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THE LAW-MAKING EFFECTS OF THE FAO DEEP-SEA FISHERIES GUIDELINES

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Abstract The second half of the twentieth century saw major improvements in the legal regime for fisheries management. This notwithstanding, the deep seas remain largely unregulated under international law, until recently only being covered by the general environmental and management provisions found in UNCLOS. In light of this regulatory gap, this article evaluates the potential law-making effects, if any, of the FAO Deep-Sea Fisheries Guidelines, a voluntary instrument designed to provide States with a regulatory framework for the management of their deep-sea fisheries. It considers how the Guidelines may inform, interpret and influence the content of the general high-sea obligations in UNCLOS. Despite the vagueness and generality of those provisions, some indication of their substantive content has been given in recent decisions, particularly the *South China Sea Arbitration*. By assessing their compatibility, and their level of acceptance by the international community, this article argues that the FAO Deep-Sea Guidelines are beginning to have a law-making effect by providing an authoritative interpretation of the general high-sea obligations found in UNCLOS relating to deep-sea fisheries.

Keywords: public international law, environmental law, environmental management, fisheries management, GAIRS, law of the sea, legal interpretation, soft law, United Nations Convention on the Law of the Sea.

I. INTRODUCTION

According to the United Nations Food and Agriculture Organization (FAO), the deep sea, defined as ocean areas more than 200 metres deep,[1] is the largest habitat on the planet.[2] It is home to a wide variety of species, including three major groups of deep-water fish.[3] Despite the importance of such species to

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[1] FAO, 'Deep-Sea Fisheries' (2016) <http://www.fao.org/fishery/topic/4440/en>.
[2] FAO, 'Deep-Sea Ecosystems' (2016) <http://www.fao.org/fishery/topic/166310/en>.
[3] ibid.

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the marine environment, the last decades have seen an increase in fishing activities in all deep-sea regions, exposing previously untouched ecosystems to industrial-scale fishing practices.[4] The characteristics of deep-sea species —'long life-spans, late maturity, slow growth and low fertility'[5]—leave them particularly vulnerable to overfishing, and the increasing use of high-impact bottom trawl gear is putting added strain on already threatened habitats.[6]

The second half of the twentieth century saw major improvements in the legal regime for fisheries management. The introduction of a 200-nautical mile Exclusive Economic Zone in the 1982 United Nations Convention on the Law of the Sea (UNCLOS) gave coastal States control over their natural resources,[7] and the 1995 Agreement on Straddling and Highly Migratory Fish Stocks (UNFSA) established a legal framework for stocks moving between areas of national jurisdiction and the high seas.[8] However, apart from the general high-sea provisions found in UNCLOS and a few references in UNFSA,[9] neither instrument specifically deals with fish stocks found exclusively on the high seas, of which deep-sea fisheries (DSFs) make up an important part. Being governed only by the general UNCLOS provisions, '[DFSs] on the high seas [thus] represent one of the last unregulated open-access frontiers' in the law of the sea regime.[10]

In response to the threats faced by deep-sea ecosystems from fishing activities and the failure of the UNCLOS provisions to address those threats in an adequate manner,[11] the 2008 FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas (Guidelines) were

[4] J Harrison, *Making the Law of the Sea: A Study in the Development of International Law* (Cambridge University Press 2011) 215; R Warner, 'Conserving Marine Biodiversity in Areas beyond National Jurisdiction: Co-Evolution and Interaction with the Law of the Sea' in DR Rothwell *et al.* (eds), *The Oxford Handbook of the Law of the Sea* (Oxford University Press 2015).

[5] KM Gjerde and D Freestone, 'Unfinished Business: Deep-Sea Fisheries and the Conservation of Marine Biodiversity Beyond National Jurisdiction' (2004) 19(3) The International Journal of Marine and Coastal Law 209, 210.

[6] As elaborated in FAO, Code of Conduct for Responsible Fisheries (adopted 31 October 1995) FAO Doc 95/20/Rev/1, Preface; UN, *Oceans and the Law of the Sea*, Report from the Secretary-General, Sixty-ninth session, A/69/71 (21 March 2014) paras 49–59. See also Gjerde and Freestone (n 5) 211; KM Gjerde, 'High Sea Fisheries Management' in Freestone *et al.* (eds), *Law of the Sea: Progress and Prospects* (Oxford University Press 2006) 288–9.

[7] United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3, art 56(1)(a).

[8] 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 (adopted 4 August 1995, entered into force 11 December 2001) 2167 UNTS 3.

[9] UNFSA (n 8) arts 9–10.

[10] Gjerde and Freestone (n 5) 209. The UNGA has passed a resolution calling for the development of a legally binding instrument under the UNCLOS to address the conservation and sustainable use of marine biological diversity in ABNJ. The process is now moving forward to formal international negotiations. However, it is uncertain at this time whether such an instrument, if ever concluded, would include fisheries, as this is one of the more contentious issues in the negotiations, see UNGA Res 69/292 (6 July 2015) UN Doc A/RES/69/292.

[11] FAO, *Report of the Twenty-Sixth Session of the Committee on Fisheries* (7–11 March 2005, 26th Sess), FAO Fisheries Report No 780 (FIPL/R780 (En)) para 86.

developed. The Guidelines were designed to provide States with a regulatory framework for the management of their DSFs, with a particular focus on how best to protect the ecosystem and conserve the living resources found within them. Requested by the UN General Assembly (UNGA),[12] and adopted through the FAO,[13] the Guidelines have—despite their non-binding form—been welcomed as an important tool for States and other actors engaged in DSFs in areas beyond national jurisdiction (ABNJ).[14] However, uncertainties still remain regarding the role played by the Guidelines in the UNCLOS regime and the potential effects such instruments may have on the development of the international law of the sea more generally.

In light of such developments, this article evaluates the potential law-making effects, if any, of the FAO Deep-Sea Fisheries Guidelines. It considers how the Guidelines may inform, interpret and influence the content of the general high-sea obligations in UNCLOS, 'the legal framework within which all activities in the oceans and seas must be carried out'.[15] Despite their vagueness and generality, recent decisions have given some indication of their substantive content, particularly the *South China Sea Arbitration*. Furthermore, the development and implementation of the Guidelines by States and Regional Fisheries Management Organisations (RFMOs) are beginning to give indications of how these actors view the UNCLOS obligations relating to DSFs.

The first part of this article discusses the role played by soft-law instruments in international law-making, focusing on how such instruments may influence and develop the UNCLOS regime. Building on this, Part III assesses whether the Guidelines are compatible with recent interpretations of the UNCLOS framework and, more specifically, whether they have anything to offer in terms of understanding how States should comply with their obligations when engaging in DSFs. Part IV evaluates whether the Guidelines have any authority as an interpretive instrument. Although the subject of this article is the FAO Guidelines, these cannot be evaluated in isolation from other soft-law instruments, such as UNGA Resolutions, nor from the workings of the FAO itself, both of which are, therefore, also taken into account. Finally, the article considers the extent to which the Guidelines have been accepted since their conclusion. This part focuses primarily on the work carried out by RFMOs in relation to DSFs, due both to the prominent role given to such organizations by the Guidelines and the fact that the latter's implementation has largely been carried out through them.

[12] UNGA Res 61/105 (8 December 2006) UN Doc A/RES/61/105, para 89.

[13] FAO, *Report of the Technical Consultation on International Guidelines for the Management of Deep-Sea Fisheries in the High Seas* (4–8 February and 25–29 August 2008) FAO Fisheries and Aquaculture Report No 881 (FIEP/R881 (Tri)).

[14] FAO, International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (adopted August 2008) <http://www.fao.org/docrep/011/i0816t/i0816t00.htm> Abstract.

[15] UNGA Res 69/245 (29 December 2014) UN Doc A/RES/69/245, Preamble.

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The analysis leads to the conclusion that the Guidelines are beginning to have law-making effect by providing an authoritative interpretation of the general high-sea obligations found in UNCLOS as they relate to DSFs. The Guidelines both reflect and inform the understanding given to the high-sea provisions under the Convention, and their compatibility with them shows that they reflect current understandings of the obligation of due diligence by courts and tribunals. Furthermore, the fact that the Guidelines have been developed, adopted and recognized through a range of consensus-based fora adds support to the claim that they now amount to internationally endorsed standards of conduct for DSFs. This represents a significant strengthening of the international legal regime for the deep seas, which is an important step forward for an area of the oceans that has long been neglected in international law.

II. THE ROLE OF SOFT LAW IN INTERNATIONAL LAW-MAKING

The aim of UNCLOS was to create a comprehensive 'legal order for the seas and oceans'.[16] However, due to the generality and vagueness of many of its provisions it was also accepted that it should 'be capable of further evolution through amendment, the incorporation by reference of other generally accepted international agreements and standards'.[17] In these circumstances, soft law, understood as non-legally binding instruments,[18] can play an important role in interpreting or amplifying those provisions of a treaty that are more general in nature. The validity of this approach is set out in the Vienna Convention on the Law of Treaties. According to Article 31(3), '[a]ny subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions' can be taken into account when interpreting the treaty.[19] In addition, weight can be given to '[a]ny subsequent practice in the application of a treaty which establishes the agreement of the parties regarding its interpretation'[20] and '[a]ny relevant rules of international law applicable in the relations between the parties'.[21]

Following the Vienna Convention, it is clear that soft-law instruments can affect treaty interpretation and evolution in several ways. First, they can influence the development of customary international law, provided that their wording is 'of a fundamentally norm-creating character' and supported by

[16] UNCLOS (n 7) Preamble.

[17] A Boyle, 'Further Development of the 1982 Law of the Sea Convention: Mechanisms for Change' (2005) 54 ICLQ 563, 563–4. See also Vienna Convention on the Law of Treaties (adopted 22 May 1969, entered into force 27 January 1980) 1155 UNTS 331, art 31(3)(c); C McLachlan, 'The Principle of Systemic Integration and Art 31(3)(c) of the Vienna Convention' (2005) 54 ICLQ 279, 312.

[18] A Boyle and C Chinkin, *The Making of International Law* (Oxford University Press 2007) 212; A Boyle, 'Soft Law in International Law-Making' in MD Evans (ed), *International Law* (5th edn, Oxford University Press 2018).

[19] VCLT (n 17) art 31(3)(a).

[20] ibid art 31(3)(b).

[21] ibid art 31(3)(c).

