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***FISHERIES LAW REGULATION AND BIODIVERSITY PROTECTION IN THE  
ARCTIC OCEAN***

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*Ai miei nonni che mi hanno cresciuto.  
Ai miei genitori che mi hanno sempre sostenuto,  
appoggiando ogni mia decisione  
fin dalla scelta del mio percorso di studi.  
Infine, dedico questa tesi a me stesso,  
ai miei sacrifici e alla mia tenacia  
che mi hanno permesso di arrivare fin qui.*

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## TABLE OF ABBREVIATIONS

|        |  |
|--------|--|
| ABNJ   | Areas beyond national jurisdiction   |
| AEPS   | Arctic environmental protection strategy   |
| AHL    | Allowable harvest level  |
| AMAP   | Arctic monitoring and assessment programme   |
| AMSA   | Arctic marine shipping assessment  |
| BAT    | Best available technique   |
| BET    | Best environmental practices   |
| CAFF   | Conservation of Arctic flora and fauna   |
| CAO    | Central Arctic Ocean   |
| CAOFA  | Central Arctic Ocean Fisheries Agreement   |
| CBD    | Convention on Biological Diversity   |
| CCAMLR | Convention on the Antarctic Marine Living Resources  |
| CCMPR  | Convention on the Conservation and Management of the Pollock Resources in the Central Bering Sea |
| CLCS   | Commission on the Limits of the Continental Shelf  |
| COFI   | FAO Committee on Fisheries   |
| DSF    | Deep-sea fishery   |
| DSU    | Dispute Settlement Understanding   |
| DWFN   | Distant water fishing nation   |
| EcoQO  | Ecological Quality Objective   |
| EEA    | European Economic Area   |
| EEZ    | Exclusive Economic Zone  |
| EFTA   | European Free Trade Association  |
| EPPR   | Emergency Prevention Preparedness and Response   |
| EU     | European Union   |
| FAO    | Food and Agriculture Organization  |
| FCMA   | Fishery Conservation and Management Act  |
| GATT   | General Agreement on Tariffs and Trade   |

|          |  |
|----------|--|
| GES      | Good Environmental Status  |
| GNP      | Gross National Profit  |
| HELCOM   | Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area                   |
| HSVAR    | High Seas Vessels Authorization Record   |
| ICC      | Inuit Circumpolar Conference   |
| ICES     | International Council for the Exploration of the Sea   |
| ICSID    | International Centre for Settlement of Investment Disputes   |
| ICJ      | International Court of Justice   |
| INQ      | Individual national quota  |
| IPOA-IUU | International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing |
| ISA      | International Seabed Authority   |
| ITLOS    | International Tribunal for the Law of the Sea  |
| IUU      | Illegal, Unreported and Unregulated Fishing  |
| JNRFC    | Joint Norwegian-Russian Fisheries Commission   |
| MPA      | Marine Protected Area  |
| MSFD     | Marine Strategy Framework Directive  |
| NEAFC    | North East Atlantic Fisheries Commission   |
| NSSH     | Norwegian spring-spawning herring  |
| OSPAR    | Convention for the Protection of the Marine Environment of the North-East Atlantic                       |
| PAME     | Protection of the Arctic Marine Environment  |
| POP      | Persistent organic pollutant   |
| PSM      | Port State Measure   |
| PSMA     | Agreement on Port State Measures   |
| RFMO     | Regional Fisheries Management Organization   |
| SAI      | Significant adverse impact   |
| SAO      | Senior Arctic Officials  |



|        |   |
|--------|---|
| SEAFO  | South East Atlantic Fisheries Organization                  |
| SFPZ   | Svalbard Fisheries Protection Zone                          |
| SSB    | Spawning stock biomass                                      |
| TAC    | Total allowable catch                                       |
| UN     | United Nations  |
| UNCED  | United Nations Conference on Environment and<br>Development |
| UNCLOS | United Nations Convention on the Law of the Sea             |
| UNFSA  | United Nations Fish Stocks Agreement                        |
| UNGA   | United Nations General Assembly                             |
| USA    | United States of America                                    |
| USSR   | Union of Soviet Socialist Republics                         |
| VME    | Vulnerable marine ecosystem                                 |
| VMS    | Vessel monitoring system                                    |
| WTO    | World Trade Organization                                    |

