* 1309 (1994); <www.un.org/Depts/los>.

³⁵ Arts 1(1)(1) and (3) and 133(a) of the LOS Convention.

³⁶ See the Report of the Ad Hoc Open-ended Informal Working Group established by the UNGA to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (UN Doc. A/61/65, of 20 March 2006), at p. 9, paras 29-31.

³⁷ See also Arts 2 and 3. It also does not apply to highly migratory species other than fish. For the definition of fish see subsection 1.2.

³⁸ See Art. 3 of the Fish Stocks Agreement and the discussion by E. J. Molenaar, “The Concept of “Real Interest” and Other Aspects of Co-operation through Regional Fisheries Management Mechanisms,” 15 *International Journal of Marine and Coastal Law* 475-531 (2000), at pp. 480-481.

³⁹ Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, Honolulu, 5 September 2000. In force 19 June 2004, 40 *International Legal Materials* 277 (2001); <www.wcpfc.org>.

⁴⁰ While the words “all waters” in Art. 3 of the WCPFC Convention, note 39 above, can be interpreted to include also archipelagic waters, the linkage between “areas under national jurisdiction” and “sovereign rights” in Art. 7 serves as an argument for their exclusion. At any event, during the negotiations the Chairman made assurances that archipelagic waters would be excluded for the purpose of the assessment of financial contributions. See Molenaar, note 38 above, at p. 481, n. 23.

subsection 2.2.1 in relation to areas under sovereignty, coastal States may still be bound to an obligation to cooperate under customary international law.

As an Implementation Agreement of the LOS Convention, the Fish Stocks Agreement must not be presumed to have the intention to change the jurisdictional framework of the LOS Convention. The reality is less straightforward. While the basic LOS Convention resource entitlements of both coastal and flag States remain unaltered, many of its obligations are broadened, deepened and more specified. Examples include:

- the obligation to apply the precautionary approach (Articles 5(c), 6 and Annex II);
- the obligation to protect biodiversity in the marine environment (Article 5(g));
- the obligation to take account of a wide range of ecosystem considerations (Article 5);
- the obligation to strive for compatibility (Article 7);
- the specific duties of flag States (Articles 18 and 19);
- the general duty of port States (Article 23(1)); and
- the key role accorded to RFMOs as the preferred governance vehicles at the regional level (Article 8). This provision is intended to eventually lead to a situation where fishing is reserved for States that are members of RFMOs or that cooperate with them.

The Fish Stocks Agreement also contains new rights or rights that were at best only implicitly incorporated in the LOS Convention. These include:

- the undefined right of States with a ‘real interest’ to become members of RFMOs (Article 8(3));
- the carefully circumscribed non-flag State enforcement powers on the high seas (Articles 21 and 22);
- the specific enforcement powers of port States (Article 23(2) and (3));⁴¹ and
- the implicit rights of developing States (Articles 24-26).

None of these broadened, deepened or more specified obligations or new or more explicit rights are therefore in principle applicable to discrete high seas fish stocks. As at the time of writing this report there were only 61 parties to the Fish Stocks Agreement,⁴² it must be emphasized that these obligations and rights are also not universally applicable to straddling deep sea fish stocks either.

2.2.3 *Compliance Agreement*

The Compliance Agreement was negotiated by means of a diplomatic conference convened by the FAO Council. The Agreement’s primary purpose is to tackle the problem of re-flagging fishing vessels in order to avoid compliance with applicable conservation and management measures on the high seas. Article III, which is the core of the Agreement, specifies that a flag State is responsible for fishing vessels under its flag that operate on the high seas, that no high seas fishing should occur without prior flag State authorization and that no authorization shall be given unless the flag State is able to exercise effectively its responsibilities under the Agreement. The flag State is also required to maintain a record of high seas fishing vessels and to provide a range of information for each of its high seas fishing vessels to FAO (Articles IV and VI). Some of these obligations are also laid down in Article 18 of the Fish Stocks Agreement.

The Compliance Agreement is a concise treaty with a relatively specific purpose. Apart from elaborating the general obligations of flag States laid down in Articles 91 and 94 of the LOS Convention, it does not modify its jurisdictional framework. The Preamble to the Compliance

⁴¹ Even though it can also be argued that port States already have such powers under customary international law.

⁴² As of 14 September 2006 (information obtained at <www.un.org/Depts/los>).

Agreement notes that the Agreement will form an integral part of the Code of Conduct, which was eventually adopted two years later. This linkage is confirmed in Article 1.1 of the Code of Conduct.

It is important to note that the Agreement is not limited to a particular type of high seas fisheries or species. Article II(1) reveals that it applies above all to fishing vessels operating on the high seas. Moreover, the definition of ‘fishing vessel’ in Article I(a) is linked to “marine living resources”; a much broader term than ‘fish’.

Finally, it should be observed that the Compliance Agreement presently suffers from a similar limited participation as the Fish Stocks Agreement. At the time of writing, there were only 34 parties. However, the participation of the European Community (EC) should be counted as participation of all current 25 European Union (EU) Member States.⁴³

2.2.4 *Code of Conduct*

The Code of Conduct was developed within FAO to provide guidance to States, organizations as well as individuals involved in diverging capacities (e.g. fishers, consumers and researchers) in the broadest possible spheres relevant to the conservation and management of living aquatic resources. As is evident in the consistent use of “should” in its provisions, the Code is a non-legally binding instrument. However, Article 1.1 of the Code points out that parts of it are based on the LOS Convention and that some of the Code’s provisions are also laid down in the Compliance Agreement. These parts are therefore legally binding for States that are parties to these other conventions. As the Code was adopted within the framework of FAO, all FAO Member States have committed to it. Participation is therefore essentially universal.

The Code of Conduct is in part a framework instrument. Further guidance on responsible fisheries is laid down in the numerous Technical Guidelines developed by FAO, the four international plans of action (IPOAs) that were elaborated within the framework of Article 2(g) of the Code, and the Port State Model Scheme⁴⁴.

The scope of the Code of Conduct not only covers marine resources - including therefore high seas deep sea fish species - but also freshwater resources and aquaculture. Worth highlighting are the various provisions that call for taking into account a broad array of ecosystem considerations.⁴⁵ It should be noted that many of the Code’s provisions are insufficiently specific. Therefore, it may be useful and/or necessary to develop Technical Guidelines and/or an IPOA to provide effective and comprehensive guidance for specific types of fisheries or fisheries for specific species. The Technical Guidelines on inland fisheries and those on the management and conservation of sharks - the latter of which have been developed to support implementation of the IPOA on Sharks⁴⁶ - are precedents in this regard.⁴⁷

2.2.5 *Relevant ‘non-fisheries’ instruments*

One of the most important non-fisheries instruments of relevance to this report is the CBD. One of the CBD’s broad objectives is the conservation and sustainable use of biodiversity. While specific obligations related to components of biodiversity such as those on *in-situ* conservation are not

⁴³ Information obtained from <www.fao.org/Legal>. However, as Cyprus and Sweden had deposited their instruments of acceptance prior to their accession to the EU, they must be subtracted from the 25 EU Member States.

⁴⁴ Model Scheme on Port State Measures to Combat Illegal, Unreported and Unregulated Fishing (Annex E to the ‘Report of the Technical Consultation to Review Port State Measures to Combat Illegal, Unreported and Unregulated Fishing, Rome, 31 August–2 September 2004’ (*FAO Fisheries Report*, No. 759 (Rome, FAO: 2004)), endorsed by COFI at its 26th Session (2005) (FAO Fisheries Reports No. R780, note 2 above, at para. 25).

⁴⁵ See *inter alia* Arts 6.2, 6.4, 6.5, 6.6, and 7.2 of the Code of Conduct.

⁴⁶ International Plan of Action for the Conservation and Management of Sharks. Adopted by COFI in February 1999 and endorsed by the FAO Council in June 1999; text available at <www.fao.org/fi>.

⁴⁷ Technical Guidelines Nos 4, Suppl. 1, and 6.

applicable in areas beyond national jurisdiction (ABNJ),⁴⁸ the general obligations related to processes and activities *are*.⁴⁹ But even these more general obligations are still very significant in light of the participation in the CBD, which was at the time of writing even broader than that in the LOS Convention.⁵⁰

The main objective of the CITES Convention is the protection of endangered species against over-exploitation through the regulation of international trade. Trade includes pursuant to Article I(c) of the CITES Convention “introduction from the sea”, which is defined in Article I(e) as “transportation into a State of specimens of any species which were taken in the marine environment not under the jurisdiction of any State”.⁵¹ International trade in endangered species is regulated by means of listing species on the three Appendices to CITES, with each Appendix requiring different types of regulation. Even though some fish species, for instance various species of sharks, sturgeons and the famous coelacanth,⁵² have already been listed on Appendices I or II, the suitability of the CITES listing criteria for commercially exploited aquatic species remains contested.⁵³

The aim of the CMS is to conserve migratory terrestrial, avian and marine species throughout their range of distribution. Various forms of regulatory action are possible, for instance prohibitions of intentional taking, habitat protection and the development of agreements that do not merely deal with conservation but also with management, which thus encompasses utilization.⁵⁴ While Appendix I lists species threatened with extinction, Appendix II lists species that are in need of, or would significantly benefit from, international cooperation by means of global or regional agreements. At the time of writing, Appendices I and II already included some fish species, for example various species of sharks and sturgeons. However, none of the agreements that have been established under Article IV so far relate to fish and none have a utilization component.⁵⁵

2.3 Relevant global institutions

2.3.1 FAO

The purposes and functions of FAO are set out in the Preamble to and Article I of its Constitution.⁵⁶ While the purposes relate primarily to the common welfare of peoples, the functions also include the promotion and recommendation of national and international action relating to the conservation of natural resources. The Code of Conduct (and thereby its IPOAs and Technical Guidelines) should be regarded as an example of international action. Other important functions of FAO are the collection, analysis, interpretation and dissemination of information relating to agriculture (which includes fisheries and marine products), furnishing technical assistance as well as the residual category of “all necessary and appropriate action to implement the purposes of the Organization”.