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sufficient *opinio juris* and State practice.[22] This avenue of international law-making may not be particularly important for the present purposes, as most of the provisions of the Guidelines are not formulated in sufficiently norm-creating language. Perhaps more interesting for the present inquiry is the role played by soft-law instruments in setting out so-called 'generally accepted international rules and standards' (GAIRS). GAIRS are here understood in the broadest sense of the term, including both strictly technical standards and more general standards of conduct. UNCLOS contains several such 'rules of reference',[23] ranging from the direct obligation to adopt and follow GAIRS, to the relatively weak requirement to take them 'into account'.[24]

The latter formulation is used in UNCLOS Article 119, and implies a larger degree of State discretion when deciding which measures to take.[25] However, as was confirmed in the *Whaling in the Antarctic* case, this is not to say that States are free to disregard such standards at will; despite not being under an obligation to follow them, States must still 'take into account' and give 'due regard' to such resolutions and guidelines when making their decisions.[26] This implies that, although UNCLOS itself does not make such standards binding, they may still have a role to play in the development of the legal regime by making State and RFMO practice more uniform.[27] However, GAIRS can also have a stronger role, namely to inform the content of a specific rule of law set out in a treaty. In such cases, 'their importance derives principally from the influence they may exert on the interpretation, application and development of other rules of law'.[28] In other words, GAIRS not only assist in the interpretation of a rule, they also specify what States must do in order to fulfil the obligation set out in that rule. By coupling GAIRS with obligations found in UNCLOS, the standards set out in the former inform the substantive content of the latter. GAIRS 'then applies to the UNCLOS States Parties concerned by *virtue of* UNCLOS *itself*', not the soft-law instrument in question.[29] This is important because it allows the substantive requirements of an obligation to

[22] *North Sea Continental Shelf Cases* (*Federal Republic of Germany v Denmark and The Netherlands*) [1969] ICJ Rep 3, para 72.

[23] W van Reenen, 'Rules of Reference in the New Convention on the Law of the Sea, in Particular in Connection with the Pollution of the Sea by Oil from Tankers' (1982) 12 NYIL 5.

[24] An example of the former is seen in relation to shipping standards (UNCLOS (n 7) art 211) whereas the latter is exemplified in the provision on the duties of flag States (UNCLOS (n 7) art 94(3)(b)).

[25] Harrison (n 4) 225.

[26] *Whaling in the Antarctic (Australia v Japan; New Zealand Intervening)* [2014] ICJ Rep 226, paras 137 and 144. This conclusion only applied to those instruments that had been 'adopted by consensus or by a unanimous vote', as confirmed in paras 46 and 83.

[27] UNCLOS (n 7) art 117. See also P Birnie and A Boyle, *International Law and the Environment* (3rd edn, Oxford University Press 2009) 150.

[28] Boyle and Chinkin (n 18) 223. See also K Houghton, 'Identifying New Pathways for Ocean Governance: The Role of Legal Principles in Areas beyond National Jurisdiction' (2014) 49 Marine Policy 118.

[29] J Barrett, 'UNCLOS: A "Living" Treaty?' in J Barrett and R Barnes (eds), *Law of the Sea: UNCLOS as a Living Treaty* (BIICL 2016) 23 (emphasis added). See also P Contini and P Sand, 'Methods to Expedite Environmental Protection: International Ecostandards' (1972) 66 AJIL 37.

be expanded without the need for another binding legal instrument to be negotiated and agreed to by the parties.

The role of GAIRS has received increasing attention over recent decades, but there are still controversies regarding the extent of their normative influence and the threshold of acceptance which is needed to give them legal effect.[30] In the *Whaling in the Antarctic* case, the ICJ noted that when soft-law instruments are 'adopted by consensus or by unanimous vote' they 'may be relevant for the interpretation of the Convention' to which they relate.[31] The emphasis on consensus is crucial in this context, as the parties to the treaty must agree to any subsequent interpretation of a treaty obligation.[32] However, the question still remains whether acceptance must be given by all the parties to the treaty, or only those parties whose interests are affected by the provisions in question. In the case of DSFs the latter is arguably the case, as only a relatively small group of the UNCLOS parties actually engage in such activities, at least at present time. As such, when evaluating whether the necessary threshold of acceptance has been met in relation to the Guidelines it is primarily the implementation by the relevant fishing States and RFMOs that must be considered. This is not to say that the practice of UNCLOS State parties more generally is irrelevant; their expressed support for the Guidelines, particularly in the process leading up to their conclusion, can still be an important indication of general consensus, albeit a less significant one than that given by relevant flag States and RFMOs.

It is worth noting at this stage that the UNFSA also applies to ABNJ and thus overlaps to a significant degree with the provisions in the Guidelines, particularly those provisions relating to RFMOs.[33] It is therefore reasonable to question whether this inquiry should be focused on that instrument, as the various RFMOs will already be bound to comply with UNFSA provisions specifically relating to them. However, there are three main reasons why it is still worth considering the law-making effects of the Guidelines on the UNCLOS regime independently of UNFSA. First of all, there are still important differences in membership between UNCLOS and UNFSA. Whereas 168 States are parties to the former only 87 States are parties to the latter, a point made all the more important by the fact that most UNCLOS provisions are now considered part of customary international law and thus binding even on non-parties.[34] This implies that any State not party to

[30] ibid 20.

[31] *Whaling in the Antarctic Case* (n 26) para 46.

[32] As per VCLT (n 17) art 31(3).

[33] eg arts 9–10 UNFSA (n 8) specify the obligations imposed upon RFMOs, several of which mirror the equivalent requirements in the Guidelines. In particular, art 10(c) requires the parties to 'adopt and apply any generally recommended international minimum standards for the responsible conduct of fishing operations', a provision which is generally understood as referring to soft law instruments as those discussed in this article.

[34] D Guilfoyle, 'The High Seas' in Rothwell *et al.*, *The Oxford Handbook of the Law of the Sea* (Oxford University Press 2015) 206. Although most States currently engaged in DSFs are parties to both treaties, the difference may still be important in cases where non-UNFSA parties open new

UNFSA is only bound by the general provisions found in UNCLOS when fishing in ABNJ. Secondly, and more importantly, the UNFSA specifically applies to the conservation and management of straddling and highly migratory fish stocks. Consequently, those species which do not fall within this definition—so-called 'discrete high seas fish stocks'—are not covered by the UNFSA.[35] It is important to note that some efforts have been made to '[a]pply basic UNFSA provisions to high seas discrete stocks and/or to [DSFs]', most notably during preparations—known as the St. John's conference—for the 2006 Review Conference on the UNFSA.[36] However, as pointed out by Takei, 'while this view was agreed by consensus at the workshop, subsequent discussion at the plenary … shows hesitation on the part of States' to pursue this line further.[37] As such, it is still highly questionable whether UNFSA's mandate has in fact been expanded to include discrete high-sea fish stocks and DSFs.

Finally, the Guidelines, although making references to RFMOs, also contain provisions relating specifically to flag States. This is important because '[i]nstititional gaps are found in the coverage of high seas by [RFMOs]'.[38] This means that, in regions where there is no RFMO (eg the Arctic, and Central and Southwest Atlantic) or where such an organization is still only emerging (eg the NPFC in the North Pacific) the management of DSFs is left to the discretion of individual flag States.[39] In such situations, discrete high-sea fish stocks and other vulnerable high-seas species can only rely on UNCLOS for their protection, making the question of the law-making effects of the Guidelines in relation to the Convention highly relevant.

III. THE RELATIONSHIP BETWEEN THE GUIDELINES AND UNCLOS: INTERPRETATION AND COMPATIBILITY

The Guidelines address DSFs found in ABNJ explicitly. They apply to fishing activities where part of the total catch 'includes species that only can sustain low exploitation rates' and where the fishing gear used is likely to make contact with the seafloor during the operation.[40] In an attempt to strike a balance between environmental protection and economic development, their main objective is

DSFs or in cases of withdrawal from UNFSA. See EJ Molenaar, 'Addressing Regulatory Gaps in High Seas Fisheries' (2005) 20 The International Journal of Marine and Coastal Law 533, 555.

[35] Boyle and Chinkin (n 18) 223.

[36] UN, 'Fourth Informal Consultations of States Parties to the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks' (2005) ICSP4/UNFSA/REP/INF.1, Annex V.

[37] Y Takei, *Filling Regulatory Gaps in High Seas Fisheries: Discrete High Seas Fish Stocks, Deep-Sea Fisheries and Vulnerable Marine Ecosystems* (BRILL 2014) 107; Molenaar (n 34) 555.

[38] Takei (n 37) 4.

[39] FAO, 'Regional Fisheries Management Organizations and Deep-Sea Fisheries' (Fisheries and Aquaculture Department 2018) <http://www.fao.org/fishery/topic/166304/en>.

[40] Guidelines (n 14) para 8(i) and (ii).

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to 'promote responsible fisheries that provide economic opportunities while ensuring the conservation of marine living resources'.[41]

In order to address the potential law-making effect of the Guidelines, it is important to first identify the legal framework within which such a process can take place. The public international law of the sea is governed by UNCLOS, Part VII of which deals with the high seas.[42] Freedom of fishing for all States is specifically listed in Articles 87 and 116; however, the Convention does place some restraints upon this freedom. Most importantly, Article 117 requires States to take 'such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas',[43] although it is not made clear in the provision itself what this specifically entails. Furthermore, these conservation measures should be decided on in cooperation with other States, although individual measures may have to be taken in relation to the States' specific nationals where necessary.[44]

Article 94 is important for our understanding of Article 117, which provides that '[e]very State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag'.[45] The actual nature of this flag State obligation was raised in the *Seabed Advisory Opinion*. The International Tribunal for the Law of the Sea (ITLOS) identified it as that of 'due diligence', namely the obligation 'to deploy adequate means, to exercise best possible efforts, to do the utmost'.[46] The meaning of due diligence was clarified in the *Pulp Mills* case, where it was defined as 'an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement'.[47] Although discussing the meaning of flag State obligations within the EEZ, the Tribunal specifically linked the due diligence obligation to Article 94,[48] which also applies to vessels operating on the high seas.[49] The due diligence obligation is normally invoked in situations where the potential offending party is not the State itself, but is an actor operating

[41] ibid para 11. [42] UNCLOS (n 7) art 86. [43] ibid art 117.

[44] As per ibid art 118 and the good-faith requirement set out in art 300. See also S Nandan and S Rosenne (eds), *United Nations Convention on the Law of the Sea, 1982: A Commentary. Vol III* (Martinus Nijhoff Publishers 1995) para 117.9(b). [45] ibid art 94.

[46] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (request for Advisory Opinion submitted to the Seabed Disputes Chamber) [2011] ITLOS Rep 10, para 110. As confirmed in *Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC)* [2015] ITLOS No 21, para 129; *South China Sea Arbitration (The Republic of Philippines v The People's Republic of China)* [2016] (Award of 12 July 2016, given under a Tribunal constituted under Annex VII to the United Nations Convention on the Law of the Sea) PCA Case No 2013-19, ICGJ 495, para 944.

[47] *Pulp Mills on the River Uruguay (Argentina v Uruguay)* [2010] ICJ Rep 14, para 197.

[48] *Fisheries Commission Advisory Opinion* (n 46) para 119.