## INTRODUCTION

Over 150 fish stocks find their habitat in Arctic waters.<sup>1</sup> However, the Arctic Ocean is populated by a few species. The most numerous species are: Atlantic and Pacific cod, Greenland cod, walleye pollock, capelin, long rough dab, yellowfin sole, Atlantic and Pacific herring, redfish, Greenland halibut and polar cod.<sup>2</sup>

Climate change has had a profound impact on the fish population mentioned through particular phenomena such as changes in growth, metabolic or reconstructive processes or changes in their biological environment.<sup>3</sup> Since fish are ectothermic, that is, cold-blooded, temperature is the determinant environmental factor.<sup>4</sup> Climate change could affect the abundance of the fish stocks by primarily conditioning recruitment, as recruitment patterns are largely affected by oceanographic processes such as mixing and distribution of prey at the initial moment of life, local wind patterns.<sup>5</sup>

Climate change could be a leading factor in modifying the abundance, size, distribution and concentration of prey in addition to the quantity and allocation of predators.<sup>6</sup> Temperature in particular is a crucial aspect in determining the distribution patterns of fish stocks as most of them tend to prefer a specific temperature range.<sup>7</sup> Thus, climate change can result in the reduction or widening of the range of distribution of a

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<sup>1</sup> Andrew J Norris and Patrick McKinley, 'The central Arctic Ocean-preventing another tragedy of the commons', in *Polar Record*, Vol.53 N.1 (201701), pp. 43-51, 26 October 2016, at p. 44.

<sup>2</sup> Dan Liu, 'The 2015 Oslo Declaration on Arctic High Seas Fisheries: The Starting Point Towards Future Fisheries Management in the Central Arctic Ocean', *Arctic Yearbook*, pp. 1-28, 2017, at p. 7.

<sup>3</sup> F. Boscolo-Galazzo, K.A. Crichton et al., 'Temperature dependency of metabolic rates in the upper ocean: A positive feedback to global climate change?', *Global and Planetary Change*, Volume 170, November 2018, Pages 201-212, at p. 205.

<sup>4</sup> Willy Østregren, "The post-Cold War Arctic: Challenges and transition during the 1990s," in *Arctic Development and Environmental Challenges: Information needs for decision-making and international co-operation*. Ringkjøbing/Gentofte: Scandinavian Seminar College, distributed by Erling Olsens Forlag, 1997; Papers from a Nordic Policy Seminar, Arendal, Norway, September 8–10, 1996, pp. 33–49, at p. 35.

<sup>5</sup> Hongsik Kim, Ana C. Franco and U. Rashid Sumaila, 'A Selected Review of Impacts of Ocean Deoxygenation on Fish and Fisheries', *Fishes* 2023, 8(6), 316, at p. 6.

<sup>6</sup> Aïssa Morin, Simon Chamaillé and Marion Valeix, 'Climate Effects on Prey Vulnerability Modify Expectations of Predator Responses to Short- and Long-Term Climate Fluctuations', *Front. Ecol. Evol.*, 22 January 2021, Sec. Population, Community, and Ecosystem Dynamics, Volume 8 – 2020, at p. 3.

<sup>7</sup> Richard J Bell, Brian Grieve, Marta Ribera, John Manderson, Dave Richardson, 'Climate-induced habitat changes in commercial fish stocks', *ICES Journal of Marine Science*, Volume 79, Issue 8, pp. 2247–2264, October 2022, at p. 2251.

certain stock.<sup>8</sup> In the current climate change scenarios, the extension to the poles of the distribution area of numerous fish species is highly likely.<sup>9</sup>

There are four main ecosystems and fishing areas in the Arctic region: the Northeast Atlantic (the Barents and Norwegian Seas), the North Central Atlantic (it includes the sea area around Iceland, Greenland) the Newfoundland and Labrador Seas and the Bering Sea.<sup>10</sup>

