

## **Regional Fisheries Management Organizations and the new biodiversity agreement: Challenge or opportunity?**

Running title: The BBNJ Treaty

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## **Abstract**

In 2018, the international community began formal intergovernmental negotiations over a new legally binding instrument for the protection of marine biodiversity of areas beyond national jurisdiction. Protecting marine biodiversity is imperative for a sustainable future and all the different organizations and agreements will have to work together to achieve this common goal. One of the first key principles to be agreed was to ‘not undermine’ the existing legal instruments or mandates of regional and sectoral marine governance organizations. While fisheries are not being discussed during the negotiations, a marine biodiversity agreement is likely to still impact regional fisheries management organizations, due to overlapping areas of interest. This article aims to firstly, assess the potential constraints posed by the commitment to ‘not undermine’; secondly, consider how aspects of the biodiversity agreement, such as area-based management and environmental impact assessments, might enhance regional fisheries management organizations; and thirdly, suggest meaningful ways to ensure cooperation between regional fisheries management organizations and the marine biodiversity agreement.

Keywords: binding agreement, conservation, fisheries management, high seas, marine resources, ocean governance

## 1 **Status of fisheries management on the high seas**

2 Globally, overfishing is a serious and increasing problem. The 2020 *State of the World Fisheries and*  
3 *Aquaculture* report produced by the United Nations Food and Agriculture Organization noted that 34.2%  
4 of all fished species were overfished (FAO, 2020). An adequate and effective fisheries management  
5 approach is key to improving the status of fish stocks (Hilborn et al., 2020). The key bodies responsible  
6 for fisheries management in areas outside national jurisdiction are Regional Fisheries Management  
7 Organizations (RFMOs). These organizations have the capacity to enforce legally binding measures on  
8 their members and can be separated into general RFMOs (i.e. managing non-straddling fish stocks) and  
9 tuna RFMOs (i.e. managing tuna and tuna-like species) (Ásmundsson, 2016). Almost all high seas areas  
10 outside the polar regions are covered by at least one tuna RFMO (Fig.1). Important gaps in the  
11 management of non-straddling fish stocks remain, as there are no general RFMOs managing the South-  
12 The exclusion of fish from the negotiations has constrained opportunities to explore ways to advance  
13 high seas fisheries management, noting that around 95% of high seas fish biodiversity is currently not  
14 under the management of any international agreement (Ortuño Crespo et al., 2019).

15 Insert Figure 1 here

16

17 Human activities in areas beyond national jurisdiction (ABNJ) are primarily governed by the 1982  
18 United Nations Convention on the Law of the Sea (UNCLOS) and related 1995 United Nations Fish  
19 Stocks Agreement (UNFSA). The UNFSA built on UNCLOS and promotes important elements of  
20 sustainable fisheries management and conservation including the precautionary approach (United  
21 Nations, 1995, Article 6) as well as reinforcing the functions of RFMOs (United Nations, 1995 Article  
22 10). However, the UNFSA concentrates on highly migratory and straddling fish stocks (i.e. stocks that  
23 move between EEZs and high seas areas) (United Nations, 1995). This leads to a gap in the management  
24 of discrete or non-migratory high seas fish stocks (i.e. fish stocks found only in high seas areas) (Munro  
25 et al., 2004). Moreover, this management framework is compromised by the failure of important fishing  
26 countries (such as the United States of America and Peru) to ratify UNCLOS and the emergence of new  
27 issues, such as exploitation of Marine Genetic Resources (MGRs), since its entry into force in 1994  
28 (Tiller et al., 2019). The ABNJ are also at the intersection of many sectorally (e.g. fishing, shipping and  
29 mining) and geographically divided organizations, resulting in a “fundamentally disjunctive and  
30 fragmentary system for the conservation and sustainable use of biodiversity in ABNJ” (Warner, 2015,  
31 p. 218).

32 This article aims to explore the potential impact of an agreement on biodiversity beyond national  
33 jurisdiction (BBNJ) on RFMOs. We argue that even though fisheries have been excluded from the  
34 BBNJ discussions, RFMOs will likely still be significantly impacted by, and have an influence on, the  
35 implementation of any agreement, due to overlapping areas of interest, and despite commitments that

36 the agreement will “not undermine” existing arrangements. The first section provides a short overview  
37 of existing agreements and initiatives regarding the conservation of marine ecosystems. This is followed  
38 by a detailed description of the BBNJ agreement. The last section summarizes potential outcomes and  
39 how they might impact upon RFMOs.