[49] See also *South China Sea Arbitration* (n 46) para 944: 'the obligation of a flag State to ensure its fishing vessels not be involved in activities which will undermine a flag State's responsibilities under the Convention' requires 'due diligence', regardless of where the activity took place.

within the State's jurisdiction or control.[50] This is often the case with DSFs, where individual fishing vessels engage in deep-sea fishing under the authorization and control of the flag State.

As was observed by ITLOS, '[t]he content of "due diligence" obligations may not easily be described in precise terms', both because it can change over time and because the risk associated with the activity may increase.[51] GAIRS, such as the Guidelines, might nevertheless serve a useful purpose in this regard, by giving the due diligence obligation 'concrete content and predictability'.[52] The Guidelines cover a range of issues, many of which mirror provisions found in other legal instruments, for example UNFSA and the 1995 FAO Code of Conduct for Responsible Fisheries. However, certain aspects are unique in the sense that they address issues particular to DSFs and draw on the more detailed understandings of certain environmental terms and concepts that have emerged within the law of the sea in recent years. For the purpose of analysis, the Guideline's provisions are divided into groups or 'clusters' dealing with specific issues: (1) DSF conservation and management measures; (2) Vulnerable Marine Ecosystems (VMEs); and (3) Environmental Impact Assessment (EIA). The following three sections will address whether these provisions are compatible with the courts' interpretation of the open-textured high-sea UNCLOS obligations, and whether the Guidelines can be used to provide further detail regarding the content of these obligations as they apply to the deep seas.

A. DSF *Conservation and Management Measures*

The conservation and management measures identified by the Guidelines relate back to the provisions dealing with high-sea fishing and the conservation of living resources found in UNCLOS Part VII, Articles 116–119. As discussed in Part II, Article 19 sets out the duty to take into account 'any generally recommended international minimum standards' when deciding on which measures to take in pursuit of the conservation of living resources.[53] As such, it is clear that the Guidelines, as a minimum, must be considered by the relevant States when taking such measures.[54] However, the normative effect of the Guidelines may arguably be stronger than this, as they are consonant with the current understanding given to UNCLOS Articles 116–119 by the courts.

According to recent judgments, due diligence is a twofold obligation: the first element is the requirement to put in place national legislation and enforcement

[50] *Pulp Mills* (n 47) para 197; RP Barnidge Jr, 'The Due Diligence Principle under International Law' (2006) 8 International Community Law Review 81, 94.
[51] *Seabed Advisory Opinion* (n 46) para 117.
[52] Birnie and Boyle (n 27) 149. See also D French, 'Treaty Interpretation and the Incorporation of Extraneous Legal Rules' (2006) 55 ICLQ 281.
[53] UNCLOS (n 7) art 119(1)(a).
[54] As per the Court's statement in the *Whaling in the Antarctic* case (n 26) paras 137 and 144.

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mechanisms,[55] the second is to make use of the 'best available technique' or practice (BAT).[56] Both elements are to a large extent addressed in the Guidelines. First of all, States are encouraged to 'establish and implement national policy, legal and institutional framework for the effective management of DSFs'.[57] This mirrors the first aspect of the flag State due diligence obligation. Furthermore, the Guidelines provide a detailed description of how this is to be done. For example, States are asked to set both target and limit reference points for each specific fish stock,[58] develop and use selective and cost-effective fishing methods,[59] require vessel authorization and keep an updated vessel register,[60] and put in place enforcement mechanisms, including monitoring, control and surveillance (MCS) measures.[61]

The second element of the due diligence obligation is reflected in Article 119, which requires States to take measures based on 'the best scientific evidence available'.[62] Importantly, this implies not only that the measures taken should be based on scientific advice, but also that States acquire scientific information in order to fully address the effects of such fishing and the adequacy of the measures taken.[63] This is further supported by UNCLOS Article 200, which requires States to cooperate in 'undertaking programmes of scientific research' in order to acquire knowledge about the marine environment.[64] The latter obligation is clearly reflected in the Guidelines, which encourage States to 'develop data collection and research programmes to assess the impact of fishing on target and non-target species and their environment'.[65] Due to the lack of knowledge regarding the species and habitats found in the deep seas, the data reporting and monitoring programmes envisaged by the Guidelines are essential if States are to be able to take the appropriate measures envisaged under Article 119. It therefore follows that such data collection forms an important part of the due diligence obligation for the deep seas, particularly as regards the effect of fishing on associated and dependent species.[66]

Examining the Guidelines as a whole, it is noteworthy that all of its provisions attempt to operationalize and implement a precautionary approach to fisheries management, which according to ITLOS is 'an integral part of the general

[55] In the *South China Sea Arbitration* (n 46) para 964, the Tribunal confirmed that the due diligence obligation requires States to adopt 'appropriate rules and measures' to address an activity that may cause damage to the marine environment.
[56] Birnie and Boyle (n 27) 148. As confirmed in *Pulp Mills* (n 47) para 223.
[57] Guidelines (n 14) para 26.
[58] ibid para 21(i). The Guidelines specifically refer to the FAO Code of Conduct (n 6) paras 7.5.2 and 7.5.3, in this regard, and apply the understanding of reference points set out in that instrument.
[59] ibid para 21(v).
[60] ibid paras 56–57. This is also required by UNCLOS (n 7) art 94(2)(a).
[61] ibid paras 21(vi) and 54.
[62] UNCLOS (n 7) art 119(1)(a).
[63] Nandan and Rosenne (n 44) para 119.7(d).
[64] UNCLOS (n 7) art 200.
[65] Guidelines (n 14) paras 21(iii), 31–3, 37–9.
[66] As argued by Nandan and Rosenne (n 44) para 119.7(d).

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obligation of due diligence'.[67] Although this is said in relation to the obligations of sponsoring States as regards activities in the Area,[68] the Tribunal itself has identified the general, overall 'link between an obligation of due diligence and the precautionary approach'.[69] This means that, arguably, it also applies to the obligations of flag States relating to fishing vessels operating in the deep seas. As was emphasized by the Tribunal in the *Seabed Advisory Opinion*, the standards of due diligence by which a State is measured, and thus the level of precaution needed, 'has to be more severe for the riskier activities'.[70] The inherent vulnerability of deep-water fisheries and the current lack of knowledge concerning their biology and life cycle means that the risks associated with such fishing are currently very great. A high level of precaution is therefore needed. The Guidelines reflect this, providing, for example, that 'DSFs should be rigorously managed throughout all stages of their development' and that 'while knowledge is low harvest rates are kept low enough to minimise risk to sustainability'.[71]

By indicating how the precautionary approach can be operationalized in practice, the Guidelines assist States to better comply with their obligations as flag States under Articles 116–119. They thus reflect the 'inherent evolutionary'[72] meaning of those obligations for the deep seas. A similar evolutionary change is apparent in relation to another requirement under Article 119, namely that States 'take measures which are designed … to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield' (MSY).[73] MSY can be defined as the greatest quantity of fish that can be taken annually from a particular stock without reducing its average size.[74] However, despite the prevalence of references to MSY in legal instruments the concept has come under increasing scrutiny and criticism in recent decades[75] and most scholars now

[67] *Seabed Advisory Opinion* (n 46) para 131. See also D Freestone, 'International Fisheries Law since Rio: The Continued Rise of the Precautionary Principle' in A Boyle and D Freestone (eds), *International Law and Sustainable Development* (Oxford University Press 1999).

[68] UNCLOS (n 7) art 1(1): '"Area" means the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction.'

[69] *Seabed Advisory Opinion* (n 46) para 132. The Court did this by referring to *Southern Bluefin Tuna (New Zealand v Japan; Australia v Japan) (Provisional Measures)* [1999] Permanent Court of Arbitration, Reports of International Arbitral Awards, Vol XXIII 1-5777, para 77. This was confirmed in the *Fisheries Commission Advisory Opinion* (n 46) para 125, where the Tribunal found that, although the relationship between flag States and their vessels and between sponsoring States and contractors 'is not entirely comparable', the findings of the Tribunal in the Seabed Advisory Opinion on 'the meaning of the expression "responsibility to ensure" and the interrelationship between the notions of obligations "of due diligence" and obligations "of conduct"' still applied.

[70] *Seabed Advisory Opinion* (n 46) para 117.

[71] Guidelines (n 14) para 23.

[72] Birnie and Boyle (n 27) 734. See also *Gabcikovo-Nagymaros Project (Hungary v Slovakia)* [1997] ICJ Rep 7, paras 67–68.

[73] UNCLOS (n 7) art 119(1)(a).

[74] Birnie and Boyle (n 27) 590–1.

[75] Y Tanaka, *The International Law of the Sea* (2nd edn, Cambridge University Press 2015) 236; D Nelson, 'The Development of the Legal Regime for High Seas Fisheries' in A Boyle and D

agree that the concept has been replaced by a more precautionary understanding of conservation, namely that of sustainable use.[76] Any use that is sustainable should be 'non-exhaustive', meaning that the level of exploitation should allow for the indefinite availability of the resource in the future.[77] Both in UNFSA and the FAO Code of Conduct, the concept of MSY is placed 'within a context of a proactive, precautionary and more environmentally focused approach to conservation'.[78] This emphasizes that the main objective for fisheries management should always be 'long-term sustainable use'.[79]

Linked with the MSY requirement in Article 119 is the setting of the total allowable catch (TAC) for high-sea fisheries. This requirement is also present in the Guidelines. Paragraph 65 states that effort and catch controls should address the impact of such fishing on 'low-productivity species, non-target species and sensitive habitat features'.[80] In addition, they should include measures such as, *inter alia*, precautionary effort limits, precautionary spatial catch limits, regular review of the status of stocks and subsequent adjustment of TAC, and the comprehensive monitoring of all DSF efforts under State control. However, the Guidelines do not limit effort and catch controls simply to the setting and adjustment of TAC; they appear to be broad enough to include other measures, such as limiting the number of vessels participating in a certain DSF, regulating the type of gear to be used or the amount of fish permitted to be caught over a certain period.[81] Such measures are clearly consistent with Article 119, which requires States, when setting their TAC, to take into account the effect of fishing on associated and dependent species.

The aim of such measures is to maintain or restore such populations 'above levels at which their reproduction may become seriously threatened'.[82] The low fertility and late maturity of deep-sea fish species means that even low levels of fishing might seriously threaten their ability to reproduce.[83] Furthermore, the lack of knowledge regarding the actual size of particular deep-sea stocks means that it is very difficult to be certain about the effect of fishing on reproductive levels.[84] It is therefore essential that States take into account the precautionary catch and effort levels envisaged by the Guidelines in order to meet their obligation to ensure that such stocks do not become 'seriously threatened'.[85]

It is important to note that the effect on associated and dependent species should not only be taken into account when setting TAC, but also when deciding on what general conservation measures to take under Article 119. The Guidelines suggest putting in place 'Fishery Management Plans'. These should include, *inter alia*, measures with defined 'long-term/multi-annual

Freestone (eds), *International Law and Sustainable Development* (Oxford University Press 1999) 126.