In the Arctic live some of the most commercially exploited fish stocks in the world such as the Pacific salmon and Atlantic cod.<sup>11</sup> The AMSA report showed that fishing vessels represent the largest group of naval activities in the Arctic marine area, with a share of more than 50% of total shipping activity.<sup>12</sup> By 2004, about 1600 fishing vessels were active in the region, with most of the fishing in the Arctic taking place in the Bering and Barents Seas, on the west coast of Greenland and around the Iceland and the Faroe Islands.<sup>13</sup>

Due to the melting of glaciers, fishing in the Arctic is set to increase in the coming years. However, it is tough to predict where new fishing opportunities will arise and for which species.<sup>14</sup> In the meanwhile, it is not accessible to forecast which States will benefit, which will be disadvantaged and how subsistence fishing will be influenced, especially with regard to competition in commercial fishing.<sup>15</sup> In this context, the effects

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<sup>8</sup> Richard J. Bell, David E. Richardson, Jonathan A. Hare, Patrick D. Lynch, Paula S. Fratantoni, 'Disentangling the effects of climate, abundance, and size on the distribution of marine fish: an example based on four stocks from the Northeast US shelf', *ICES Journal of Marine Science*, Volume 72, Issue 5, May/June 2015, Pages 1311–1322, at p. 1314.

<sup>9</sup> Bryony L. Townhill, Elena Couce, Jonathan Tinker, Susan Kay and John K. Pinnegar, 'Climate change projections of commercial fish distribution and suitable habitat around north western Europe', *Fish and Fisheries*, Volume 24, Issue 5, pp. 848-862, September 2023, at p. 852.

<sup>10</sup> Erik J. Molenaar and Richard Caddell, 'Background Paper – Arctic Fisheries', *Arctic Transform*, 9 February 2009,

<sup>11</sup> WWF-Norway, WWF International Arctic Programme, Factsheet, Effects of Climate Change on Arctic Fish, Oslo February 2008, p. 1, available at [http://awsassets.panda.org/downloads/arctic\\_fish\\_factsheet.pdf](http://awsassets.panda.org/downloads/arctic_fish_factsheet.pdf); approximately 40 % of the United States' commercial fisheries (by weight) stem from the Bering Sea and about half of the fish consumed in the European Union is from the European Arctic.

<sup>12</sup> Arctic Marine Shipping Assessment 2009 Report, Arctic Council, April 2009, available at: [http://www.pame.is/images/stories/PDF\\_Files/AMSA\\_2009\\_Report\\_2nd\\_print.pdf](http://www.pame.is/images/stories/PDF_Files/AMSA_2009_Report_2nd_print.pdf), p. 4

<sup>13</sup> Solveig Glomsrød and Iulie Aslaksen, 'The Economy of the North', *Statistics Norway Oslo–Kongsvinger*, December 2006.

<sup>14</sup> James Overland, Edward Dunlea, Jason E. Box, Robert Corell, Martin Forsius, Vladimir Kattsov, Morten Skovgård Olsen, Janet Pawlak, Lars-Otto Reiersen and Muyin Wang, 'The urgency of Arctic change', *Polar Science* Volume 21, September 2019, pp. 6-13, at p. 9.

<sup>15</sup> Robert Pomeroy, John Parks, Karina Lorenz Mrakovcich and Christopher LaMonica, 'Drivers and impacts of fisheries scarcity, competition, and conflict on maritime security', *Marine Policy* Volume 67, May 2016, Pages 94-104, at p. 97.

of other human activities that could augment because of climate change must be taken into account: maritime shipping and mining can compete with or affect fisheries, such as pollution.<sup>16</sup>

However, overfishing raises a significant threat to Arctic fish populations.<sup>17</sup> More than 50% of the regional stocks of cod, haddock and whiting in the Northeast Atlantic are close to collapse.<sup>18</sup> When in 2004 the Arctic Council issued a scientific report called “the Arctic Climate Impact Assessment”, it was found that the global consequences of climate change are likely to be less important than fisheries policies and their implementation.<sup>19</sup> According to the report, the determining factor in predicting the future of fisheries is constituted by sound resource management practices, which in general are partially dependant on the properties and efficiency of the resource management regime.<sup>20</sup>