⁴⁸ Reference can be made to the following definition of ‘marine environment not under the jurisdiction of any State’ agreed at the 54th Meeting of the Standing Committee of CITES (2-6 October 2006): “those areas beyond the waters and the continental shelf, comprising the seabed and subsoil, subject to the sovereign rights or sovereignty of any State consistent with international law, as reflected in the [LOS Convention]” (SC54 Doc 19, at p. 5).

⁴⁹ See in particular Arts 3, 4, 5, 7(c), 8(l) and 22 of the CBD.

⁵⁰ For information see <www.biodiv.org>.

⁵¹ See note 48 above.

⁵² Information obtained from <www.cites.org>.

⁵³ Reference can here be made to the FAO Ad Hoc Expert Advisory Panel for Assessment of Listing Proposals for Commercially-Exploited Aquatic Species (see Report of the Twenty-Sixth Session of the Committee on Fisheries (COFI), Rome, 7-11 March 2005 (*FAO Fisheries Reports* No. R780), at p. 9, para. 54).

⁵⁴ See the definitions in Art. I(1)(a), (f), (h) and (i), the listing under Art. III and the agreements under Arts IV and V of the CMS.

⁵⁵ See <www.cms.int> for an overview of these agreements. Note, however, that in July 2006, a Meeting on Identify Options for International Cooperation on Migratory Sharks under the Convention on Migratory Species was convened in the Seychelles.

⁵⁶ Constitution of the Food and Agriculture Organization of the United Nations, Quebec City. Opened for signature and entered into force on 16 October 1945; <www.fao.org/Legal>.

Article VI(1) of the Constitution enables the establishment of commissions as well as regional fisheries advisory bodies “to advise on the formulation and implementation of policy and to coordinate the implementation of policy”. An example of the latter category is the Fishery Committee for the Eastern Central Atlantic (CECAF). Article VI(2) allows for the establishment of “committees and working parties to study and report on matters pertaining to the purpose of the Organization”, pursuant to which the Committee on Fisheries (COFI) was established. In accordance with its Rules of Procedure, COFI can establish subsidiary bodies to deal with certain specific issues (e.g. the Sub-Committee on Aquaculture). Article XIV of the Constitution enables the approval of “agreements concerning questions relating to food and agriculture”; examples of these are the IOTC Agreement⁵⁷ and the Compliance Agreement.

As the Compliance Agreement shows, jurisdictional issues are not necessarily beyond the mandate of FAO. This would be confirmed once again if the Port State Model Scheme is modified and converted into a legally binding instrument by means of negotiations facilitated or convened by FAO - as was advocated during the Review Conference on the Fish Stocks Agreement (UNFSA Review Conference) in May 2006.⁵⁸ However, according to FAO, the work of COFI (and thereby FAO) is to complement rather than supplant the efforts of other organizations working in the field of fisheries and aquaculture.⁵⁹ This underscores the general need for the effective functioning and development of international law. Under different political or practical circumstances, the Compliance Agreement might therefore not have been developed and negotiated within FAO but somewhere else, for example by means of a diplomatic conference convened by the United Nations General Assembly (UNGA). A similar argument may be made with regard to the possible conversion of the Port State Model Scheme.

2.3.2 *UNGA and other UN bodies*

Whereas the UN Charter⁶⁰ does not refer explicitly to the law of the sea or the conservation and management of marine living resources, the LOS Convention’s purpose of establishing a stable and equitable legal order for the oceans⁶¹ is closely related to Charter’s primary purpose, namely maintaining international peace and security.⁶² The competence of the UNGA in relation to the law of the sea and the conservation and management of marine living resources is implied in the fact that the diplomatic conference that produced the LOS Convention was convened by the UNGA. This is also the case for the negotiations that led to the two implementation agreements of the LOS Convention. The competence of the UNGA is also implied in its annual ‘Oceans’ and ‘Fish’ resolutions, its creation of the annual informal consultative process (ICP) on Oceans and the Law of the Sea and the establishment of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. Significant is finally the recognition by the 8th Conference of Parties (CoP) to the CBD of the UNGA’s “central role in addressing issues relating to the conservation and sustainable use of biodiversity in marine areas beyond national jurisdiction”.⁶³

By contrast, most States regard the mandate of the annual meeting of States parties to the LOS Convention (SPLOS) as essentially administrative.⁶⁴ In addition, the competence of the UNFSA Review Conference that was convened and suspended (but not closed) in May 2006 pursuant to Article 36 of the Fish Stocks Agreement, is not only limited but suffers from non-Party issues as

⁵⁷ Agreement for the Establishment of the Indian Ocean Tuna Commission, Rome, 25 November 1993 (105th Session FAO Council). In force 27 March 1996, <www.iotc.org>.

⁵⁸ See Report of the Review Conference on the Fish Stocks Agreement (UN Doc. A/CONF.210/2006/15, of 5 July 2006), at p. 39, para 43(d).

⁵⁹ Information obtained at <www.fao.org/fi/body/cofi/cofi.asp>.

⁶⁰ Charter of the United Nations, San Francisco, 26 June 1945. In force 24 October 1945, 1 *United Nations Treaty Series* xvi; <www.un.org/aboutun/charter>.

⁶¹ See the Preamble.

⁶² Art. 1(1) of the UN Charter.

⁶³ CoP Decision VIII/24 (2006) ‘Protected Areas’, at para. 35 (Preamble prior thereto).

⁶⁴ See ‘Report of the Sixteenth Meeting of States Parties’, UN Doc. SPLOS/148, of 28 July 2006, pp. 18-19, paras 92-96.

well.⁶⁵ Furthermore, the competence of UN-OCEANS is in principle limited to “enhance cooperation and coordination among Secretariats of the International Organizations and Bodies concerned with ocean related activities”.⁶⁶ The work of its Task Force on Marine Biodiversity beyond National Jurisdiction is similarly limited.⁶⁷

Lastly, since the operation of the Trusteeship Council set up pursuant to Chapter XII of the UN Charter was suspended in 1994, various suggestions have been made to revive the Council by giving it a new environmental mandate.⁶⁸

2.3.3 Other international bodies

It is instructive to note that the 8th CoP of the CBD recognized the central role of the UNGA while at the same time also recognizing the CBD’s key role in supporting the work of the UNGA with regard to marine protected areas beyond national jurisdiction “by focusing on provision of scientific and, as appropriate, technical advice relating to marine biological diversity, the application of the ecosystem approach and the precautionary approach, and in delivering the 2010 [protected areas] target”.⁶⁹

The analyses of the purposes of the CITES and the CMS carried out in subsection 2.2.5 apply in principle equally to the competence of the CoPs of the CITES and the CMS.

3. CURRENT REGIONAL LEGAL AND INSTITUTIONAL FRAMEWORK RELATING TO THE CONSERVATION AND MANAGEMENT OF HIGH SEAS DEEP-SEA FISHERIES

3.1 Relevant RFMOs and Arrangements

There are currently several RFMOs and Arrangements that regulate fisheries other than tuna (-like) or anadromous species and whose regulatory areas either include high seas areas or consist exclusively of high seas areas. Table I categorizes these RFMOs and Arrangements as pre-Fish Stocks Agreement or post-Fish Stocks Agreement, with the latter distinguishing furthermore between those already in operation and those not yet in operation or under negotiation.

Included in the last subdivision is a recent initiative relating to the management of high seas bottom trawling in the North West Pacific Ocean. As the participants in this initiative “recognized the importance of establishing a new international management arrangement for bottom trawl fisheries on the high sea[s] of the North Western Pacific Ocean”,⁷⁰ it is possible that these initiatives lead to a NWPOF Agreement⁷¹. The term ‘Agreement’ is chosen here for reasons of consistency, inspired by the fact that the Draft SPOF Agreement⁷² is modeled on the SIOF Agreement⁷³ - which is an

⁶⁵ Cf. UN Doc. A/CONF.210/2006/15, note 58 above, at pp. 5-6 and 29, paras 13-18 and 134

⁶⁶ Report of the First Inter-Agency Meeting of UN-OCEANS (2005), p.2 (text at <www.oceansatlas.org>).

⁶⁷ See the 2005 Report, note 66 above, at p. 6.

⁶⁸ P. Sands, *Principles of International Environmental Law* (Cambridge, Cambridge University Press, 2nd edition, 2003), p. 94 reports that President Gorbachev of the Soviet Union proposed in 1990 to expand the function of the Council “to include responsibility for environmental protection in areas beyond national jurisdiction, the global commons.” Also noteworthy is Malta’s proposal to change the role of the Council into a guardian and trustee of the resources of the global commons (as reported by S. Busuttil and K. Yazaki, “Preface” in A. Agius and S. Busuttil with T. Kim and K. Yazaki (eds) *Future Generations and International Law* (London, Earthscan Publication: 1998), at p. xi). Note, also that para. 178 of UNGA Resolution 60/1, of 16 September 2005, reads “Considering that the Trusteeship Council no longer meets and has no remaining functions, we should delete Chapter XIII of the Charter and references to the Council in Chapter XII”.