[76] See eg. Tanaka (n 75) 236; Birnie and Boyle (n 27) 591.

[77] Birnie and Boyle (n 27) 564.

[78] ibid 735.

[79] FAO Code of Conduct (n 6) art 7.2.1.

[80] Guidelines (n 14) para 65.

[81] ibid para 65.

[82] UNCLOS (n 7) art 119(1)(b).

[83] Gjerde and Freestone (n 5) 210.

[84] FAO, 'Deep-Sea Ecosystems' (n 2).

[85] UNCLOS (n 7) art 119(1)(b).

management objectives'[86] and 'biological reference points that ensure, at a minimum, that fish stocks are harvested at levels that are sustainable in the long term'.[87] Importantly, not only do the Guidelines encourage States to establish such plans for their DSF operations generally; they also encourage them to develop and adopt individual plans for individual DSFs, taking into account target and non-target stocks, the characteristics of the specific fishery, the presence of VMEs and defining features of the fishing area in question.[88] Such fishery management plans would appear to reflect the UNCLOS requirement that measures taken be based on the best scientific evidence to both 'maintain or restore populations' of harvested species and to address the potential impact on associated and dependent species.

As the above analysis has shown, the Guidelines' provisions concerning DSF can to a large extent be said to define the conservation and management measures that States must take in order to comply with their high-seas UNCLOS obligations in the context of the deep seas. However, some of them go further, reflecting the evolutionary meaning of Articles 117 and 119 and the way in which the international law of the sea has developed to incorporate a stronger environmental and precautionary dimension into its high-sea fisheries provisions.

B. Vulnerable Marine Ecosystems

One of the more innovative aspects of the Guidelines are its provisions relating to the second of the three 'clusters', namely those dealing with the protection of Vulnerable Marine Ecosystems (VMEs). Vulnerability in the context of the marine environment has received increasing attention over the last decade, as the effects of human disturbance of many marine ecosystems have become more apparent.[89] In fact, the term VME is now commonly used by both the UNGA[90] and the UN Secretary-General,[91] indicating that the language of the Guidelines relating to VMEs has gained standing within international legal discourse.

Despite this increased focus on vulnerability, the term VME is not, however, found in UNCLOS. Article 192 simply holds that 'States have the obligation to protect and preserve the marine environment',[92] whereas

[86] Guidelines (n 14) para 75.

[87] ibid para 76. The FAO Code of Conduct (n 6) para 6.9, only makes a brief reference to such plans as part of a 'Coastal Management Plan'. Such plans are also included in the FAO, International Plan of Action for the Management of Fishing Capacity (adopted February 1999) <http://www.fao.org/docrep/006/X3170E/X3170E00.HTM> paras 19–24. However, here the focus is on national plans of action for managing fishing capacity, not specific fisheries as such.

[88] ibid paras 75–76.

[89] EJ Goodwin, 'Threatened Species and Vulnerable Marine Ecosystems' in Rothwell *et al.*, *The Oxford Handbook of the Law of the Sea* (Oxford University Press 2015) 801.

[90] See eg UNGA Res 61/105 (n 12).

[91] See eg UN, *Oceans and the Law of the Sea*. Report of the Secretary-General (22 March 2011, 66th Sess) UN Doc A/66/70.

[92] UNCLOS (n 7) art 192.

Article 194 places a duty on States to take measures 'to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life'.[93] Commentators initially argued that UNCLOS Part XII simply formulated 'a series of legal principles' without imposing any actual substantive obligations on States.[94] However, such an interpretation was challenged in the *South China Sea Arbitration*, in which the Tribunal said that, '[a]lthough phrased in general terms, the Tribunal considers it well established that Article 192 does impose a duty on State Parties, the content of which is informed by the other provisions of Part XII and other applicable rules of international law'.[95]

Building on the *Southern Bluefin Tuna Cases*, where the ITLOS said that 'the conservation of living resources of the sea is an element in the protection and preservation of the marine environment',[96] the Tribunal identified the obligation under Article 192 as being an obligation of due diligence, requiring States to take measures to protect and preserve the living resources found in the seas.[97] The Tribunal also analysed the relevance of Article 194 (5) to the due diligence obligation found in Article 192. Although that Article primarily deals with pollution, its provisions are not limited to such measures.[98] Indeed, the Tribunal confirmed that the requirement of Article 194(5) falls under the due diligence obligation imposed by Article 192, meaning that the latter 'extends to the prevention of harms that would affect depleted, threatened or endangered species' both directly and 'indirectly through the destruction of their habitat'.[99]

Many of the issues raised by the courts would seem to resonate well with the VME provisions in the Guidelines. The question then arises whether, despite the difference in terminology, the provisions of the Guidelines dealing with VMEs

[93] ibid art 194(5).

[94] See eg S Rosenne and A Yankov (eds), *United Nations Convention on the Law of the Sea 1982: A Commentary, Vol IV* (Martinus Nijhoff Publishers 1990) para 192.1.

[95] *South China Sea Arbitration* (n 46) para 941. Also confirmed in *MV 'Lousia' (Saint Vincent and the Grenadines v Kingdom of Spain)* (Provisional Measures) [2010] ITLOS No 18, para 76; *Dispute Concerning Delimitation of the Maritime Boundary Between Ghana and Côte D'Ivoire in the Atlantic Ocean* (Provisional Measures) [2015] ITLOS No 23, para 69.

[96] *Southern Bluefin Tuna case* (n 69) para 70.

[97] *South China Sea Arbitration* (n 46) para 956. Such reasoning builds on the Court's finding in the *Legality of the Threat of Use of Nuclear Weapons* (Advisory Opinion) [1996] ICJ Rep 226, para 29, that States must 'ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control'. See also Declaration of the UN Conference on Environment and Development (1992) UN Doc A/CONF151/26/Rev 1, Principle 2: 'States have (…) the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'

[98] As confirmed in *Chagos Marine Protected Areas Arbitration (Mauritius v United Kingdom)* [2015] Award of 18 March, Permanent Court of Arbitration <http://www.pcacases.com/pcadocs/MU-UK%2020150318%20Award.pdf> para 320; *South China Sea Arbitration* (n 46) para 945.

[99] *South China Sea Arbitration* (n 46) para 959.

can shed any light on the content of the due diligence obligations in Articles 192 and 194(5). A useful starting point is to consider whether the meaning given to 'rare and fragile ecosystems' and 'habitat of depleted threatened or endangered species' by UNCLOS, and their interpretation by the courts, coincides with the definition of VME set out in the Guidelines. UNCLOS itself does not specify what is meant by these phrases, and neither the Convention nor the Guidelines define 'ecosystem' or 'habitat'. In the *South China Sea Arbitration*, the Tribunal relied on the definition found in the Convention on Biological Diversity (CBD), according to which an ecosystem is 'a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit'.[100] Because of the near-universal level of support enjoyed by the CBD, the Tribunal considered this definition to be 'internationally accepted' and thus also applicable to UNCLOS.[101] The same would appear to be the case for the Guidelines, which are to be interpreted in conformity with both UNCLOS and other 'relevant rules of international law', including the CBD.[102]

As the first of its kind, the Guidelines set out five criteria by which VMEs can be identified and subsequently designated.[103] Two of them, '[u]niqueness or rarity' and 'fragility',[104] are both terms found in the UNCLOS provision.[105] The other three characteristics relate to the functional significance of the habitat, the presence of habitats and ecosystems containing 'rare, threatened or endangered marine species' or complex ecosystems where the 'ecological process are usually highly dependent on these structured systems'.[106] This fits well with the Tribunal's approach to the phrase 'habitat of depleted, threatened or endangered species', which emphasized the importance of protecting both the ecosystem and the habitat in which such species are found in order to fulfil the obligation to protect and preserve them.[107] Thus, although neither UNCLOS nor the courts have specifically used the phrase VME when discussing the obligation to protect and preserve the marine environment, it is arguably the case that the operationalization of the term by the courts to a large extent resembles the definition of VME set out by the Guidelines.

The five defining characteristics are complemented by the Annex, which lists several examples of species, communities and habitats that may characterize a VME, in addition to particular features that may potentially support them.[108] This detailed definition provided by the Guidelines is important because it

[100] United Nations Convention on Biological Diversity (adopted 33 June 1992, entered into force 20 December 1993) 1760 UNTS 79, art 2.
[101] *South China Sea Arbitration* (n 46) para 945.
[102] Guidelines (n 14) para 7.
[103] ibid (n 14) paras 42(i)–(v).
[104] ibid (n 14) para 42(i) and (iii) respectively.
[105] UNCLOS (n 7) art 194(5). See also *South China Sea Arbitration* (n 46) para 945.
[106] Guidelines (n 14) paras 42(ii) (iv) and (v) respectively.
[107] *South China Sea Arbitration* (n 46) para 959.
[108] Guidelines (n 14) para 41 and Annex.

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allows both States and RFMOs to identify and designate areas containing VMEs more accurately. The significance of designation should not be underestimated, as it paves the way for a wide range of more targeted conservation and management measures to be applicable in the areas in question.[109] First and foremost, the Guidelines call for the establishment of a 'functioning regulatory framework' to protect VMEs and to prevent significant adverse impacts.[110] This reflects the first element of the due diligence obligation discussed above. However, until such a framework is established,[111] the Guidelines, innovatively, suggest several targeted measures, including limitations on the further expansion on the number of vessels involved in DSFs and the areas in which they can operate, a reduction of TAC in specific fisheries or, where appropriate, the temporary closure of DSFs in VMEs.[112]

Such provisions further illustrate how the Guidelines operationalize the precautionary approach, and suggest measures that might be taken in response to the threats which DSFs face. These include effort and catch controls[113] and temporal and spatial restrictions or closers of areas where VMEs have been designated.[114] Furthermore, both RFMOs and States should put in place 'an appropriate protocol identified in advance for how fishing vessels in DSFs should respond to encounters … with a VME'.[115] Such protocols should, as a minimum, require the vessels in question to cease their fishing activities in the area and report the encounter to the flag State or RFMO.[116] These measures all reflect the requirement of the courts that States have a positive 'duty to prevent, or at least mitigate' the potential harm arising from activities that pose a risk to the environment.[117] The existence of a VME protocol is an important prevention and mitigation tool as it provides guidance to fishing vessels on how to deal with and prevent damage to VMEs. In addition, it also provides a mechanism for communicating the discovery of new VMEs and the introduction of new measures by the State on how to best protect them.