An example supporting this statement is the collapse of northern cod off Newfoundland and Labrador.<sup>21</sup> In summary, the substantial effect of climate change on fish stocks and commercial fisheries in the Arctic is uncertain, since the adaptation of management structures will play an important role.<sup>22</sup>

The causes highlighted so far (climate change, consequent displacement and reduction of fish stocks in different sea areas) are scaling back the abundance of fish stocks in the Arctic Ocean. The States catching in these waters, often disregarded by the status of these stocks and driven by their own economic interests, initiate fishing activities that lead to overfishing. In light of the current international regulatory framework, will it be feasible to achieve optimal governance of the four high seas areas of the Arctic Ocean

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<sup>16</sup> Elena Gissi, Elisabetta Manca, Antonios D. Mazaris, Simonetta Fraschetti, Vasiliki Almpantidou, Stanislao Bevilacqua, Marta Coll, Giuseppe Guarnieri, Elena Lloret-Lloret, Marta Pascual, Dimitra Petza, Gil Rilov, Maura Schonwald, Vanessa Stelzenmüller and Stelios Katsanevakis, ‘A review of the combined effects of climate change and other local human stressors on the marine environment’, *Science of the Total Environment*, Volume 755, Part 1, 10 February 2021, 142564, pp. 1-14, at p. 6.

<sup>17</sup> Erik J. Molenaar, ‘Arctic Fisheries Conservation and Management: Initial Steps of Reform of the International Legal Framework,’ in *The Yearbook of Polar Law*, ed. Gudmundur Alfredsson and Timo Koivurova, 427–64 1 (Leiden Boston: Martinus Nijhoff Publishers, 2009), at 433.

<sup>18</sup> Mikhail Gorbachev, *The Speech in Murmansk at the ceremonial meeting on the occasion of the presentation of the Order of Lenin and the Gold Star Medal to the city of Murmansk: October 1, 1987* (Moscow: Novosti Press Agency, 1987), p. 730.

<sup>19</sup> Hjálmar Vilhjálmsson and Alf Hákon Hoel, ‘Fisheries and Aquaculture’, in *Arctic Climate Impact Assessment*, Cambridge University Press, 2005.

<sup>20</sup> *Ibid.*, p.770

<sup>21</sup> *Ibid.*, p.692

<sup>22</sup> Andrea Bryndum-Buchholz, Derek P. Tittensor and Heike K. Lotze, ‘The status of climate change adaptation in fisheries management: Policy, legislation and implementation’, *Fish and Fisheries*, Volume 22, Issue 6, November 2021, Pages 1248-1273, at p. 1253.

(the Banana Hole in the Norwegian Sea, the Loophole in the Barents Sea, the Central Arctic Ocean and the Donut Hole in the Central Bering Sea)? Do international regulatory tools provide suitable and consistent responses to the problems of overexploitation of fish stocks in these areas?

To answer these questions, the matters that the four high seas areas of the Arctic Ocean are currently facing will be stressed and a detailed and balanced analysis will be given showing how fisheries stakeholders in these areas have moved to address this problem. In order to accomplish this task, various approaches will be employed. The thesis will use a descriptive method where it is necessary to give the coordinates of events that marked a certain region of the high seas; for instance, the great collapse of the pollock in the Donut Hole, the cod war in the Loophole or the mackerel war in the Banana Hole. The normative approach will certainly not be lacking and will be central as various provisions of conventions, treaties or agreements that can be applied to certain issues will be analysed to resolve ongoing or unresolved disputes.

In the first chapter, the discourse starts by providing a framework of all the international legal instruments available to resolve disputes concerning fishing on the high seas of the Arctic Ocean. The strengths and the weaknesses of the most relevant provisions are the object of focused analysis.

The second chapter moves on to describe the Arctic coastal States and the delimitations of their maritime borders. A deep examination of the respective claims and disputes is offered here.

In the third chapter, the particular governance system of the Banana Hole in the Norwegian Sea is analysed. The management of fishing activities has not always been easy as it is demonstrated by certain events that have occurred in the region such as the mackerel war and the Atlanto-Scandian herring arbitration. The issues raised and the solutions found are discussed in the chapter. It is argued here that the manners in which problems were solved in this area can serve as example of good governance to be applied in other similar contexts.