⁶⁹ CoP Decision VIII/24 (2006) ‘Protected Areas’, at para. 42.

⁷⁰ Draft Record of the First Inter-governmental Meeting on Establishment of [a] New Mechanism for Management of High Seas Bottom Trawling in the North Western Pacific Ocean (Doc. NWPBT/01/Rec rev2 (on file with author)), at p. 2.

⁷¹ North West Pacific Ocean Fisheries Agreement.

⁷² Chair’s Draft Pacific Ocean Regional Fisheries Management Agreement of 8 September 2006, text at <www.southpacificrfmo.org>. However, discussions at the Second International Meeting on the Establishment of the South Pacific Regional Fisheries Management Organization at Hobart, Australia, 6-11 November 2006 showed that some delegations preferred a fully-fledged RFMO.

Arrangement and not (also) a constitutive instrument for an RFMO - and by the assumption that a NWPOF Agreement may be modeled on the Draft SPOF Agreement.⁷⁴ The regulatory area of the NWPOF Agreement could be the high seas areas of FAO Statistical Area No. 61, but excluding high seas areas already covered by existing RFMOs and Arrangements (e.g. so it seems, the CBS Convention⁷⁵) as well as areas of high seas that are surrounded by an EEZ of a single State (e.g. the Sea of Okhotsk).⁷⁶ Most of the current bottom trawling in the envisaged regulatory area seems to occur above the Emperor Seamount chain.

Table 1. Overview of the various relevant RFMOs and Arrangements

Pre-Fish Stocks Agreement	Post-Fish Stocks Agreement	
	<i>In operation</i>	<i>Not in operation (n.i.o.) or under negotiation (u.n.)</i>
CBS Convention ⁷⁷ CCAMLR Convention ⁷⁸ GFCM Agreement ⁷⁹ NAFO Convention ⁸⁰ NEAFC Convention ⁸¹	SEAFC Convention ⁸² STR Arrangement ⁸³	SIOF Agreement ⁸⁴ (n.i.o.) Draft SPOF Agreement ⁸⁵ (u.n.) Possible NWPOF Agreement ⁸⁶ (u.n.)

As a consequence of this report's focus on the high seas/ABNJ, RFMOs or Arrangements that have no high seas areas in their regulatory areas are not discussed. Also excluded are bodies that do not qualify as RFMOs or Arrangements within the meaning of the Fish Stocks Agreement. In order to qualify, such bodies must have the competence to impose legally binding conservation and management measures on its members or participants.⁸⁷ ICES (International Council for the Exploration of the Sea) and PICES (North Pacific Marine Science Organization) are examples of bodies that do not meet these requirements.⁸⁸ Also excluded are FAO regional fishery bodies that do not have high seas areas within their areas of competence and/or that merely have an advisory role. CECAF and the Western Central Atlantic Fishery Commission (WECAFC) fall within the latter

⁷³ Southern Oceans Fisheries Agreement, Rome, 7 July 2006. Not in force, text on file with author.

⁷⁴ However, the NWPOF Agreement may also be modeled on the CBS Convention, note 75 below, due to the significant overlap in participation.

⁷⁵ Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea, Washington, 16 June 1994. In force 8 December 1995, 34 *International Legal Materials* 67 (1995); <www.afsc.noaa.gov/refm/cbs>.

⁷⁶ Cf. (Draft) Establishment of an interim targeted protection mechanism for vulnerable marine ecosystems and management of high seas bottom trawl fisheries in the North Western Pacific Ocean (Doc. NWPBT/01/WP 2 rev4 (on file with author)), at p. 2.

⁷⁷ See note 75 above.

⁷⁸ Convention on the Conservation of Antarctic Marine Living Resources, Canberra, 20 May 1980. In force 7 April 1982, 19 *International Legal Materials* 837 (1980); <www.ccamlr.org>.

⁷⁹ Agreement for the establishment of a General Fisheries Council for the Mediterranean (Rome, 24 September 1949. In force 20 February 1952, 126 *United Nations Treaty Series* 239). Amendments adopted by the FAO Council at its 113th Session in November 1997 entered into force on 29 April 2004; amended version available at <www.fao.org/Legal/>.

⁸⁰ Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, Ottawa, 24 October 1978. In force 1 January 1979, 1135 *United Nations Treaty Series* 369; <www.nafo.ca>.

⁸¹ Convention on Future Multilateral Cooperation in the North-East Atlantic Fisheries, London, 18 November 1980. In force 17 March 1982, 1285 *United Nations Treaty Series* 129; <www.neafc.org>.

⁸² Convention on the Conservation and Management of the Fishery Resources in the South East Atlantic Ocean, Windhoek, 20 April 2001. In force 13 April 2003, 41 *International Legal Materials* 257 (2002); <www.fao.org/Legal/treaties>.

⁸³ Arrangement between the Government of Australia and the Government of New Zealand for the Conservation and Management of Orange Roughy on the South Tasman Rise. Signed for New Zealand on 17 February 2000 and for Australia on 25 February 2000. In effect on 1 March 2000; text at 16 *International Journal of Marine and Coastal Law* 119-124 (2001).

⁸⁴ See note 73 above.

⁸⁵ See note 72 above.

⁸⁶ See note 70 above.

⁸⁷ See Art. 1(1)(b) and (d) of the Fish Stocks Agreement.

⁸⁸ The Loophole Agreement (Agreement between the Government of Iceland, the Government of Norway and the Government of the Russian Federation Concerning Certain Aspects of Co-operation in the Area of Fisheries, St. Petersburg, 15 May 1999. In force summer 1999, <www.oceanlaw.net>) is, for various reasons, excluded as well.

category. It is submitted that these bodies cannot effectively contribute to the sustainable management of deep sea species without first transforming in modern RFMOs or Arrangements. This recommendation is repeated in subsection 4.1 below.

3.2 Objectives and species coverage

Table III (included in the Annex to this Report) gives an overview of the objectives and species coverage of relevant RFMOs and Arrangements. Also incorporated are the amendments to the objectives and species coverage of the NAFO Convention and the NEAFC Convention that have recently been proposed as part of reform-efforts. This overview gives rise to several conclusions. First, the objectives and species coverage of the RFMOs and Arrangements established prior to the adoption of the Fish Stocks Agreement are generally narrower than those established thereafter. The CCAMLR Convention and - to a lesser extent - the CBS Convention and the STR Arrangement,⁸⁹ are exceptions to that general rule. The objectives of the (old) NAFO Convention, the (old) NEAFC Convention, and the STR Arrangement are exclusively related to the conservation and management of target species and not (also) to the broader environment.

Most of the constitutive instruments of the RFMOs and Arrangements that were/are adopted after the Fish Stocks Agreement distinguish between on the one hand fishery resources - which are targeted species - and on the other hand more broadly all marine living resources or the marine ecosystem - which may be impacted by fishing activities.⁹⁰ Conversely, the CBS Convention, the CCAMLR Convention and the GFCM Agreement (potentially) apply to all the marine living resources in their regulatory areas. Regarding sedentary species as defined in Article 77(4) of the LOS Convention, it is worth noting that only the old NEAFC Convention explicitly excludes these. All the other constitutive instruments either include sedentary species explicitly⁹¹ or implicitly by means of the (potential) applicability to all marine living resources. As regards the GFCM Agreement, it should be noted that there are no areas within its scope of application that belong to the 'Area'.

Second, apart from the STR Arrangement, which relates exclusively to orange roughy (*Hoplostethus atlanticus*), none of the other objectives and species coverage relate explicitly to deep sea species or fisheries. Nevertheless, the species listed in Section 5 of the Annex to the SEAFC Convention include various deep sea species, such as orange roughy and deep-sea red crab (*Chaceon maritae*)⁹² and Annex I to the NAFO Convention includes Greenland halibut (*Reinhardtius hippoglossoides*) and possibly other deep-sea species.⁹³ The NWPOF Agreement is also expected to relate exclusively or mainly to deep sea species (as target species). Even the CBS Convention, which relates in principle exclusively to walleye pollock (*Theragra chalcogramma*), could in the future be used for marine living resources other than pollock. It is also important to note that the wording of the objectives and species coverage of all the other RFMOs and Arrangements does not explicitly or implicitly *exclude* deep sea species or fisheries either. As the discussion in subsection 3.3 shows, some of these other RFMOs and Arrangements indeed regulate deep sea species and thereby confirm their competence in that regard. Finally, there is no apparent distinction between RFMOs and Arrangements established prior to and after the adoption of the Fish Stocks Agreement.

⁸⁹ The objective and species coverage of the STR Arrangement is relatively narrow even though it was agreed upon after the adoption of the Fish Stocks Agreement.

⁹⁰ These are: the new NAFO Convention, the new NEAFC Convention, the SEAFC Convention, the SIOF Agreement and the Draft SPOF Agreement.

⁹¹ These are: the new NEAFC Convention, the SEAFC Convention, the SIOF Agreement and the Draft SPOF Agreement. As regards the new NEAFC Convention, the term "jurisdiction" replaces the term "fisheries jurisdiction" in Arts 5 and 6. This means that NEAFC will only regulate sedentary species on coastal States' outer continental shelves if these coastal States so request. The species coverage of the old NAFO Convention implicitly covers sedentary species beyond coastal States' outer continental shelves.