#### 40 **Setting the scene**

41 To address current gaps in ocean governance and increasing threats to biodiversity in ABNJ, including  
42 the high seas (i.e. water column) and the seabed (i.e. the ‘area’), in 2015 the United Nations General  
43 Assembly (UNGA) adopted a resolution to develop an international legally binding instrument under  
44 UNCLOS on the conservation and sustainable use of marine biological diversity in areas beyond  
45 national jurisdiction (UNGA, 2015a). The negotiations for this new instrument began in 2018 and the  
46 fourth and final intergovernmental conference on BBNJ was scheduled for late March 2020. However,  
47 due to the global COVID-19 pandemic, this conference has been postponed to a date to be determined  
48 by the UNGA (UNGA, 2020b). The current negotiations exclude fisheries, under a key negotiating  
49 principle not to undermine existing instruments, frameworks and bodies (Marciniak, 2017; UNGA,  
50 2017). The exclusion of fish from the negotiations has constrained opportunities to explore ways to  
51 advance high seas fisheries management, noting that around 95% of high seas fish biodiversity is  
52 currently not under the management of any international agreement (Ortuño Crespo et al., 2019).

53 The performance of regional fisheries management organization (RFMOs) has been widely criticised.  
54 These criticisms include failures to constrain fishing effort; the declines in many fish stocks; weak  
55 enforcement of conservation and management measures; and a general lack of compliance among  
56 member states with existing measures (see for example Cullis-Suzuki & Pauly, 2010; Juan-Jordá et al.,  
57 2017). There has been increasing pressure from governmental and non-governmental bodies on RFMOs  
58 to address these issues, including a call by the UNGA for all to undertake performance reviews (High  
59 Seas Task Force, 2006; UNGA, 2007). RFMOs have responded, with performance reviews addressing  
60 areas such as improved data collection; increased transparency in decision making; and implementing  
61 of re-building plans for target species reviews (Haas et al., 2019).

62 Best practice examples related to these areas exist (Haas et al., 2020b). Addressing important issues,  
63 such as the approach to decision-making within RFMOs, leads to a more resilient governance system,  
64 but also helps RFMOs respond to emerging issues. For example, decisions in RFMOs are generally  
65 made by consensus, with members having the option to opt-out and object to a particular measure (see  
66 for example Barkin & DeSombre, 2013; Willock & Lack, 2006). Approaches that require RFMO  
67 members to implement alternative measures, with the same effect as the measure that is the focus of  
68 their objection, provide a way forward (Haas et al., 2020b). An RFMO’s ability to deal with new issues  
69 is, however, influenced by the perspectives and positions of its member states.

70 Reducing the impact of fishing on bycatch species has been on the agenda of all RFMOs, and most  
71 RFMOs have implemented measures concerning the reduction of adverse impacts of fishing on species  
72 such as sharks, marine mammals and also the marine ecosystem (Haas, 2020). More, however, needs  
73 to be done; existing measures need to be enhanced to, for example, fully implement an ecosystem-based  
74 fisheries management approach (Juan-Jordá et al., 2017). This is a key area of action, as fishing has  
75 been identified as one of the major threats to marine biodiversity conservation. These examples provide  
76 some evidence to suggest RFMOs will be able to meet the challenges and opportunities posed by the  
77 BBNJ agreement.

78 The agreement on biodiversity beyond national jurisdiction (BBNJ) will join numerous international  
79 agreements, organizations and initiatives, which are addressing issues related to the ocean. Besides the  
80 United Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Fish Stocks  
81 Agreement (UNFSA), many non-binding agreements have enhanced the way fisheries are managed.  
82 The 1995 UN Food and Agriculture Organization's Code of Conduct for Responsible Fisheries and the  
83 UNGA Resolutions (e.g. UNGA Resolution 61/105 on adverse impacts of deep-sea fisheries) are  
84 examples of broadening and deepening of international engagement over fisheries in ABNJ. In 2015 a  
85 further initiative, the United Nations Sustainable Development Goals (SDGs), was adopted. The SDGs  
86 17 goals seek to achieve sustainable development across various social, economic, and ecological  
87 indicia. SDG 14 (Life Below Water), aiming to conserve and sustainably use the oceans, seas and  
88 marine resources for sustainable development, reinforces attention on the importance of sustainable use  
89 of ocean resources and environments. The seven main targets of SDG 14 summarize the major issues  
90 threatening the oceans, such as marine pollution, loss of biodiversity and overfishing.