In addition to the conservation and management measures listed above, the Guidelines also encourage States to make the necessary changes to the design of fishing gear and methods. They call for a reduction in by-catch, ghost fishing and methods involving contact between the fishing gear and the seabed.[118] This reflects a greater concern about the effects of destructive fishing practices, particularly bottom trawl fishing, in the deep

[109] In fact, much of the work carried out by RFMOs in relation to rare and fragile ecosystems has been done through the designation of such areas as VMEs. For a further discussion, see section IV.B of this paper. [110] Guidelines (n 14) para 61. [111] ibid para 66. [112] ibid para 63(i–iii). [113] ibid para 71(i). [114] ibid para 71(ii). [115] ibid para 67. [116] ibid para 67. [117] *Arbitration Regarding the Iron Rhine ('Ijzeren Rijn') Railway between the Kingdom of Belgium and the Kingdom of the Netherlands* [2005] Permanent Court of Arbitration, Reports of International Arbitral Awards, Vol XXVII 35–125, para 59. As confirmed in *Indus Waters Kishenganga Arbitration (Pakistan v India)* (Partial Award) [2014] Award of 18 February, Permanent Court of Arbitration <https://pcacases.com/web/sendAttach/1681> para 451; *South China Sea Arbitration* (n 46) para 941. [118] Guidelines (n 14) para 71(iii).

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seas.[119] The issue of bottom trawling has received a lot of attention in recent years, especially following the attempt by the UNGA to introduce an 'interim prohibition of destructive fishing practices, including bottom trawling', through one of its resolutions.[120] However, unlike the UNGA moratorium on driftnet fishing,[121] which is widely recognized by the international community,[122] this prohibition has not gained widespread recognition.[123] This, arguably, reflects a reluctance by the international community to regard it as binding.

However, in the recent *South China Sea Arbitration* the Tribunal confirmed that 'a failure to take measures to prevent [harmful fishing practices] would constitute a breach of Articles 192 and 194(5)'.[124] This also applied if the harmful practice in question 'endangered species indirectly through the destruction of their habitat'.[125] It would thus appear that the obligation to protect and preserve the marine environment now includes a duty to take measures to prevent harmful and destructive fishing practices. This is reflective of the Guidelines' emphasis on the prevention and mitigation of damage by vessels and gear in areas containing VMEs. Although the Tribunal did not make an express reference to bottom trawling, it did refer to other practices which involve the destruction of reefs and structures found on the seafloor—for example, the 'use of boat propellers to break through the coral substrate'[126]—as having 'harmful impact on the fragile marine environment'.[127] This closely resembles the documented effects of bottom trawling on the same structures.[128] So although the Tribunal did not expressly refer to bottom trawling, the Award may nevertheless make it harder for States to justify bottom trawling and demonstrate that it does not amount to a 'harmful fishing practice'.[129]

It is important to note that, in contrast to the UNGA resolution, the Guidelines do not call for the introduction of a moratorium on harmful fishing practices. Rather, they list measures that States need to take, for example through the VME protocol and temporal or spatial closures, to prevent and mitigate their effects. This would appear to mirror the statements of the *South China Sea* Tribunal which, instead of requiring States to introduce a ban on such

[119] Such concerns have been raised in several UN General Assembly resolutions and reports by the UN Secretary-General, see eg UNGA Res 59/25 (17 January 2005) UN Doc A/RES/59/25, para 66 and UN, *Oceans and the Law of the Sea* (n 91) para 40.

[120] UNGA Res 59/25 (n 119) para 66.

[121] UNGA Res 44/225 (22 December 1989) UN Doc A/RES/44/225, para 4(a). As confirmed in UNGA Res 45/197 (21 December 1990) UN Doc A/RES/45/197; UNGA Res 46/215 (21 December 1991) UN Doc A/RES/46/215; UNGA Res 59/25 (n 119).

[122] For a good discussion on this topic, see DR Rothwell, 'The General Assembly Ban on Driftnet Fishing' in D Shelton (ed), *Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System* (Oxford University Press 2000). Some authors now argue that the moratorium on driftnet fishing has been accepted as forming part of customary international law, see eg P Sands and J Peel, *Principles of International Environmental Law* (Cambridge University Press 2012) 431.

[123] Sands and Peel (n 122) 431–2, 439–40.

[124] *South China Sea Arbitration* (n 46) para 960.

[125] ibid para 959.

[126] ibid para 953.

[127] ibid para 960.

[128] FAO, 'Bottom Trawls' (2016) <http://www.fao.org/fishery/geartype/205/en>.

[129] *South China Sea Arbitration* (n 46) para 960.

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practices—in line with the approach taken by UNGA—, only required that States 'take measures to prevent' harmful fishing practices.[130]

C. Environmental Impact Assessment

A large part of the Guidelines is dedicated to the last of the three 'clusters', specifically the need to carry out an EIA in situations where 'deep-sea fishing activities are likely to produce significant adverse impacts in a given area'.[131] Our starting point here is UNCLOS Article 206, which holds that,

> [w]hen States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment… .[132]

It is important to note that this Article only requires States to 'assess the potential effects' of 'planned activities under their jurisdiction or control', not to carry out an EIA specifically. Furthermore, it gives significant discretion to the individual State, as it does not say anything regarding the specific content of this requirement, most importantly, what measures States must take in order to comply.[133] A stronger legal basis for the duty to conduct an EIA can, however, be found in the case law. In its *Seabed Advisory Opinion*, the ITLOS confirmed that the obligation to carry out an EIA is now a 'general obligation under customary international law'.[134] They relied on the ICJ judgment in the *Pulp Mills* case,[135] which, although concerning the obligation to conduct an EIA in a transboundary context, the Tribunal thought 'may also apply to activities with an impact on the environment in an area beyond the limits of national jurisdiction'.[136] ITLOS considered that the duty to carry out an EIA applied to all planned activities, regardless of where they are carried out, provided that they are under the 'jurisdiction or control' of the State concerned.[137] This would appear to include fishing and maritime activities under flag State jurisdiction within ABNJ.[138] It is also important to note that the obligation of due diligence resting on States in relation to the

[130] ibid para 960. [131] Guidelines (n 14) para 47. [132] UNCLOS (n 7) art 206.

[133] AGO Elferink, 'Environmental Impact Assessment in Areas beyond National Jurisdiction' (2012) 27 The International Journal of Marine and Coastal Law 449, 450; N Craik, *The International Law of Environmental Impact Assessment* (Cambridge University Press, 2008) 98–9.

[134] *Seabed Advisory Opinion* (n 47) para 145. The principle is also set out in the Rio Declaration on Environment and Development (n 97) art 17.

[135] *Pulp Mills* (n 47) para 204: 'it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource'. [136] *Seabed Advisory Opinion* (n 46) para 148.

[137] Rosenne and Yankov (n 94) para 206.6(a). As confirmed in *South China Sea Arbitration* (n 46) para 948.

[138] Despite its legal basis, however, the implementation of this requirement is still highly uneven across the various RFMOs. See section IV.B and Elferink (n 133).

marine environment also requires that an EIA is undertaken. As the ICJ said in the *Pulp Mills* case, 'due diligence … would not be considered to have been exercised, if a party … did not undertake an environmental impact assessment on the potential effects' of the activity in question.[139]

An EIA is required if there are 'reasonable grounds' for believing that deep-sea fishing may cause 'significant and harmful changes to the marine environment'.[140] According to the FAO,[141] and a wide range of scholars and scientists,[142] this is generally the case with fishing activities in the deep seas. Because these areas contain 'habitats that are easily damaged and take a long time to recover', fishing practices targeting species found within such areas can reasonably be assumed to present a risk of harmful and significant change. Our current lack of knowledge concerning many DSFs supports this conclusion.[143] The duty to conduct an EIA would thus appear to apply to all fishing activities undertaken in the deep seas, and lies with the State whose vessels are engaged in such fisheries.

In contrast to UNCLOS Article 206, which does not give details concerning what should be included in an EIA nor how it should be carried out, the Guidelines provide a considerable degree of detail regarding both aspects of the procedure.

First of all, an EIA should include, *inter alia,* the types of fishing conducted or contemplated, the state of the fishing resources and related ecosystems at the time of assessment, the identification of VMEs and risk assessments of activities upon such areas, the identification and evaluation of the characteristics of likely impacts and 'the proposed mitigation and management measures to be used'.[144] The Guidelines also provide a definition of 'significant adverse impacts', this being 'those that compromise ecosystem integrity'.[145] The Guidelines list several factors that should be considered when determining whether there is such an impact, including its spatial extent and the sensitivity of the ecosystem in question.[146] The Guidelines also provide that States should submit the results of their EIAs either to the relevant RFMO or, if there is none, directly to the FAO.[147] Such a requirement is in line with the obligation under UNCLOS to 'communicate reports of the results of such assessments' to 'the competent international organizations',[148] a duty which the courts have confirmed is 'absolute'.[149]

[139] *Pulp Mills* (n 47) para 204; confirmed in *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* [2015] ICJ Rep 150, para 153.
[140] UNCLOS (n 7) art 206.
[141] FAO, *Deep-Sea Fisheries in the High Seas: Ensuring Sustainable Use of Marine Resources and the Protection of Vulnerable Marine Ecosystems* (2009) <http://www.fao.org/docrep/014/i1064e/i1064e00.htm>.
[142] See eg Gjerde and Freestone (n 5); Sands and Peel (n 122) 431–3, 440.
[143] FAO, *Deep-Sea Fisheries in the High Seas* (n 141) 7.
[144] Guidelines (n 14) paras 47(ii–vii). [145] ibid para 17. [146] ibid para 18.
[147] ibid paras 51–52. [148] UNCLOS (n 7) arts 205, 206.
[149] *South China Sea Arbitration* (n 46) para 948.

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We now turn to the question of whether the provisions of the Guidelines dealing with environmental assessments can be understood as an agreed minimum standard for the purposes of fleshing out the content of the due diligence obligation to carry out an EIA. Unlike Article 119, which requires States to take into account 'any generally recommended international minimum standards',[150] Article 206 makes no reference to the standard that should be adopted. In fact, in the *Pulp Mills* case, the ICJ held that 'it is for each State to determine … the specific content of the environmental impact assessment'.[151] This is also reflected in Article 206 which, by using the phrases 'reasonable grounds' and 'as far as practicable', implies that the States in question have a certain level of discretion when it comes to carrying out their obligation.[152] However, the Court also noted that in determining the specific content of the EIA, the State is required to have regard for 'the nature and magnitude of the proposed development and its likely adverse impact on the environment as well as to the need to exercise due diligence in conducting such an assessment'.[153] This suggests that their discretion is not unlimited, and that the exercise of a 'certain level of vigilance' is still required when it comes to the content and application of the EIA.[154]

Although States have a large degree of discretion when decided on what elements to include in their EIAs, Article 206 does give some guidance. It requires States to 'assess the potential effects of such activities on the marine environment', in this case the potential effects of *fishing* on the *deep-sea marine environment*. It is arguable that this would include most, if not all, of the factors which are listed by the Guidelines as matters which an EIA should address. The first two factors relate to the type of fishing conducted, the gear used, and identification of the 'best available scientific and technical information on the current state of fishery resources'.[155] These all appear central to the obligation to carry out an EIA for DSFs. As fishing is the 'planned activity', the identification and assessment of that activity would seem to be the minimum content of any risk assessment.