⁹² See also note 96 below.

⁹³ The new NAFO Convention will probably no longer include the list of species (cf. the September 2006 Report, note 140 below, at p. 3, para. 4(b)).

Third, none of the objectives and species coverage contain wording related to the classification of stocks. Even though all the RFMOs and Arrangements (with the exception of the SIOF Agreement) were mainly or exclusively established to regulate straddling fish stocks within the meaning of Article 63(2) of the LOS Convention, neither their objectives nor their species coverage refer explicitly to the straddling nature of the fish or other species covered. There is once again no apparent distinction between RFMOs and Arrangements established prior to and after the adoption of the Fish Stocks Agreement.

The STR Arrangement is a special case because Australia and New Zealand were unable to agree as to whether orange roughy in the regulatory area constituted a discrete high seas fish stock or not.⁹⁴ It is also worth noting that the objective of the SIOF Agreement is similar to those of the other constitutive instruments of RFMOs and Arrangements, even though its negotiation process was primarily aimed at establishing a regulatory framework for discrete high seas fish stocks.⁹⁵ This similarity also exists with respect to the objectives of the SEAFC Convention and the Draft SPOF Agreement, even though both were/are negotiated in full awareness of the presence of discrete high seas fish stocks in the (envisaged) regulatory area.⁹⁶ It is too early to say anything about the objective of a possible NWPOF Agreement, but it is worth noting that in the envisaged regulatory area there may well be discrete high seas fish stocks of pelagic armourhead (*Pseudopentaceros wheeleri* and *P. richardsoni*), alfonsino (*Beryx splendens*) and oreo dories (*Allocyttus* spp., *Neocyttus* spp. and *Pseudocyttus* spp.).⁹⁷

Fourth, the fact that the SEAFC Convention, the SIOF Agreement and the Draft SPOF Agreement were (are) negotiated in full awareness of the presence of discrete high seas fish stocks in the (envisaged) regulatory area is also important. This is because they were (are) negotiated after the adoption of the Fish Stocks Agreement and their (draft)texts draw heavily on the Fish Stocks Agreement. The GFCM Agreement cannot be grouped together with these.⁹⁸ The STR Arrangement is once again a special case because it is non-legally binding and only Australia was a party to the Fish Stocks Agreement at the time when it signed the Arrangement. It nevertheless draws on the Fish Stocks Agreement in spite of the disagreement as to stock classification. As regards the NWPOF Agreement initiative, it can be noted that at the time of writing all the participants, except South Korea, were party to the Fish Stocks Agreement. Consequently, it is likely that the Fish Stocks Agreement will be extensively drawn on. A similar argument can finally also be made with respect to the new NAFO Convention which draws on the Fish Stocks Agreement despite the presence of discrete high seas fish stocks within the NAFO Regulatory Area.⁹⁹

In summary, the constitutive instruments of various RFMOs seem to indicate that (part of) the Fish Stocks Agreement is already applicable to discrete high seas fish stocks. The objectives of relevant RFMOs and Arrangements are formulated in a general way, without classifying stocks or species as

⁹⁴ See the Preamble.

⁹⁵ For some information about the complex negotiation process of the SIOF Agreement see Molenaar, note 8 above, at pp. 109-115 as well as Molenaar, note 33 above, at pp. 541-542. A formal account of the negotiation process is incorporated in the 'Final Act of the Conference on the Southern Indian Ocean Fisheries Agreement', which was adopted on 7 July 2006.

⁹⁶ With respect to the SEAFC Convention, the deep sea red crab stock "is generally agreed to be a discrete stock" (A. Jackson, "The Convention on the Conservation and Management of Fishery Resources in the South East Atlantic Ocean 2001: An Introduction", 17 *International Journal of Marine and Coastal Law* 33-77 (2002), at pp. 38 and 47). As regards the Draft SPOF Agreement, see Doc. SP/01/WP1 (February 2006), at pp. 1-2. Note also that Art. 26(2) of the Draft SPOF Agreement refers explicitly to Arts 116-119 of the LOS Convention. This could be primarily related to the issue of non-parties to the Fish Stocks Agreement, to the issue of high seas discrete fish stocks or to both.

⁹⁷ Information provided by C. Ahn, Ministry of Maritime Affairs and Fisheries of South Korea, August 2006. See also the 'Report submitted in accordance with paragraph 17 of General Assembly resolution 59/25 of 17 November 2004, to assist the Review Conference to implement its mandate under paragraph 2, article 36 of the United Nations Fish Stocks Agreement - Report of the Secretary-General' (UN Doc. A/CONF.210/2006/1, of 4 January 2006), at pp. 25-26, para. 113.

⁹⁸ While the 1997 amendments to the GFCM Agreement were also approved after the adoption of the Fish Stocks Agreement, the current text of the GFCM Agreement does not draw on the Fish Stocks Agreement and the 1997 amendments were also not adopted in the face of full awareness of the presence of discrete high seas fish stocks in the regulatory area.

⁹⁹ Cf. UN Doc. A/CONF.210/2006/1, note 97 above, at p. 74, n. 48.

straddling or discrete high seas. It seems that the competence of all these RFMOs and Arrangements thereby covers discrete high seas fish stocks as well. There are no indications that these RFMOs and Arrangements, in performing their functions, explicitly or implicitly distinguish between straddling and discrete high seas fish stocks. Perhaps apart from the issue of the allocation of fishing opportunities, such a distinction would also not be warranted by scientific, pragmatic or other factors.

3.3 Relevant practice by relevant RFMOs and Arrangements

The discussion in the previous subsection concluded that even though the constitutive instruments of some RFMOs and Arrangements may not refer to deep sea species or fisheries in their objectives and species coverage or otherwise, deep sea species or fisheries are not explicitly or implicitly excluded either. This view is supported by the regulation of deep sea species by some of these RFMOs. Such regulation thereby confirms their competence in that regard.

Deep sea fisheries are a relatively new phenomenon for NEAFC, which established the NEAFC Deep-Sea Working Group, which met for the first time in June 2002. It is worth noting that NEAFC relies on ICES for scientific advice. In 1994, ICES had already established a dedicated study group on deep sea resources but re-established this group as the Working Group on the Biology and Assessment of Deep Sea Fisheries Resources (WGDEEP)¹⁰⁰ in 2001.¹⁰¹

NEAFC seems to be the only RFMO that has established a dedicated body to deal with deep sea species. Despite the absence of a dedicated body, deep sea species and fisheries have been regulated by CCAMLR (e.g. toothfish (*Dissostichus* spp.)). No dedicated body exists within the GFCM either. However, the efforts of the Sub-Committee on Marine Environment and Ecosystems (SCMEE) of the GFCM Scientific Advisory Council also relate to the impact of deep sea fisheries on sensitive marine ecosystems (but not to deep sea species as target species).¹⁰² Finally, a dedicated body is not likely to be established within the framework of the SEAFC Convention, as most of the target species are deep sea species. This would be similar for the SIOF Agreement, once it enters into force, and for the NWPOF Agreement. The situation is very different for the SPOF Agreement as not only deep sea species but also commercially significant stocks of small pelagic fish occur in its envisaged regulatory area.

3.4 Relevant non-fisheries instruments

In view of the need for RFMOs and Arrangements to pursue an EAF, they should cooperate and coordinate with relevant non-fisheries instruments at the regional level. Of particular importance in this regard are the instruments, action plans and bodies established under the regional seas programme of the United Nations Environmental Programme (UNEP), other regional marine environmental protection bodies such as the OSPAR Commission¹⁰³ and the Helsinki Commission¹⁰⁴ and regional advisory bodies such as ICES, PICES and the Mediterranean Science Commission (CIESM).

¹⁰⁰ Previously named Working Group on the Biology and Assessment of Deep Sea Fisheries.

¹⁰¹ Cf. Final Report of the NEAFC Deep-Sea Working Group (Bergen, June 2002), at p. 21.

¹⁰² This advice has, *inter alia*, led to Recommendation GFCM/2006/3 'Establishment of Fisheries Restricted Areas in Order to Protect the Deep Sea Sensitive Habitats'.

¹⁰³ Established by the Convention for the Protection of the Marine Environment of the North-East Atlantic, Paris, 22 September 1992. In force 25 March 1998, <www.ospar.org>.

¹⁰⁴ Established by the Convention on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, 9 April 1992. In force 17 January 2000; <www.helcom.fi>.

4. REFORM OF THE INTERNATIONAL LEGAL AND INSTITUTIONAL FRAMEWORK

4.1 Reform at the regional level

4.1.1 Establishing new RFMOs or Arrangements

Despite recent progress in the form of the adoption of the SIOF Agreement and the negotiations on the SPOF Agreement and the NWPOF Agreement, there are still several gaps in high seas coverage with relevant RFMOs or Arrangements. These are displayed in Table II below. The mere listing of these gaps does not imply that straddling or discrete high seas deep sea fish stocks actually occur in these high seas areas.¹⁰⁵ As subsection 3.2 concluded that the CBS Convention could also function as an arrangement for the conservation and management of deep sea fisheries, it is not regarded as a gap.