91 Achieving SDG 14 will positively reinforce the achievement of other SDGs, such as SDG 1 – no poverty  
92 and SDG 2 – zero hunger (Singh et al., 2017), and will also reduce the impacts of climate change (SDG  
93 13 – climate action) (Laffoley et al., 2019). Contrary to other initiatives, the SDGs rely not only on the  
94 support of nation-states but also on existing intergovernmental organizations, non-governmental  
95 organizations and industries (Gupta & Nilsson, 2017; Kanie et al., 2019). To achieve SDG 14, a  
96 coherent areas beyond national jurisdiction (ABNJ) governance framework needs to be in place (UNGA,  
97 2015b). The BBNJ agreement is especially relevant for SDG 14.2, the protection and conservation of  
98 marine and coastal ecosystems, and SDG 14.5, the conservation of at least 10% of the marine and  
99 coastal ecosystem. This new agreement is seen as a way to set the direction for the conservation and  
100 sustainable use of the oceans and thus is an important step to support the implementation of the targets  
101 of SDG 14 (Gjerde et al., 2019).

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105 **The BBNJ agreement**

106 *The ‘package’*

107 Even though the outcomes of the BBNJ negotiations are yet to be decided, speculation regarding  
108 potential impacts of a new agreement on the current structure of marine resource management abound.  
109 The Ad Hoc Open-ended Working Groups and intergovernmental conferences to form a BBNJ  
110 agreement have focussed on a negotiation “package” of four issues; (i) use of marine genetic resources  
111 (MGRs) including access and benefit-sharing, (ii) area-based management tools (ABMTs) including  
112 marine protected areas (MPAs), (iii) environmental impact assessments (EIAs) for activities in high  
113 seas, and (iv) capacity building and technology transfer for developing countries (Wright et al., 2015).  
114 As all four issues in the BBNJ negotiation package might impact upon fisheries, below we describe in  
115 more detail the potential overlap. The need for capacity building and the transfer of marine technology  
116 plays an important role in all the first three issue areas, so is integrated broadly into their discussion,  
117 rather than addressed separately.

118 Use of MGRs has been one of the most contested topics in the negotiations for the BBNJ agreement. A  
119 strong political divide on this issue has been observed between developing countries and a group of  
120 developed countries (De Santo et al., 2020). The most common definition for MGRs is provided by the  
121 Convention on Biological Diversity (CBD) which provides “marine genetic resources refers to genetic  
122 material of marine plant, marine animal, microbial or other origin containing functional units of heredity  
123 which have an actual or potential value” (CBD, 1992, Art. 2). UNCLOS provides little guidance on  
124 access and benefit-sharing directed towards MGRs, as it was not an issue during its negotiation. At the  
125 BBNJ intergovernmental conferences countries considered whether or not to include fish as an MGR  
126 (Barnes, 2019). While the CBD’s definition of MGRs is perhaps wide enough to include fish (i.e. marine  
127 animal), a distinction might be made between fish as a genetic resource and fish as a commodity  
128 (Marciniak, 2017). Some countries such as Israel would like to see this distinction included in the draft  
129 BBNJ text (UNGA, 2020a). Discussion around the inclusion of fish as an MGR and potential  
130 management implications of such decisions are ongoing. However, Indonesia and Iceland proposed that  
131 it be noted in the treaty text that the management of fisheries is a separate issue from the BBNJ  
132 agreement (UNGA, 2020a). Thus, the BBNJ agreement would not interfere with the management of  
133 fish, but would only cover the genetic information of individual specimens of fish (Marciniak, 2017).

134 One of the most important topics of the BBNJ negotiations concerning fisheries management is ABMTs  
135 including MPAs. Similar to MGRs, members are struggling to agree on a definition for these tools and  
136 how they might be implemented (De Santo et al., 2020). Currently, ABMTs (including MPAs) are  
137 implemented by different regional and global organizations, such as fisheries closures by RFMOs  
138 (Marciniak, 2017), and it is important to take these arrangements into account during the BBNJ  
139 negotiations (Mendenhall et al., 2019). For example, the UNGA Resolution 61/105 on sustainable