An assessment of the location of the planned activity would also appear to be included. In the *Pulp Mills* case the ICJ held that 'any decision on the actual location' of the activity should take into account the ability of the site to mitigate the effects of the activity in question.[156] Although the Court was reluctant to find that alternative or more suitable locations must be evaluated as part of the EIA,[157] it still emphasized that the location of the activity

[150] UNCLOS (n 7) art 119(1)(a).
[151] *Pulp Mills* (n 47) para 205. As confirmed in the *Border Activities Case* (n 139) para 104.
[152] As confirmed in the *South China Sea Arbitration* (n 46) para 948.
[153] *Pulp Mills* (n 47) para 205.
[154] ibid para 197.
[155] Guidelines (n 14) paras 47(i)–(ii).
[156] *Pulp Mills* (n 47) para 211: The ICJ could not 'fail to note that any decision on the actual location of such a plant along the River Uruguay should take into account the capacity of the waters of the river to receive, dilute and disperse discharges of effluent from a plant of this nature and scale'.
[157] ibid para 210.

should be included if it was relevant for the assessment of the impact of the planned activity on the environment. Because the level of risk associated with deep-sea fishing will be directly dependent on the fishing area in question, particularly if that area contains a VME, it is highly likely that an assessment of the fishing area would form a natural part of an EIA for the deep seas.

Similar reasoning applies to the third factor listed in the Guidelines, namely the 'identification, description and mapping of VMEs known or likely to occur in the fishing area'.[158] Article 194(5) requires States to protect 'rare and fragile ecosystems as well as the habitat of depleted, threatened or endangered species'.[159] It is therefore necessary to identify whether such ecosystems, habitats and species can be found in the area, and to what degree they will be subjected to risk by the planned fishing activities.

The fourth, fifth and sixth factors listed in the Guidelines relate to the 'data and methods used to identify, describe and assess the impacts of the activity',[160] the occurrence, scale and duration of the likely impacts,[161] and the identification of those aspects that are likely to cause 'significant adverse impacts'.[162] These factors would seem to amplify the general obligation set out in UNCLOS Article 206. Whilst emphasizing the discretion exercised by States in deciding the content of their EIAs, the ICJ still specified that States must have 'regard to the nature and magnitude of the proposed development and its likely adverse impact on the environment'.[163] This largely coincides with these provisions of the Guidelines, particularly as regards determining the scale and significance of particular impacts,[164] their cumulative effect,[165] any gaps and uncertainties in the available knowledge and the use of the best available technological and scientific information when determining likely adverse impacts.[166]

The last factor concerns 'the proposed mitigation and management measures to be used to prevent significant adverse impacts'.[167] As was confirmed in the *South China Sea Arbitration*, UNCLOS Article 192 'entails the positive obligation to take active measures to protect and preserve the marine environment, and by logical implication, entails the negative obligation not to degrade the marine environment'.[168] The question then arises whether the duty to carry out an EIA can reasonably be said to include an assessment of the measures taken to fulfil those obligations. This is arguably the case, as the

[158] Guidelines (n 14) para 47(iii).
[159] UNCLOS (n 7) art 194(5).
[160] Guidelines (n 14) para 47(iv).
[161] ibid para 47(v).
[162] ibid para 47(vi). 'Significant Adverse Impacts' are defined in para 17 of the Guidelines as 'those that compromise ecosystem integrity (i.e. ecosystem structure or function) in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades the long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types'.
[163] *Pulp Mills* (n 47) para 205.
[164] As defined in the Guidelines (n 14) para 18.
[165] ibid para 47(v).
[166] ibid para 47(ii).
[167] ibid para 47(vii).
[168] *South China Sea Arbitration* (n 46) para 944.

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existence of possible prevention and mitigation measures would affect the level of risk associated with a planned activity; the more efficient measures, the lesser the risk. It therefore seems natural to include in the EIA those measures that the State is already required to take under UNCLOS Article 192 and 194(5).[169]

From the above discussion, it is reasonable to argue that the Guidelines spell out in further detail the content of the general obligation to carry out an EIA provided for in UNCLOS Article 206 and in customary international law for activities involving fishing in the deep seas. The Courts have made it clear that 'it is for each State to determine … the specific content of the environmental impact assessment required in *each case*'.[170] However, it would appear that in the case of deep-sea fishing activities, particularly those activities carried out within a VME, an EIA would have to include most of the factors listed in the Guidelines in order to fully 'assess the potential effects of such activities on the marine environment' of the deep seas, as required by UNCLOS Article 206.

IV. THE DEEP-SEA GUIDELINES AS AN AUTHORITATIVE INSTRUMENT: THE ROLE OF CONSENSUS AND INTERNATIONAL SUPPORT IN LAW-MAKING

The above discussion has shown how certain provisions of the Guidelines can be said to complement and inform the content of the general and open-textured high-sea obligations under UNCLOS. However, their textual compatibility is only one of two elements that need to be fulfilled if the Guidelines can be said to have a law-making effect. In order for soft-law instruments to be acknowledged as informing the content of a due diligence obligation, it is equally important that it is supported by sufficient levels of acceptance and consensus within the international community. This can be illustrated by both the development of the Guidelines and the process leading up to their conclusion, and by the subsequent level of acceptance and implementation shown by the relevant international actors. These will now be addressed in turn.

A. Development and Adoption of the Guidelines

As the Guidelines were the result of a long process of negotiation in several international fora, an examination of their creation and development is necessary. Despite being the centre of increasing concern since the expansion of deep-sea fishing in the 1970s,[171] the issue of DSFs was not explicitly raised by the UNGA until 2006. Resolution 61/105 called on the FAO to develop 'standards and criteria for use by States and [RFMOs] in identifying [VMEs] and the impacts of fishing on such ecosystems, and establishing standards for

[169] Birnie and Boyle (n 27) 172–3.
[170] *Pulp Mills* (n 47) para 205. As confirmed in the *Border Activities Case* (n 139) para 104 (emphasis added).
[171] Gjerde and Freestone (n 5) 211–2.

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the management of [DSFs]'.[172] This resolution was adopted 'without a vote', meaning that it was agreed by consensus.[173]

In relation to fisheries, the UNGA has taken on an active role, adopting a separate resolution on fisheries as part of its annual debate on the law of the sea.[174] However, apart from a few exceptions,[175] the resolutions adopted in relation to fisheries cannot be said to be of norm-creating character. As exemplified by Resolution 61/105, the resolutions tend to be limited to encouraging States to cooperate in relation to a certain issue or calling on other international organizations to take action.[176] The UNGA resolutions relating to fisheries are, therefore, arguably not to be understood as law-making instruments in their own right. However, their importance should not be underestimated. By identifying current issues, for example that of DSFs, and encouraging other international institutions to take measures to address them,[177] those UNGA resolutions adopted without a vote still evidence a strong level of support for the development of such measures or instruments by the designated institution. The fact that the resolutions explicitly—and through consensus—designated the FAO as the forum through which the Guidelines should be developed lends further legitimacy to the FAO's mandate in relation to DSFs.

After the passing of UNGA resolution 61/105, the matter was passed to the FAO Committee on Fisheries (COFI). Here it was agreed that an expert consultation should be held with the aim of identifying 'technical guidelines, including standards for the management of deep-sea fisheries in the high seas'.[178] The Guidelines were formally adopted at a Technical Consultation in 2008, which marked the end of a series of events held over the course of two years relating to the Guidelines and the protection of the deep seas.[179] From the outset, it was always intended that the Guidelines should be developed through a 'participatory process involving fisheries experts, fishery managers from governments, the fishing industry, academia and

[172] UNGA Res 61/105 (n 12) para 89.

[173] UN, 'Oceans and the Law of the Sea in the General Assembly of the United Nations. General Assembly resolutions and decisions' (2016) <http://www.un.org/depts/los/general_assembly/general_assembly_resolutions.htm>.

[174] Harrison (n 4) 201.

[175] The most notable exceptions are the aforementioned resolutions calling for a ban on driftnet fishing and bottom trawling. See UNGA Res 44/225 (n 121) and UNGA Res 61/105 (n 12) respectively.

[176] Harrison (n 4) 204.

[177] ibid 204.

[178] FAO, *Report of the Twenty-Seventh Session of the Committee on Fisheries* (5–9 March 2007, 27th Sess) FAO Fisheries Report No 830 (FIEL/R830 (En)) xiii. See also FAO, 'The Committee on Fisheries (COFI)' <http://www.fao.org/fishery/about/cofi/en>: COFI is a subsidiary body of the FAO Council, and 'constitutes the only global inter-governmental forum where major international fisheries and aquaculture problems and issues are examined'.

[179] FAO, *Report of the Technical Consultation* (n 13). These events included an Expert Consultation on Deep-Sea Fisheries in the High Seas in Bangkok, Thailand in 2006 and a Skippers and Fleet Managers Workshop on the International Guidelines in Cape Town, South Africa in 2008. For a full list of events, see Guidelines (n 14) para iv.

non-governmental and intergovernmental organizations'.[180] Despite inviting all 191 FAO members to the Technical Consultation, only 69 countries, together with the European Community and the Faroe Islands, attended the event.[181] In addition, observers from 14 intergovernmental and international non-governmental organizations attended,[182] thus reflecting the aim of including representatives from across the deep-sea fisheries sector.