In addition to the various FAO initiatives proposed in subsection 4.2 - which will guide States in establishing new RFMOs or Arrangements as well as in reforming existing RFMOs and Arrangements - a **possible role for FAO** would be to kick-start negotiations by inviting coastal States and high seas fishing States that have a duty and/or a real interest to participate in a prospective RFMO or Arrangement. Such a FAO initiative would appear especially pertinent for the high seas areas in the Central Atlantic that are currently included in the areas of application of CECAF and WECAFC. FAO's involvement in the negotiations of the SEAFC Convention and of the SIOF Agreement/SWIOFC Statutes¹⁰⁶ could serve as a model.

Table 2. Gaps in high seas coverage with relevant RFMOs or Arrangements

Ocean	Description of the gap
Atlantic	<ul style="list-style-type: none"> the high seas areas in the Central Atlantic that are currently included in the areas of application of CECAF and WECAFC the high seas areas in the South-West Atlantic (FAO Statistical Area No. 41, except the high seas areas covered by CECAF)
Arctic	<ul style="list-style-type: none"> all high seas areas except those covered by the NEAFC Convention¹⁰⁷ (even though access to much of this area is often limited due to sea-ice)
Pacific	<ul style="list-style-type: none"> the high seas areas of the Central Pacific to the extent that these are not covered by the SPOF Agreement the high seas areas of the North-East Pacific to the extent that these are not covered by the CBS Convention

4.1.2 Reforming existing RFMOs and Arrangements

As briefly mentioned in subsection 3.2, some RFMOs like NAFO and NEAFC have already started processes of reform. Such reform includes an overhaul of their constitutive instruments in order to align them with the requirements of the Fish Stocks Agreement, to address the calls for wider use of the EAF as well as to take action against destructive fishing practices pursuant to paragraphs 66-71 of UNGA Resolution 59/25.¹⁰⁸ It is not ruled out that the 2006 UNGA 'Fish' Resolution may contain further recommendations in relation to high seas bottom-trawling. In view of the current objectives and species coverage of the relevant RFMOs and Arrangements listed in Table I, processes of reform

¹⁰⁵ Note the brief description of deep sea fisheries in UN Doc. A/61/154, note 11 above, at p. 9, para. 18.

¹⁰⁶ The South West Indian Ocean Fisheries Commission was established as an advisory body under Art. VI(1) of the FAO Constitution. The SWIOFC Statutes were adopted by means of FAO Council Resolution 1/127 on 25 November 2004.

¹⁰⁷ According to Art. 1(1)(a), the Convention Area extends to the North Pole. The proposed amendments to the NEAFC Convention (see note 142 above) do not change that.

¹⁰⁸ See in this regard also the 'Performance Review Panel Report of the North East Atlantic Fisheries Commission, NEAFC', available at <www.neafc.org>.

also appear necessary for the GFCM. Such processes are not necessarily required in relation to the STR Arrangement, as the SPOF Agreement may eventually replace it.

While these regional processes of reform devote much attention to the impact of (deep sea) fisheries on the broader marine environment, much less attention seems to be devoted to the conservation and management of targeted deep sea species.¹⁰⁹ Only NEAFC and ICES (which provides scientific advice to NEAFC) have established dedicated bodies that also deal with targeted deep sea species.

In addition to the initiatives of FAO proposed in subsection 4.2 - which will guide States in establishing new RFMOs or Arrangements as well as in reforming existing RFMOs and Arrangements - a **possible role for FAO** would be to stimulate processes of reform within the GFCM, if only because the GFCM is an RFMO that has been established under the FAO Constitution.

4.2 Reform at the global level

4.2.1 Discrete high seas fish stocks

The analysis in subsection 2.2 highlighted that discrete high seas fish stocks are currently covered by Section 2 of Part VII of the LOS Convention and other global legally binding and non-legally binding international instruments - most importantly the Compliance Agreement and the Code of Conduct - but not by the Fish Stocks Agreement.¹¹⁰

The need to address this gap in the global legal framework has been recognized repeatedly in recent years, for instance at the St. John's Conference in May 2005.¹¹¹ Subsequently, in its 2005 Fish Resolution, the UNGA encouraged "States, as appropriate, to recognize that the general principles of the [Fish Stocks Agreement] should also apply to discrete fish stocks in the high seas". The exact same wording was also agreed on at the UNFSA Review Conference in May 2006.¹¹²

At the UNFSA Review Conference in May 2006, there was general agreement for the view that

[RFMOs] with competence to regulate straddling fish stocks have the necessary competence to conserve and manage high-seas discrete stocks. There is no obstacle for such [RFMOs] to adopt management measures in respect of such stocks in accordance with the general principles set forth in the [Fish Stocks Agreement].¹¹³

This view is supported by the analysis in subsection 3.2, which *inter alia* concluded that there is already state practice through RFMOs and Arrangements by which parts of the Fish Stocks Agreement are already applicable to discrete high seas stocks. However, that state practice 'merely' consists of the texts of constitutive instruments. State practice has more weight if it consists of actual conservation and management measures that apply explicitly or implicitly to discrete high seas fish stocks and which are adopted and applied in accordance with the Fish Stocks Agreement. As was highlighted in subsection 3.2, there seem to be no scientific, pragmatic or other factors apart from the issue of the allocation of fishing opportunities, that would necessitate RFMOs and Arrangements, in performing their functions, to explicitly or implicitly distinguish between straddling and discrete high seas fish stocks.

¹⁰⁹ Note, however, the attention devoted to target species in UN Doc. A/61/154, note 11 above, at pp. 14-15 and 40, paras 41-45 and 205.

¹¹⁰ For an alternative view see M.W. Lodge and S.N. Nandan, "Some Suggestions Towards Better Implementation of the United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks of 1995", 20 *International Journal of Marine and Coastal Law* 345-379 (2005), at p. 371.

¹¹¹ See para. 13(A) of the Ministerial Declaration adopted at the 'Conference on the Governance of High Seas Fisheries and the UN Fish Agreement: Moving from Words to Action', available at <www.dfo-mpo.gc.ca/fgc-cgp>.

¹¹² Cf. Doc. A/CONF.210/2006/15, note 58 above, at p. 31, para. 2.

¹¹³ Doc. A/CONF.210/2006/15, note 58 above, at p. 33, para. 16.

The view reproduced above suggests that the international community currently has a preference for a regional solution for the identified gap in the global international legal framework. State practice through RFMOs and Arrangements would ensure that all members and participants are under a legal obligation to apply the Fish Stocks Agreement *mutatis mutandis* equally to discrete high seas fish stocks. However, this regional approach has various shortcomings.

First, there are no obligations in the absence of RFMOs and Arrangements. The only way in which this shortcoming can be addressed is by filling spatial gaps. While this is already under way, it is not completed.

Second, some commentators¹¹⁴ argue that a significant weakness of this regional approach is its inability to address fishing by non-members.¹¹⁵ According to these commentators, this inability is caused by the need to rely on the more general obligations on cooperation that are laid down in the LOS Convention instead of the broader, deeper and more specified obligations in the Fish Stocks Agreement. However, there are others¹¹⁶ that argue that the regional governance role of RFMOs and Arrangements is no longer fundamentally challenged and that the more specified duty of States to cooperate with RFMOs and Arrangements pursuant to Article 8(3) of the Fish Stocks Agreement is already part of customary international law. It must be admitted that the carefully circumscribed non-flag State enforcement powers on the high seas under Articles 21 and 22 of the Fish Stocks Agreement would not be available for discrete high seas fish stocks. However, the current practice within RFMOs to combat fishing activities by non-members through, *inter alia*, port State measures and trade measures has not yet been challenged, for example from the perspective of international trade law.

The preference for a regional approach at the UNFSA Review Conference may to a large extent have been motivated by its limited mandate under Article 36 of the Fish Stocks Agreement. Moreover, a preference for a regional approach also does not exclude pursuing a global approach in parallel. This could take the form of a legally binding instrument by which the Fish Stocks Agreement is applied in part or as a whole to discrete high seas fish stocks. The main advantage of such an instrument *would* be that it addresses the aforementioned shortcomings of a regional approach. A major disadvantage *could* be that non-parties to the Fish Stocks Agreement feel that the pace of reform is too fast and will no longer attempt to catch up at all.¹¹⁷ This would then threaten the aim of universal participation in the Fish Stocks Agreement and thereby in the law of the sea as a whole.

4.2.2 *Suitability or lack of suitability*

The way in which such a legally binding instrument ensures that the Fish Stocks Agreement applies in part or as a whole to discrete high seas fish stocks is of critical importance. As participation in negotiations would be open to parties as well as non-parties of the Fish Stocks Agreement, negotiations may be used by non-parties to ensure that certain hard-fought components of the package deal of the Fish Stocks Agreement - for instance non-flag State enforcement - will not be part of the new instrument. This would then lead to a loss of uniformity in the international law of the sea. One possible solution to this problem is to focus on provisions in the Fish Stocks Agreement that are for obvious scientific, pragmatic or jurisdictional reasons *not suitable* for discrete high seas fish stocks.

¹¹⁴ For instance M. Hayashi, "Governing deep-sea fisheries: future options and challenges", in R. Shotton (ed.) *Deep Sea 2003: Conference on the Governance and Management of Deep-sea Fisheries* (FAO Fisheries Proceedings, FAO: 2005), Part 1: Conference reports, pp. 590-595, at p. 593.

¹¹⁵ Essentially, unregulated fishing within the meaning of para. 3.3.1 of the IPOA on IUU Fishing (International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing. Adopted by consensus by FAO's Committee on Fisheries on 2 March 2001 and endorsed by the FAO Council on 23 June 2001; text available at <www.fao.org/fi>).