140 fisheries is directed to the impact of bottom trawling and calls on states to identify vulnerable marine  
141 ecosystems (VMEs), which if encountered, should lead to a halt of bottom fishing in the area (UNGA,  
142 2007). During the BBNJ discussions, three potential versions for implementation of ABMTs have been  
143 proposed. The first option aims to use only existing organizations to implement these tools, while the  
144 second option advocates a global organization for the implementation of ABMTs, including MPAs.  
145 Thirdly, some countries proposed a hybrid model, which would divide ABMT competence among states  
146 or regional organizations and a global authority (Mendenhall et al., 2019; Tiller et al., 2019). For the  
147 last option, the new treaty could oversee the implementation of ABMTs by sharing best practices and  
148 thereby support existing organizations in applying a coherent management approach (Tiller et al., 2019).  
149 Having an independent organization might also help to overcome the *pacta tertiis* problem (i.e. only  
150 states which have joined treaties and bound to them), which exempts non-member states from  
151 conservation and management measures taken by the respective organization (such as RFMOs)  
152 (Marciniak, 2017). However, at this stage, important questions are still unresolved concerning how to  
153 establish ABMTs and MPAs (when relevant instruments already exist) and how coordination between  
154 various scales of governance might work (De Santo et al., 2020).

155 The final topic element in the BBNJ negotiations that may overlap with the activities of RFMOs is that  
156 of environmental impact assessment (EIA). UNCLOS addresses EIAs only indirectly and does not  
157 require fisheries to conduct EIAs (Barnes, 2016). The BBNJ discussions on EIAs primarily concern  
158 issues relating to who should conduct the assessments (i.e. a scientific or technical body, or states  
159 themselves) and whether EIA processes need to be prescribed, or simply subject to broad guidelines  
160 (De Santo et al., 2020). It is still unclear if activities such as fishing might need an EIA, but the UNGA  
161 resolution concerning VMEs could act as a guide concerning EIAs for fisheries, as they require an  
162 assessment of whether bottom fishing activities adversely impact the respective ecosystems (Marciniak,  
163 2017).

164

### 165 ***The issue of “not undermining”***

166 As mentioned in the introduction, fishing has been excluded from the BBNJ discussions to avoid  
167 undermining existing fisheries management organizations. The exact meaning of “not undermining”  
168 has not been defined (Scanlon, 2018) with this ambiguity allowing negotiations to move forward  
169 (Mendenhall et al., 2019). At the BBNJ conferences states frequently referred to “not undermining”,  
170 albeit in different contexts, when discussing the four package elements described above (De Santo et  
171 al., 2020; Mendenhall et al., 2019). Not undermining is open to different interpretations with  
172 considerable attention and debate in the peer-reviewed literature (see for example Barnes, 2019;  
173 Friedman, 2019; Gjerde et al., 2019).

174 The term “undermining” already appears in the UNFSA and refers to the need to not undermine the  
175 effectiveness of existing organizations and regulations (Gjerde et al., 2019). Gjerde et al. (2019) suggest  
176 using the UNFSA as guidance for the new BBNJ agreement to address the uncertainties related to this  
177 term and to strengthen existing organizations. However, Barnes argues that in the BBNJ agreement “not  
178 undermining” refers to compliance, rather than institutional effectiveness, and thus the definition in the  
179 UNFSA should not be applied (Barnes, 2019). There are several options for how the term “not  
180 undermining” can be put into practice, for example, the term could only be used to refer to the rules and  
181 mandates of existing organizations so that the new agreement will fill in where governance gaps have  
182 been identified (Barnes, 2019). While all these different interpretations of ‘undermining’ have their pros  
183 and cons, Barnes (2019) warns that a strong definition and application of this term may well “perpetuate  
184 the existing fragmented nature of ocean governance” (p. 11).

### 185 **Implications for future fisheries management**

186 Even though fisheries have been excluded from the discussions, regional fisheries management  
187 organizations (RFMOs) will be impacted by the outcomes of the agreement for biodiversity beyond  
188 national jurisdiction (BBNJ) due to the package of elements within the agreement, such as area based  
189 management tools (ABMTs) and environmental impact assessments (EIAs) (Marciniak, 2017). RFMOs  
190 are, therefore, paying close attention to the BBNJ negotiations and some have attended the  
191 intergovernmental conferences as observers. The new BBNJ agreement might indirectly strengthen the  
192 performance of the RFMOs, due to the need to reduce the impact of fisheries on marine biodiversity.  
193 RFMOs are working towards improving their performance in areas such as harvest control rules and  
194 limiting catch of bycatch species such as sharks and rays (Haas et al., 2020a), but is recognised that  
195 their ability to address issues is influenced by the interests and political will of their constituent members.