The relatively low number of delegates from FAO members might raise questions concerning the level of consensus achieved by the Technical Consultation and the adoption process more generally; although agreement without a vote appears to have been reached among the 69 delegates, this is still far from a global consensus. However, this is arguably not the case. First, many FAO State parties do not engage in deep-sea fishing and may have decided not to invest resources into attending a Consultation in which they had no interest. Moreover, those same States had already agreed to the creation of the Guidelines through their representations in the UNGA and COFI, which makes their absence less significant. At the same time, the largest and most prominent DSF States did attend. According to the FAO, in 2008 at least 27 States carried out deep-sea fishing.[183] All of these States participated in the Technical Consultation, along with other prominent fishing States such as the United States, Canada, Norway, Iceland, India, and the Philippines.[184]

The attendance of more than double the number of States that engage in DSFs show a significant degree of support for the Guidelines, albeit not universal support. Moreover, after its adoption at the Technical Consultation, several other bodies recognized the Guidelines. For example, COFI, in its first report after the Technical Consultation stated that it '[t]ook note' that the Guidelines had been developed, and welcomed the response to their aforementioned request.[185] Many of its members also expressed satisfaction with the adoption of the Guidelines, and considered them to be 'an important step forward'.[186] The FAO Council, the organization's executive organ between sessions of the FAO conference, subsequently 'endorsed' the COFI report, and 'expressed general support' for the Committee's work on the management of deep-sea fisheries.[187]

As a UN specialized agency, the FAO is recognized as playing a crucial role in the development of international fisheries policy.[188] Despite not being able to

[180] FAO, 'The FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas' (2016) <http://www.fao.org/fishery/topic/166308/en>.
[181] FAO, 'Better Management for Fishing's "Last Frontier"' (Press Release) (2008) <http://www.fao.org/newsroom/en/news/2008/1000916/index.html>.
[182] ibid.
[183] FAO, Deep-Sea Fisheries in the High Seas (n 141) 3.
[184] FAO, Report of the Technical Consultation (n 13) 8–26.
[185] FAO, *Report of the Twenty-Eighth Session of the Committee on Fisheries* (2–6 March 2009, 28th Sess), FAO Fisheries Report No 902 (FIEL/R902 (En)) para xxii.
[186] ibid para 51.
[187] FAO, *Report of the Council of FAO* (15–19 June 2009, 136th Sess) FAO Council Report No 136 (CL 136/REP) para 5–6.
[188] Harrison (n 4) 204.

make *ipso facto* binding decisions,[189] with the exception of treaties decided on by a FAO plenary conference,[190] the FAO's work on fisheries is still held in high esteem. This is both due to its near-universal membership—the FAO currently has 194 members[191]—and the fact that other institutions and organizations, for example the UNGA, have explicitly recognized its role in the further development of fisheries law and policy.[192] Any soft-law instrument agreed to by consensus within the FAO legal framework thus carries substantial weight. However, instead of deriving such weight from being legally binding, the instruments rely on their near-universal international support. This was arguably the case with the Guidelines, which through nearly all the stages of the FAO process was agreed to by consensus.

B. Initial Implementation and Acceptance

The work by the FAO, and the support for them in the UNGA, illustrate the high level of overall support for the adoption of the Guidelines. However, in order for a soft-law instrument to have any law-making effect, its authoritative status must be further recognized through subsequent acceptance and implementation. In its first resolution following their adoption, the UNGA 'welcome[d] the adoption' of the Guidelines, and urged States to implement them and 'take action immediately, individually and through [RFMOs] … in order to sustainably manage fish stocks and protect vulnerable marine ecosystems'.[193] UNGA Resolution 64/71 went further, calling upon States to '[a]dopt conservation and management measures … to ensure the long-term sustainability of deep sea fish stocks and non-target species, and the rebuilding of depleted stocks, consistent with the Guidelines'.[194]

Both UNGA Resolutions highlight the prominent role intended for RFMOs, together with individual flag States, in the process of implementing the Guidelines. As such, it is to these organizations we must turn in order to evaluate whether the Guidelines have been accepted as representing the relevant GAIRS in relation to the deep seas. It is beyond the scope of this article to consider the extent to which the Guidelines have been implemented, as this would involve a detailed examination of both domestic and regional policy of those States and RFMOs engaging in high-sea fishing. In addition,

[189] ibid 205.

[190] Constitution of the Food and Agriculture Organization of the United Nations (adopted 16 October 1945, entered into force 24 October 1945) TIAS 12134, art XIV.

[191] FAO, 'FAO Members' (2016) <http://www.fao.org/legal/home/fao-members/en/>. The Faroe Islands and Tokelau are both Associate Members.

[192] The UNGA has noted 'the critical role played by the [FAO] in providing expert technical advice, in assisting with international fisheries policy development and management standards, and in collecting and dissemination of information on fisheries-related issues'. See UNGA Res 61/105 (n 12) para 88. See also Harrison (n 4) 205.

[193] UNGA Res 63/112 (5 December 2008) UN Doc A/RES/63/112, paras 41 and 102.

[194] UNGA Res 64/72 (4 December 2009) UN Doc A/RES/64/72, para 119(d).

the fact that 'the practice of States and [RFMOs] in implementing these commitments has been subject to minimal investigation'[195] makes such a task impossible to undertake here. However, two recent publications give insights into the implementation process since the adoption of the Guidelines in 2008.[196] The following analysis will primarily be based on their findings.

The first is a report from the UN Secretary General from August 2016 who, at the request of the UN General Assembly, carried out a review of the actions taken by States and RFMOs in response to certain provisions in two UNGA resolutions regarding implementation of the Guidelines.[197] The second is a subsequent report published by the FAO entitled *Vulnerable Marine Ecosystems: Processes and Practices in the High Seas*.[198] The Guidelines themselves hold that the 'FAO should, based on biennial reports from States and [RFMOs], review the progress made in the implementation of these Guidelines.'[199] The latter report is the first comprehensive review undertaken by the FAO in relation to deep-water fishing since 2009.[200] It 'focuses mainly on the binding measures for VMEs adopted by the [RFMOs]',[201] and so allows us to identify which of the Guideline's provisions have become legally binding as a result of subsequent regional treaty agreements. Both reports focus on actions taken relating to the identification and protection of VMEs and the impacts of bottom fishing; however, their findings can also be used to draw some intimal conclusions regarding the content of the Guidelines more generally.

First of all, it is necessary to assess the implementation of the Guideline provisions relating to DSF conservation and management measures. Both reports found that important steps had been taken in this regard. One very significant development was the creation of the VMR Portal and DataBase, which was developed by the FAO in collaboration with those RFMOs whose mandates extend to the management of DSFs in ABNJ.[202] This was in response to a request made in UNGA Resolution 61/105 to establish 'a

[195] R Caddell, 'Precautionary Management and the Development of Future Fishing Opportunities: The International Regulation of New and Exploratory Fisheries' (2018) 33 The International Journal of Marine and Coastal Law 1, 5.

[196] See also A Rogers and M Gianni, *The Implementation of UNGA Resolutions 61/105 and 64/72 in the Management of Deep-Sea Fisheries on the High Seas*. Report prepared for the Deep-Sea Conservation Coalition. International Programme on the State of the Ocean (IPSO 2010); FAO, 'Review and Analysis of International Legal and Policy Instruments related to Deep-Sea Fisheries and Biodiversity Conservation in Areas Beyond National Jurisdiction' (2017) <http://www.fao.org/3/a-i7009e.pdf>.

[197] UNGA Res 71/351 (22 August 2016) UN Doc A/RES/71/351.

[198] FAO, *Vulnerable Marine Ecosystems: Processes and Practices in the High Seas* (2016) FAO Fisheries and Aquaculture Technical Paper 595 <http://www.fao.org/3/a-i5952e.pdf>.

[199] Guidelines (n 14) para 88.

[200] *Vulnerable Marine Ecosystems: Processes and Practices in the High Seas*, was prepared as a sister publication to the *Worldwide Review of Bottom Fisheries in the High Seas* (2009) FAO Fisheries and Aquaculture Technical Paper 522 (Rev.1) <http://www.fao.org/docrep/012/i1116e/i1116e00.htm>.

[201] FAO, *Vulnerable Marine Ecosystems* (n 198) 7.

[202] FAO, 'VME DataBase' (2016) <http://www.fao.org/in-action/vulnerable-marine-ecosystems/en/>; FAO, *Vulnerable Marine Ecosystems* (n 198) 1.

global database of information on vulnerable marine ecosystems in [ABNJ] to assist States in assessing any impacts of bottom fisheries' on VMEs.[203] The database represents a vital initial implementation of several of the requirements set out in the Guidelines, both to identify areas or features where VMEs are known or likely to occur,[204] and also to comply with the requirement to 'develop data collection and research programmes to assess the impact of fishing on target and non-target species and their environment'.[205]

Furthermore, both reports highlighted the steps taken by the RFMOs to put in place MCS measures, to set catch limits and to modify fishing gear and develop new technologies to increase selectivity.[206] For example, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) reported that it had put in place mechanisms for the regulation of mesh size, prohibitions on certain types of fishing, requirement of catch and efforts reporting, and precautionary catch limits.[207] Similar requirements had been put in place by the Northwest Atlantic Fisheries Organization (NAFO), the North East Atlantic Fisheries Commission (NEAFC), the South East Atlantic Fisheries Organisation (SEAFO) and, albeit to a more limited degree, the South Pacific Regional Fisheries Management Organisation (SPRFMO).[208] It was highlighted that NAFO has established 'catch monitoring and a mandatory vessel monitoring system, a joint inspection and surveillance scheme, an observer programme, [and] port State control measures',[209] all of which were set out in the Guidelines. Similar measures have been introduced by CCAMLR and the General Fisheries Commission for the Mediterranean (GFCM).[210]

However, arguably the biggest improvement in this regard has been the strengthening of the RFMOs themselves. The Guidelines, supported by the UNGA resolutions, held that 'States should strengthen existing [RFMOs] which have the competence to manage and regulate DSFs'[211] and, where no such organizations exists, should urgently attempt to establish one in order for appropriate measures to be put in place. There are currently in existence eight regional management bodies—covering 77 per cent of the high seas—whose mandate specifically allows them to manage deep-sea fisheries.[212] Three of these organizations, namely SPRFMO, the North Pacific Fisheries Commission (NPFC) and the Southern Indian Ocean Fisheries Agreement

[203] UNGA Res 61/105 (n 12) para 90.
[204] Guidelines (n 14) para 21(ii).
[205] Guidelines (n 14) para 21(iii).
[206] FAO, *Vulnerable Marine Ecosystems* (n 198)181; UN, *Actions taken by States and regional fisheries management organizations and arrangements in response to paragraphs 113, 117 and 119 to 124 of General Assembly resolution 64/72 and paragraphs 121, 126, 129, 130 and 132 to 134 of General Assembly resolution 66/68 on sustainable fisheries, addressing the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks*. Report of the Secretary-General (22 August 2016, 71st Sess) UN Doc A/71/351, paras 47–60. See also Caddell (n 195).
[207] UN Doc A/71/351 (n 197) para 87.
[208] ibid para 88–91.
[209] ibid para 88.
[210] ibid paras 92 and 93.
[211] Guidelines (n 14) para 27.
[212] FAO, *Vulnerable Marine Ecosystems* (n 198) 180.

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(SIOFA), were established after the completion of the Guidelines.[213] In addition, as was noted by the UN Secretary-General, most of the pre-existing RFMOs have undergone reviews and revisions of their mandates to better comply with the Guidelines and the requests found in the UNGA resolutions.[214] Taken together, all of these findings point to not only a change in attitude towards the regulation of DSFs but also a greater commitment to cooperation in relation to ABNJ.