¹¹⁶ For instance M.W. Lodge, "Improving international governance in the deep sea", in Shotton, note 114 above, pp. 62-65, at p. 64 and E.J. Molenaar, "Global, Regional and Unilateral Approaches to Unregulated Deep-Sea Fisheries", in Shotton, note 114 above, pp. 415-432, at p. 422.

¹¹⁷ It should be noted that Japan's ratification of the Fish Stocks Agreement on 7 August 2006 is an important step towards more universal participation.

Article 7 (on compatibility) as well as provisions that refer to coastal States or areas under national jurisdiction would appear to be obvious candidates.¹¹⁸ There are various ways in which this could be achieved, for instance by listing the provisions that are not to apply or by securing agreement on a single substantive provision with wording that captures the rationale of *mutatis mutandis* application as well as the rationale of lack of suitability.

4.2.3 *Definitions of Fish, Discrete High Seas Fish Stocks and/or Fish Stocks Discrete to Areas Beyond National Jurisdiction (ABNJ)*

Before dealing with the need for a definition of high seas fish stocks, it must be decided whether the instrument should apply exclusively to ‘fish’ as defined in Article 1(1)(c) of the Fish Stocks Agreement or to this report’s definition of fish, which *also* includes sedentary species as defined in Article 77(4) of the LOS Convention.

In considering these options, account should be taken of the view held by some States that the regime of the Area and the principle of the common heritage of mankind also apply to marine genetic resources of the Area (see subsection 2.2.1). If that view becomes broadly supported, the underlying reasoning may also be relevant to other marine living resources of the Area, including sedentary species. However, the analysis of the objectives and species coverage of relevant RFMOs and Arrangements in subsection 3.2 reveals that the objectives and species coverage of the CBS Convention and the CCAMLR Convention (potentially) apply to all marine living resources in their regulatory areas.¹¹⁹ Moreover, the definitions of fishery resources of the other constitutive instruments - except for the old and new NAFO Convention and the old NEAFC Convention - explicitly include sedentary species in the Area.¹²⁰

The objectives and species coverage of these RFMOs and Arrangements therefore seem to indicate that, at least as regards sedentary species as defined in Article 77(4) of the LOS Convention, the regime of the Area and the principle of the common heritage of mankind are not applied in their regulatory areas. In fact, the definition of sedentary species in Article 77(4) is so broad that the true limitation is that the regulatory mandates of these RFMOs and Arrangements is confined to fishing activities. As the exploration and exploitation of marine genetic resources - also known as ‘bioprospecting’ - is aimed at qualitative rather than quantitative removals of organisms, they would not be treated as fishing activities.¹²¹

In view of the above, it seems that opting for this report’s definition of fish would avoid a legal gap in the global legal framework - as sedentary species would otherwise not be covered - and would also be consistent with the present regional legal framework’s species coverage. If that option is pursued, however, it seems also necessary to incorporate a definition of ‘fishing activities’ that ensures that marine genetic resources and bioprospecting are excluded from the scope of the instrument. Such definitions can be found in many of the constitutive instruments of the newer RFMOs.

Opting for this report’s definition of fish would not only broaden the species coverage but also the spatial coverage. While outer continental shelves were already excluded due to the sovereign rights of coastal States over sedentary species, the spatial scope would be broadened by the inclusion of sedentary species occurring in the Area. Instead of applying to discrete high seas fish stocks, it would apply to fish stocks discrete to ABNJ. One option would be to use wording analogous to Article 63(2) of the LOS Convention, for instance “fish stocks that occur exclusively in areas beyond national

¹¹⁸ E.g. Arts 3, 5 (*chapeau*), 8, 11(d) and (e) and 16.

¹¹⁹ The GFCM Agreement is not listed here as there are not pockets of the Area within its scope of application.

¹²⁰ Sedentary species in the Area are implicitly covered by the old NAFO Convention.

¹²¹ Reference should here be made to the debate on bioprospecting within Antarctic Treaty Consultative Meetings (ATCMs), during which no suggestion has yet been made that this could possibly be regulated within the framework of the CCAMLR Convention (see e.g. ATCM Resolution 7 (2005) ‘Biological Prospecting’). The suggestion also does not seem to have been seriously discussed during recent Annual CCAMLR Meetings (but see the Report of the 21st Annual CCAMLR Meeting (2002) (Doc. CCAMLR-XXI), at p. 76, para. 13.17).

jurisdiction" or "fish stocks that occur exclusively on the high seas or in the Area". More elaborate definitions or lists of species may be opted for as well. It should be noted, however, that such alternatives were considered during the negotiations on the Fish Stocks Agreement but eventually did not secure the necessary support.¹²²

4.2.4 Possible role(s) of FAO

As regards possible role(s) of FAO, it must be noted that the UNFSA Review Conference recommended that FAO revise its global fisheries statistics database, presumably to facilitate the identification of potential discrete high seas fish stocks.¹²³ However, a proposal for FAO to develop Technical Guidelines on the conservation and management of discrete high seas fish stocks found insufficient support. One observer openly wondered what the benefit of such guidelines would be.¹²⁴ It seems indeed not so useful to have specific guidance for stocks that are classified by means of a legal instead of a scientific definition. By contrast, technical guidance on the conservation and management of deep sea species and fisheries *per se*, would not be based on a legal definition. Moreover, as most discrete high seas fish stocks seem in fact to be deep sea species,¹²⁵ they would effectively also address discrete high seas fish stocks. Some further comments on the scope of guidance developed by FAO are offered in subsection 4.2.7.

Furthermore, it would probably not be appropriate or useful to address the sensitive issue of allocation of fishing opportunities in FAO Technical Guidelines, if only because of their non-legally binding nature. Another possible role for FAO would arise if the international community prefers the global instrument under discussion to have a more elaborate definition or list(s) of species and asks FAO for guidance.

4.2.5 Form of the instrument

There are several options for the form of the instrument under discussion. The most likely are a Protocol to the Fish Stocks Agreement and an Implementation Agreement of the LOS Convention. As regards the latter, this could relate exclusively to discrete high seas fish stocks (or fish stocks discrete to ABNJ) but it could *also* include a number of other issues where reform is regarded necessary, for instance those discussed in the following subsections and/or the issues covered by the recent European Union (EU) proposal for an Implementation Agreement.¹²⁶ By contrast, the amendment procedures of the LOS Convention and the Fish Stocks Agreement are unlikely to be used for reasons similar to those that led to the 1994 Implementation Agreement and the Fish Stocks Agreement.

It is submitted that while nothing in the Compliance Agreement would get in the way of adding an Annex or a Protocol, it is not a logical choice. This is evident if the substance of the instrument would draw heavily on the Fish Stocks Agreement and even more so if it would consist of a single substantive provision with wording that captures the rationale of *mutatis mutandis* application of the Fish Stocks Agreement and/or the rationale of lack of suitability of some of its provisions. But even if the substance of the new instrument would not draw on the Fish Stocks Agreement at all, the simple fact that it would deal with rights and obligations for States on the conservation and management of a certain category of fish stocks, would make a linkage with the LOS Convention logical. This is due, *inter alia*, to the latter's categorization of fish stocks and its separate section 2 on the living resources of the high seas in Part VII. Also, the precedent of the linkage between the LOS Convention and the Fish Stocks Agreement - which deals specifically with two categories of fish stocks - is arguably

¹²² For a short discussion see Molenaar, note 8 above, at pp. 85-86.

¹²³ Cf. Doc. A/CONF.210/2006/15, note 58 above, at p. 35, para. 19.

¹²⁴ Cf. Doc. A/CONF.210/2006/15, note 58 above, at p. 14, paras 64-65.

¹²⁵ Cf. UN Doc. A/CONF.210/2006/1, note 97 above, at p. 23, para. 104.

¹²⁶ This proposal is laid down in the Annex to the Statement given by Austria, on behalf of the EU, at the 7th Meeting of the ICP (2006).

already sufficient by itself. These arguments far outweigh the circumstance that the Compliance Agreement relates primarily, but not exclusively,¹²⁷ to the high seas.

4.2.6 *Coastal state jurisdiction over the (outer) continental shelf*

As regards the rights and obligations of coastal States over their outer continental shelves, there are two issues where reform seems particularly necessary. The first relates to the fact that the LOS Convention currently does not clearly require coastal States to conserve sedentary species. The obligations in relation to ecosystems and habitats under Article 194(5) lack clarity and do not relate to target species.

The second concerns the lack of guidance offered by the LOS Convention as to how the justifiability of interference by coastal States with high seas fishing above outer continental shelves should be assessed. Some States take the view that

“in conformity with the [LOS Convention], the coastal State was fully entitled to adopt any conservation and management measures it deemed necessary to protect its sedentary species on the continental shelf. Those may include the possibility of imposing restrictive measures on fishing activities in the high seas over its continental shelf, including on fishing practices that were deemed to have a negative impact on sedentary species.”¹²⁸

However, the fact that only “some” States take this view means that others do not and/or that yet others have not yet determined a position on the issue. As far as could be ascertained, no coastal State had yet imposed such measures.¹²⁹ Also, the cited view does not take account of the relevance of the presence of RFMOs or Arrangements that have spatial competence over these outer continental shelves and their regulation of fisheries impacting on sedentary species of outer continental shelves. It is noteworthy that in the recent past several RFMOs have imposed restrictions for the purpose of protecting benthic species in areas that clearly lie above the (outer) continental shelves of coastal States.¹³⁰ However, agreement on such restrictions at the multilateral level does not necessarily mean that unilateral action by coastal States is ruled out. Finally, so far no coastal State has concluded the LOS Convention’s procedure involving the Commission on the Limits of the Continental Shelf (CLCS) for establishing the outer limits of its continental shelf. The precise spatial scope of their rights is therefore unclear as well.