196 Depending on the final content of the BBNJ agreement, member states could use RFMOs as a platform  
197 to comply with their duties under the BBNJ agreement and to protect marine biodiversity. Several  
198 interviews with key stakeholders have shown that even when RFMOs do not expressly acknowledge or  
199 address an international agreement, it might still indirectly influence RFMOs due to their member states  
200 who have signed the respective agreement (Haas et al., 2020a). The successful implementation of an  
201 effective BBNJ agreement will rely on the support of regional and sectoral organizations, such as  
202 RFMOs, in the establishment of a robust governance framework (Thomson et al., 2020).

203 The BBNJ agreement has significant potential to increase cooperation among existing marine  
204 governance organizations. While the mandate of most RFMOs is restricted towards the conservation  
205 and sustainable use of their target stocks, the new BBNJ agreement could complement the conservation  
206 aspect of RFMOs, for example by strengthening the ecosystem-based approach for fisheries  
207 management, or by providing a common and consistent framework for states to follow (Ortuño Crespo  
208 et al., 2019). Although due to the principle of “not undermining” existing organizations, the BBNJ

209 agreement cannot impose any direct controls on fishing activities (De Santo et al., 2020), RFMOs and  
210 the BBNJ agreement could form a Memorandum of Understanding (MoU), a non-binding agreement  
211 which is has been previously used in cooperation between RFMOs and other international organizations  
212 (Rochette et al., 2015; Scanlon, 2018). An MoU could overcome mandate limitations and thereby lead  
213 to increased protection of marine ecosystems, as shown in the MoU between OSPAR (the Convention  
214 for the Protection of the Marine Environment of the North-East Atlantic) and NEAFC (the North-East  
215 Atlantic Fisheries Commission) which resulted in MPAs in the North-East Atlantic. An MoU could  
216 determine the exact interaction with RFMOs and the BBNJ agreement and outline areas of future  
217 cooperation. For example, the sharing of data and scientific information, which will be imperative to  
218 successfully managing biodiversity in the high seas (Ortuño Crespo et al., 2019). Sharing data and  
219 scientific information, via an especially designated committee, which would have the ability to collect  
220 and distribute data, would also reduce the costs for the member states.

221

## 222 **Conclusion**

223 This article provides an overview of the intersection between regional fisheries management and the  
224 negotiations over the proposed agreement on biodiversity beyond national jurisdiction (BBNJ). While  
225 the outcomes of the BBNJ negotiations are still to be finalised, it is clear the BBNJ agreement will  
226 likely have significant implications for regional fisheries management organizations (RFMOs), due to  
227 common areas of interest. Even though fisheries have been excluded from the discussions, through the  
228 “not undermining” principle, the four topics in the package of issues on the table at the BBNJ  
229 negotiation sessions have significant intersections with the mandates and activities of RFMOs as  
230 existing organizations, institutions and arrangements. One option to secure RFMO’s engagement with  
231 the outcomes of BBNJ negotiations might be to develop a subsidiary statement such as a Memorandum  
232 of Understanding (MoU). While the proposed treaty text for the BBNJ agreement concentrates on broad  
233 governance issues, the MoU could focus on RFMOs mandates to protect marine biodiversity. This  
234 might address challenges arising in the implementation of the BBNJ agreement in terms of area based  
235 management tools (ABMTs) (especially the use of marine protected areas (MPAs)) and environmental  
236 impact assessments (EIAs). The phrase “not undermine” will ultimately shape the relationship between  
237 the BBNJ agreement and RFMOs and the new agreement will likely face the difficult task to conserve  
238 marine biodiversity without addressing fishing activities. This highlights the influence of RFMOs, that  
239 while protected by the “not undermine” principle in the BBNJ agreement, will have the potential to  
240 constrain or undermine the BBNJ agreement’s ability to advance attention to biodiversity issues in  
241 fisheries management. Building strong institutional linkages with RFMOs will therefore likely be an  
242 important step in managing the future of high seas marine resources

243

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246

247 **Data Availability Statement**

248 Data sharing not applicable to this article as no datasets were generated or analysed during the current  
249 study.

250

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369 **Figure legend:**

370 **Figure 1:** Geographical distribution of general (➡) and tuna (➡) RFMOs. Retrieved from Haas et al. (2020b).

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