As highlighted by both the FAO and the UN Secretary-General, the greater part of the implementation process has revolved around the second cluster of Guideline provisions, namely those addressing VMEs.[215] Despite some variations in degree, 'a broadly uniform framework for the management of prospective deep-sea exploratory fishing has been adopted by a growing array of RFMOs'.[216] For example, several of the RFMOs have implemented VME encounter protocols, which include, *inter alia*: the definition of VME indicator species and thresholds; move-on rules, including reporting procedures; and the possibility of temporary closures and related procedures for deciding whether or not an area should be reopened or remained close at subsequent evaluations.[217] Importantly, when amending their mandates to comply with the requirements of the Guidelines and the UNGA resolutions, 'most [RFMOs] have expanded their data collection regimes to include reporting on agreed VME indicator species'.[218] This not only allows States and RFMOs to better monitor changes and development within their own VMEs, but also to build up an internationally recognized set of indicators known across and beyond the various regulatory areas.

It is important to note that the designated RFMO is the only authority with the competence to identify and declare an area of high seas to be a VME.[219] This means that the RFMOs are the only entities with the authority to close such areas in situations where fishing activities are deemed to constitute a risk. The RFMOs appear to have taken advantage of their authority in this regard, with their response being to 'delineate and close designated VME areas to all bottom-contact fishing gear'.[220] The relatively extensive use of both temporary and permanent closure procedures reflect the increasingly important status given to the precautionary principle when it comes to DSFs, a point also highlighted by the FAO report.[221] As discussed above, the precautionary principle underlies all the provisions of the Guidelines and it is

[213] SPRFMO and SIOFA were established in 2012, whereas NPFC was established in 2015. See FAO, *Vulnerable Marine Ecosystems* (n 198) 107–56.

[214] UN, *Oceans and the Law of the Sea*. Report of the Secretary-General (13 March 2009, 64th Sess) UN Doc A/64/66, para 66.

[215] FAO, *Vulnerable marine ecosystems* (n 198) 184; UN Doc A/71/351 (n 197) paras 156–162.

[216] Caddell (n 195) 54.

[217] UN Doc A/71/351 (n 197) para 79.

[218] FAO, *Vulnerable Marine Ecosystems* (n 198) 182.

[219] ibid 182.

[220] ibid 182. The one notable exception is the designated VME on Valdivia Bank in the southeast Atlantic Ocean. Here, SEAFO decided to close the area to all gears except pots and longlines.

[221] FAO, *Vulnerable Marine Ecosystems* (n 198) 182.

interesting that both reports drew attention to the increasing role played by the principle, particularly in the management of VMEs, but also as regards deep-sea fishing more generally.

Finally, it is necessary to briefly evaluate the implementation of the provisions of the Guidelines relating to EIAs. According to the FAO report, '[t]he assessment of impacts from bottom fisheries by [RFMOs] on VMEs has been, in general, similar'.[222] For existing fishing areas, most RFMOs do not require a prior EIA, not even for the use of bottom contact gears. The reason given is that '[t]hese areas are generally well known and if any VMEs did exist in the precise fishing area in the past, is it unlikely they remain'.[223] However, the reports found that '[b]ottom fishing outside of the designated existing fishing areas is, in most regions, subject to exploratory fishing protocols that require impact assessments on both the target stock and on bycatch and incidental species'.[224] This is fully in line with the previously discussed paragraph 47 of the Guidelines, which requires both flag States and RFMOs to include, *inter alia*, VMEs, target stock, and potential bycatch.[225] Therefore, despite the current lack of RFMO requirements to carry out an EIA for already *existing* DSFs, significant improvements have been implemented for *new and exploratory* fisheries.[226] This is important as it ensures not only the gathering of important information concerning such unexplored areas, but also the better protection of species and habitats previously untouched by human activities.

C. The Law-Making Effects of the Deep-Sea Fisheries Guidelines

Despite illustrating the significant progress made both in relation to the management of VMEs and DSFs more generally, both reports still highlight that the implementation of the Guidelines and the UNGA resolutions 'continues to be uneven' and explicitly specify that further efforts are needed.[227] This is partly because several of the more recently established RFMOs have expressed the need for more time and resources—both scientific and monetary—to implement the provisions.[228] Furthermore, despite the progress made regarding data gathering and scientific knowledge, very little is known about the deep seas. As highlighted by the FAO, 'while general guidance exists in the FAO Deep-Sea Fisheries Guidelines on factors that should be taken into account … complete scientific knowledge is rarely available for these deep-sea ecosystems'.[229] This means that in situations where precise scientific information is not available, States and RFMOs must rely on the best available knowledge, which may or may not be accurate.[230]

[222] ibid 180. [223] ibid 181. [224] ibid 181. [225] Guidelines (n 14) para 47.
[226] Caddell (n 195) 54. [227] UN Doc A/71/351 (n 197) para 163. [228] ibid para 163.
[229] FAO, *Vulnerable Marine Ecosystems* (n 198) 181.
[230] ibid 182; UN Doc A/71/351 (n 197) paras 54–60.

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Due to this uncertainty, and the uneven degree of implementation across the various RFMOs, 'overfishing of deep-sea species is likely to continue and some VMEs will not be adequately protected from significant adverse impacts',[231] at least in the foreseeable future. However, the cumulative effects of recent developments should not be underestimated. The Guidelines were the result of an acknowledgement by the international community that 'deficiencies in the existing legal and institutional framework' prevented the appropriate conservation and management of DSFs to take place.[232] This, together with the levels of consensus and subsequent acceptance enjoyed by the Guidelines, supports the claim that there is an increased willingness among States to address these issues and that the Guidelines have been accepted as representing the best available practice for doing so. This is partly due to a realization that unregulated deep-sea fishing may result in irreversible damage to species, structures, and ecosystems valuable for human enjoyment. However, it also reflects an increasing commitment on the part of the international community to incorporate a stronger environmental dimension into international law, including the law of the sea.[233]

This all lends support to the claim that the Guidelines are beginning to have a law-making effect on the international legal regime for the deep seas. In fact, as the above analysis has shown, there are strong reasons to conclude that FAO Deep-Sea Guidelines now inform the content of the due diligence obligation relating to DSFs on the high seas. Such a conclusion is supported by Caddell, who highlights both the involvement of UNGA and the relative uniformity of RFMO implementation as being 'suggestive of the formation of recognised international standards for the pursuit of these specific fishing activities'.[234] It is important to remember that any law-making effect is not derived directly from the wording of the Guidelines themselves; the international community deliberately refrained from using norm-creating language, and the Abstract to the Guidelines explicitly state that they are voluntary.[235] Instead, the obligation resting on States is that of flag State due diligence. This is a general obligation whose source is found in UNCLOS—however, the content of that obligation is to a large extent now informed by the Guidelines. As has been emphasized above, the nature of the due diligence obligation and the concrete measures to be taken in a specific case will depend on the area in question and the nature of the planned activity. As such, the standards identified here will probably not apply to high-seas activities more generally, although some elements may overlap.

Rather, the Guidelines specifically address those characteristics of DSFs that States will have to take into account when fulfilling their due diligence

[231] UN Doc A/71/351 (n 197) para 163.
[232] FAO, *Report of the Twenty-Sixth Session of the Committee on Fisheries* (n 11) para 86.
[233] D Freestone and Z Makuch, 'The New International Environmental Law of Fisheries' (1996) 7 Yearbook of International Environmental Law 3.
[234] Caddell (n 195) 60.
[235] Guidelines (n 14) Abstract.

obligations in respect of those areas. This implies that the law-making effect of the Guidelines stem from their identification of the typical sets of measures that States are expected to take when engaging in fishing activities in the deep seas. This represents an important step forward in the further development of the legal regime for DSFs, a regime traditionally characterized by a lack of substantive obligations and a large degree of State discretion. The Guidelines have introduced a degree of clarity and predictability to DSF State obligations, which not only recognizes the vulnerability of these species and ecosystems, but also shows an appreciation of their unique contribution to the marine environment and the urgent need to protect them.

V. CONCLUSION

This article has attempted to identify the law-making effects, if any, of the 2008 FAO Deep-Sea Fisheries Guidelines, by analysing and assessing how the Guidelines can be said to inform, interpret, and influence the content of the general high-sea fisheries obligations found in UNCLOS. Building on the courts' understanding of the evolutionary terms set out in these high-sea provisions, three 'clusters' of Guideline provisions were analysed. By evaluating their compatibility and development, it has been argued that the Guidelines offer an internationally accepted interpretation of the content of the due diligence obligation as it applies to the deep seas, setting out the measures and principles that States should comply with when engaging in DSFs. Furthermore, their adoption by consensus, together with the promising level of implementation and acceptance that has subsequently taken place, suggest that the international community now accepts that the Guidelines, despite their soft-law status, inform the content of such measures. For an area of the sea that is particularly vulnerable to the effects of fishing, and whose ecosystem and biodiversity are unique in their rarity and importance, the endorsement of the Guidelines by the international community may prove to be an important step in the right direction. Their adoption reflects a growing appreciation of the unique characteristics of the deep seas, and the urgent need to better conserve, manage, and protect the living resources found there.

The Deep-Sea Fisheries Guidelines are thus a powerful example of the role that soft-law instruments can play in the interpretative and evolutionary development of international law. This analysis supports the claim made by Boyle and Chinkin that 'once soft-law begins to interact with binding instruments its non-binding character may be lost or altered'.[236] This has clearly been the case in the interaction between UNCLOS and the Guidelines, as illustrated by the evolutionary interpretation adopted by the courts. The analysis has also shown that soft-law may inspire the creation of new, separate, hard law instruments, as exemplified by the amendment and

[236] Boyle and Chinkin (n 18) 213.

establishment of treaties relating to RFMOs. If nothing else, soft-law instruments may identify the standard by which legitimate conduct is evaluated and judged. Regardless of their non-binding nature, their acceptance and implementation by a large number of actors in the international sphere makes it more difficult to defend the legitimacy of non-conforming behaviour by the minority.[237] The Guidelines came about at the request of States and other relevant actors, first through the UNGA and then the FAO. Although deliberately written without the use of norm-creating language, the process of adoption, the level of implementation and, importantly, the request for review of the measures taken by States and RFMOs to implement them, give strong support to the claim that States do recognize the need for a common standard by which their efforts can be judged.

However, this article has also illustrated the need for flexibility in international law, particularly in those management areas still characterized by highly varying circumstances and a significant lack of scientific and geographical knowledge. In the management and preservations of DSFs, soft-law instruments like the Deep Sea Guidelines gives the relevant actors room to manoeuvre while at the same time making them aware of each other's activities, objections and expectations.[238] As highlighted by Adler, any community of practice simply requires that States 'must share collective understandings' of 'what they are doing and why'.[239] The FAO Deep Sea Fisheries Guidelines has allowed States not only to clarify their obligations under the legal regime for the law of the sea, but also to realize the urgent need for common, coordinated action to protect some of the most vulnerable areas on the planet.

[237] CM Chinkin, 'The Challenge of Soft Law: Development and Change in International Law' (1989) 38 ICLQ 866.
[238] ibid 866.
[239] E Adler, *Communitarian International Relations: The Epistemic Foundations of International Relations* (Routledge 2005).

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