In conclusion, there seems to be a need for clarification of the relationship between the sovereign rights of coastal States over sedentary species on their outer continental shelves, the freedom of high seas fishing, the presence of and regulation by RFMOs or Arrangements and the consequences of not having established final and binding outer limits. While clarification on the second issue could be provided in the course of an international dispute settlement procedure, this would not resolve the first issue. The international community may in any event prefer not to wait for such a procedure and commence negotiations towards a legally binding instrument that incorporates clarification on both issues.

¹²⁷ See, for instance, Art. III(1).

¹²⁸ See UN Doc. A/61/65, note 36 above, at p. 7, para. 22. See also the fourth preambular paragraph to the SPOF Agreement, which notes that coastal States have the right to conserve “living marine resources upon which fishing has an impact”.

¹²⁹ It is worth noting, however, that by 2020 New Zealand intends to have established some marine protected areas beyond its EEZ to protect benthic communities (cf. UN Doc. A/61/154, note 11 above, at p. 23, para. 93). However, it is not clear if these areas are on New Zealand’s outer continental shelf or if New Zealand intends to do this unilaterally.

¹³⁰ E.g., Recommendation GFCM/2006/3 ‘Establishment of Fisheries Restricted Areas in order to Protect the Deep Sea Sensitive Habitats’ and the decision by NEAFC in November 2006 to close fishing in areas on the Hatton and Rockall bank to protect cold water corals (the latter information was provided by K. Hoydal, Secretary of NEAFC, 28 November 2006). The areas closed to bottom trawling by NAFO in September 2006 (information provided by J. Fischer, Executive Secretary of NAFO, 27 November 2006) and the areas closed to all fishing by SEAFC in October 2006 (Conservation Measure 06/06 ‘On the Management Of Vulnerable Deep Water Habitats And Ecosystems In The SEAFO Convention Area’) all seem to lie in the Area.

As regards the form of such an instrument, an Implementation Agreement to the LOS Convention seems the most likely option for reasons similar to those mentioned in subsection 4.2.1. Likewise, the issue of the outer continental shelf could be the only issue addressed by this Implementation Agreement or could be part of a package. In case the international community decides to resolve the gap identified in subsection 4.2.1 by means of an Implementation Agreement that applies to this report's broad definition of fish - including sedentary species therefore - it would seem logical to *also* incorporate clarification on the two issues discussed in this subsection.

As the required clarification would be essentially jurisdictional, there would seem to be **no obvious role for FAO**.

4.2.7 *Other non-legally binding guidance by FAO and legally binding instruments*

Subsection 4.1.2 noted that while the ongoing processes of reform within RFMOs are primarily focused on EAF and the impact of (deep sea) fisheries on the broader marine environment - in part due to the UNGA's efforts in combating destructive fishing practices -, much less attention seems to be devoted to the conservation and management of targeted deep sea species. This defect applies to the regional as well as to the global level. The following subsections deal with non-legally binding guidance by FAO and legally binding instruments.

4.2.8 *Non-legally binding guidance by FAO*

COFI already agreed on the need to develop guidance in the form of a code of practice or of Technical Guidelines on deep sea fisheries at its 26th Session in 2005.¹³¹ It should be noted that the title (but not the prospectus) of this Expert Consultation - namely 'Deep Sea Fisheries in the High Seas' - suggests that the spatial scope of this guidance is limited to the high seas. It is submitted that this needs to be carefully considered.

As far as could be ascertained, none of the existing Technical Guidelines or IPOAs has a scope based on stock-classifications used by the law of the sea. A choice for such a scope may be perceived by some States as a choice for a jurisdictional/legal approach instead of a technical or scientific approach and thereby inappropriate in view of FAO's mandate. Moreover, some States may argue that limiting the scope to the high seas or ABNJ would be discriminatory against States that have a particular interest in these areas. This latter argument is also voiced against a (limited) UNGA moratorium on high seas bottom trawling as well as against the EU proposal for an Implementation Agreement, whose spatial scope is limited to ABNJ. While these objections certainly have merit, it is suspected that they are *also* used to frustrate any reform whatsoever, for the reason that explicit restrictions on the sovereign rights of coastal States are unacceptable to many States. All this friction would be avoided by broadening the scope of the guidance to deep sea fisheries and species in general.

As regards the form of the guidance, the COFI Report refers to a code of practice or Technical Guidelines. Another alternative would, in light of the existence of the IPOA on Sharks and the Technical Guidelines on sharks,¹³² be an IPOA, whether or not supported by Technical Guidelines to further its implementation.¹³³ The choice for the form of guidance depends first of all on the nature of the substance, the level of prescription and whether it is aimed only at States or also at other relevant actors. Another important consideration for the form and spatial scope is if the non-legally binding guidance is intended to be converted into a legally binding instrument at a later stage or that such an option should at least be kept open. This is not a theoretical possibility as some States were in favor of the option to develop a "single global arrangement for the management of [deep sea] fisheries" during

¹³¹ See note 2 above.

¹³² See notes 46 and 47 above and accompanying text.

¹³³ A less appropriate form of guidance would be a manual modeled on the 'Manual for the monitoring and management of queen conch', developed by FAO (see FAO Doc. COFI:FT/X/2006/3 'CITES Issues with respect to International Fish Trade and the CITES/FAO MOU', at p. 5, para. 17).

the 26th Session of COFI in 2005.¹³⁴ Such a two-stage approach may for instance be pursued with regard to the Port State Model Scheme.¹³⁵ It seems that an IPOA is more suitable for a two-stage approach than Technical Guidelines.

As regards the substance, it would seem to be especially pertinent to determine if, in view of the characteristics of deep sea species and (new and exploratory) deep sea fisheries, there are particular needs for the collection and sharing of data or for guidelines for the application of the precautionary approach and for precautionary reference points. Account may also be taken of relevant efforts within ICES¹³⁶ as well as the work of the FAO ad hoc Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-exploited Aquatic Species¹³⁷.

Another form of guidance that FAO may wish to consider is to develop a Model Arrangement for the conservation and management of deep sea fisheries, based on a similar rationale as that of the Port State Model Scheme. Accordingly, such a Model Arrangement would offer guidance to States in establishing Arrangements at the regional level. It has to be pointed out, however, that the fact that the Draft SPOF Agreement seems to be partly modeled on the SIOF Agreement could indicate that enough guidance is already available.

4.2.9 *Legally binding instrument*

The international community may feel that the risk of loss of marine biodiversity posed by deep sea fisheries is so high that reliance on voluntary implementation of non-legally binding FAO instruments by coastal States, flag States, RFMOs and other actors is not sufficient. Some States already voiced these sentiments during COFI's 26th Session in 2005 (see above). In case a two-stage approach was chosen (see also above), this decision may also come after assessments have shown that voluntary implementation has been inadequate. The observations made above on the spatial scope apply here as well.

The instrument may as a minimum contain the suggestions made above in relation to the collection and sharing of data and the precautionary approach. In view of the decentralized nature of international law and the absence of hierarchy among its forms/manifestations as well as its law-making processes, particular care should be taken to ensure that proposed reform minimizes competition or overlap with existing legal regimes. The most directly relevant legal regimes are of course existing RFMOs and Arrangements. On the other hand, it may also be argued that the conservation and management of deep sea fisheries and species would benefit from global regulation. This could take various forms. One form would be for the instrument to mandate a new or existing global body to assess the risk of fishing for certain deep-sea species or the risk of using certain fishing practices. Of the existing global bodies, possible candidates would be COFI, the UNGA or the UN Trusteeship Council (see subsection 2.3). In view of the commitment to closer cooperation between the FAO and CITES - most recently expressed by the conclusion of a FAO/CITES Memorandum of Understanding at Geneva on 3 October 2006¹³⁸ - it may be considered to convert the abovementioned FAO ad hoc Expert Advisory Panel into a permanent body.

One step further would be to give that new or existing body the competence to regulate deep sea fisheries globally.¹³⁹ However, in view of the fierce opposition by some States to blanket moratoria

¹³⁴ See FAO Fisheries Reports No. R780, note 2 above, at p. 14, para. 86. Note that the global agreement on discrete high seas fish stocks advocated by Hayashi, note 114 above, at p. 593, would concern first of all deep sea species.

¹³⁵ See note 58 above.

¹³⁶ As advocated in UN Doc. A/CONF.210/2006/1, note 97 above, at p. 24, para. 108.

¹³⁷ See FAO Fisheries Reports No. R780, note 2 above, at p. 9, para. 54.

¹³⁸ The MoU is contained in CITES Doc. SC53 Doc. 10.1 and in Annex I to FAO Doc. COFI:FT/X/2006/3, note 134 above.

¹³⁹ See also M.W. Lodge, "Improving International Governance in the Deep Sea", 19 *International Journal of Marine and Coastal Law* 299-316 (2004), at p. 307 and R. Shotton and M. Haward, "Requirements for Managing Deep-Sea Fisheries", in Shotton, note 114 above, at pp. 704-709.

and a species-by-species (instead of a stock-by-stock) approach - inspired by the moratorium on commercial whaling, the listing of certain whale species on the Annexes of CITES and the suitability of the CITES listing criteria to commercially exploited aquatic species - this alternative is not likely to find sufficient support. Possibly, however, support would be broader in case the global body is only given a mandate by default, namely in the absence of an RFMO or Arrangement with spatial and substantive competence. It is worth noting that a mandate by default-rationale is also a crucial element in the proposals by various States for a recommendation by the UNGA on high seas bottom trawling on the high seas.

As regards the form of the instrument, it seems that an Implementation Agreement to the LOS Convention seems the most likely option for reasons similar to those mentioned in subsection 4.2.1.

ANNEX I

Table 3. Overview of the objectives and species coverage of relevant RFMOs and Arrangements

RFMO or Arrangement		Objective	Species coverage
CBS Convention		(1) to establish an international regime for conservation, management, and optimum utilization of Pollock resources in the Convention area; (2) to restore and maintain the Pollock resources in the Bering Sea at levels which will permit their maximum sustainable yield; (3) to cooperate in the gathering and examining of factual information concerning Pollock and other living marine resources in the Bering Sea; and (4) to provide, if the Parties agree, a forum in which to consider the establishment of necessary conservation and management measures for living marine resources other than Pollock in the Convention Area as may be required in the future (Art. II)	Pollock and other living marine resources, as may be required in the future (Art. II)
CCAMLR Convention		Conservation (defined as including rational use) of Antarctic marine living resources in line with several conservation principles with are regarded as reflecting an ecosystem approach (Art. II)	Antarctic marine living resources, defined as “the populations of fin fish, molluscs, crustaceans and all other species of living organisms, including birds, found south of the Antarctic Convergence.” (Art. I(2))
GFCM Agreement		The development and proper utilization of the living marine resources in the Mediterranean and the Black Sea and connecting waters (Preamble)	The living marine resources in the Mediterranean and the Black Sea and connecting waters (Preamble)
NAFO Convention	Old	The conservation and optimum utilization of the fishery resources of the Northwest Atlantic area (Preamble)	All fishery resources of the Convention Area, with the following exceptions: salmon, tunas and marlins, cetacean stocks managed by the International Whaling Commission or any successor organization, and sedentary species of the Continental Shelf, i.e., 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 (Art. I(4)) The list of species in Annex I includes Greenland halibut (<i>Reinhardtius hippoglossoides</i>) and possibly other deep-sea species

	New ¹⁴⁰	<p>The ensure the long term conservation and sustainable use of the fishery resources in the Convention Area and, in so doing, to safeguard the marine ecosystems in which these resources occur (Art. II)</p> <p>New Article III contains various principles that shall be applied in giving effect to the objectives of the Convention. These are clearly inspired by Article 5 of the Fish Stocks Agreement and include the obligation to apply the precautionary approach, to need to preserve marine biological diversity and to take account of a broad range of ecosystem considerations</p>	<p>“Fishery resources” means all resources of fish, molluscs and crustaceans within the Convention Area excluding (i) sedentary species subject to the exclusive sovereign rights of Coastal States pursuant to Article 77 of the [LOS] Convention, and (ii) in so far as they are managed by other international Conventions or Agreements, anadromous, catadromous stocks as well as highly migratory species listed in Annex I of the [LOS] Convention (Art. I(f))</p> <p>“Living marine resources” means all living components of the marine ecosystems (Art. I(j))</p> <p>The list of species is removed from the Annexes and will form part of the Financial Regulations¹⁴¹</p>
NEAFC Convention	Old	The conservation and optimum utilisation of the fishery resources of the North-East Atlantic area (Preamble)	<p>All fishery resources of the Convention Area, with the exception of sea mammals, sedentary species i.e., 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 and, in so far as they are dealt with by other international agreements, highly migratory species and anadromous stocks (Art. 1(2))</p>
	New ¹⁴²	<p>The long-term conservation and optimum utilisation of the fishery resources of the North-East Atlantic area, and in doing so to safeguard the marine ecosystems in which the resources occur (Preamble)</p> <p>To ensure the long-term conservation and optimum utilisation of the fishery resources of the Convention Area, providing sustainable economic, environmental and social benefits (Art. 2)</p> <p>Pursuant to new Article 4, NEAFC shall <i>inter alia</i> “(b) apply the precautionary approach; (c) take due account of the impact of fisheries on other species and marine ecosystems, and in doing so adopt, where necessary, conservation and management measures that address the need to minimize harmful impacts on living marine resources and the marine ecosystems; and (d) take due account of the need to conserve marine biological diversity”</p>	<p>“Fishery resources” means resources of fish, molluscs, crustaceans and including sedentary species,¹⁴³ excluding in so far as they are dealt with by other international agreements, highly migratory species listed in Annex I of the [LOS Convention], and anadromous stocks (Art. 1(b))</p> <p>“Living marine resources” means all living components of marine ecosystems (Art. 1(c))</p> <p>“Marine biological diversity” means the variability among marine living organisms and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (Art. 1(d))</p>
SEAFC Convention		<p>“The long-term conservation and sustainable use of the fishery resources in the Convention Area” (Art. 2)</p> <p>Article 3 contains various general principles by which Contracting Parties are bound in giving effect to the objective. These are clearly inspired by Article 5 of</p>	<p>“Fishery resources” means resources of fish, molluscs, crustaceans and other sedentary species within the Convention Area, excluding (i) sedentary species subject to the fishery jurisdiction of coastal States pursuant to [Article 77(4) of the LOS Convention] and (ii) highly migratory species listed in Annex I of the [LOS</p>

¹⁴⁰ Based on the Report of the Working Group on the Reform of NAFO (Lunenburg, September 2006) (NAFO/GC Doc. 06/3), at Annex 5 (WG WP 06/1, Revision 3, Corr.). The new NAFO Convention had not yet been approved at the 2006 NAFO General Meeting (information provided by S. Ekwall, EU Commission and J. Fischer, NAFO Secretariat).

¹⁴¹ NAFO/GC Doc. 06/3, note 140 above, at p. 3.

¹⁴² The amendments to the NEAFC Convention as agreed at the meeting of the Working Group on the Future of NEAFC in June 2005 (see Annex 1 to the Final Report of the June 2005 meeting of the Working Group on the Future of NEAFC) were adopted by a postal vote sometime in May 2006 (information provided by K. Hoydal, NEAFC Secretariat, 28 November 2006).

¹⁴³ See also note 91 above.

	the Fish Stocks Agreement and include the obligation to apply the precautionary approach, to protect biodiversity in the marine environment and to take account of a broad range of ecosystem considerations	Convention]; “Living marine resources” means all living components of marine ecosystems, including seabirds; The list of species in Section 5 of the Annex includes various deep sea fish species
SIOF Agreement	“to ensure the long-term conservation and sustainable use of the fishery resources in the Area” (....) “and to promote the sustainable development of fisheries in the Area” (Art. 2) Article 4 contains several general principles that should be applied by the Contracting Parties in giving effect to their duty to cooperate. These are clearly inspired by Article 5 of the Fish Stocks Agreement and include the obligation to apply the precautionary approach, to protect biodiversity in the marine environment and to take account of a broad range of ecosystem considerations	“Fishery resources” means resources of fish, molluscs, crustaceans and other sedentary species within the Area, ¹⁴⁴ but excluding: (i) sedentary species subject to the fishery jurisdiction of coastal States pursuant to article 77(4) of the [LOS] Convention; and (ii) highly migratory species listed in Annex I of the [LOS] Convention (Art. 1(f))
STR Arrangement	“conservation and management of orange roughy on the South Tasman Rise” (Preamble)	Orange roughy, whether or not the species can be classified as a straddling stock or as a discrete high seas stock (Preamble)
Draft SPOF Agreement	“to ensure the long-term conservation and sustainable use of fishery resources in the Area (...); to avoid adverse impacts on the marine environment and its ecosystems in the Area through fishing; and to promote the protection of the marine habitats in the Area on which fishery resources are reliant (Art. 2) Article 4 contains several conservation and management principles that should be applied by the Contracting Parties in giving effect to their duty to cooperate. These are clearly inspired by Article 5 of the Fish Stocks Agreement as well as Article 4 of the SIOF Agreement and include the obligation to apply the precautionary approach, to protect biodiversity in the marine environment and to take account of a broad range of ecosystem considerations	‘Fishery resources’ means the resources of fish, molluscs, crustaceans and other sedentary species within the Area, ¹⁴⁵ but excluding: (i) sedentary species subject to the fishery jurisdiction of coastal States pursuant to article 77(4) of the [LOS] Convention; and (ii) highly migratory species listed in Annex 1 of the [LOS] Convention (Art. 1(e))
Possible NWPOF Agreement	Whereas the objective and principles still have to be agreed on, the full title of the First Inter-governmental meeting indicates already that they would not only relate to targeted demersal deep sea species but also to the broader marine environment.	Whereas the target fisheries and species still have to be agreed on, as the arrangement would focus on bottom trawling, the species covered would seem to be primarily demersal species. Some of these may be discrete high seas fish stocks. ¹⁴⁶ Moreover, as noted in the box to the left, the objective would also relate to the broader marine environment.

¹⁴⁴ Art. 1(c) defines the term ‘Area’ as the “area to which this Agreement applies, as prescribed in article 3”.

¹⁴⁵ Art. 1(c) defines the term ‘Area’ as the “area to which this Agreement applies in accordance with article 3”.

¹⁴⁶ See note 97 above and accompanying text.