In the fourth chapter, the Loophole fishery is examined, looking in particular at what the role of the coastal States has been and how Iceland has insisted on involving distant water fishing nations in the bilateral decision-making process of coastal States.

Particular attention is given to the analysis of the Trilateral Loophole Agreement, which represents the current governance agreement of this high seas area.

Moving to the fifth chapter, the focus is brought on the management of the Central Arctic Ocean. This chapter depicts the various steps that were taken to reach an agreement that protects the vulnerable and still unexplored ecosystem from possible aggressive and unscrupulous exploratory fishing.

The last area of the Arctic Ocean – namely, the Donut Hole – is the object of the sixth chapter. The latter addresses the collapse of one of the largest fisheries in the world: the Pollock fishery. The causes of the decline are explained and the Convention signed by the Parties to promote the careful exploitation of the resource is analysed in detail. Finally, in order to analyse its effectiveness the Convention is compared to other legal tools such as the UNFSA and the FAO Compliance Agreement.

Having described the various areas of the Arctic Ocean, the international issues raised therein and the international regulatory solutions that have been developed by the States concerned, the present Thesis offers some final remarks on the prospects for a more cooperative and environmentally sound management of one of the most precious areas of our planet: the Arctic.

## CHAPTER I

### 1.1 The International Regulation of the Arctic Ocean

Arctic fishing is legally framed as fishing on the high seas. As such, it falls under the following international treaty law: the United Nations Convention on the Law of the Sea (UNCLOS), the United Nations Fish Stocks Agreement (UNFSA), the FAO Compliance Agreement and Code of Conduct for Responsible Fisheries, the Agreement on Port State Measures to Prevent Illegal, Unreported and Unregulated (IUU) Fishing and the International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.<sup>23</sup>

#### 1.1.1 United Nations Convention on the Law of the Sea (UNCLOS)

As in any other part of the oceans, the different maritime zones existing in the Arctic Ocean are: internal waters, territorial seas, EEZ, continental shelves, deep seabed beyond the limit of the national jurisdiction called Area and high seas.<sup>24</sup> UNCLOS recognizes sovereignty to each coastal State over its internal waters, archipelagic waters and territorial seas, overlying airspace and its seabed and subsoil. In these areas, the coastal State has exclusive access and control of living and non-living marine resources.<sup>25</sup>

Each of the five Arctic Ocean coastal States (Kingdom of Norway, Kingdom of Denmark, Russian Federation, USA and Canada) has demanded an EEZ in waters beyond and adjacent to their own territorial sea.<sup>26</sup> In that zone, the coastal State shall enjoy sovereign rights for the purpose of exploring, exploiting, managing and conserving the living and non-living natural resources of the overlying waters of the seabed, the seabed

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<sup>23</sup> Erik J. Molenaar, 'Status and Reform of International Arctic Fisheries Law' in *Arctic Marine Governance: Opportunities for Transatlantic Cooperation*, pp. 103-125, edited by E. Tedsen, S. Cavalieri and R. Andreas Kraemer, March 2013, at p. 111.

<sup>24</sup> Joanna Mossop and Clive Schofield, 'Biodiversity beyond National Jurisdiction and the Limits of the Commons', in *Marine Biodiversity of Areas beyond National Jurisdiction* 285, pp. 285-306, Leiden; Boston: Brill | Nijhoff, 2021, at p. 293.

<sup>25</sup> Dorota Pyc, 'The Role of the Law of the Sea in Marine Spatial Planning', in *Maritime Spatial Planning: past, present, future*, 24 January 2019, pp. 375-395, at p. 381.

<sup>26</sup> Tullio Scovazzi, 'Sovereignty over Land and Sea in the Arctic Area', *Agenda Internacional Año XXIII* N° 34, 2016, pp. 169-196, at p. 174.

and their subsoil.<sup>27</sup> Moreover, in the same zone such States shall have jurisdiction for the construction and use of artificial islands, marine scientific research and the protection and conservation of the marine environment as expressed in article 56 UNCLOS.<sup>28</sup>

The maximum width of the EEZ shall be 200 nm as measured by the baselines determined in accordance with article 57 UNCLOS.<sup>29</sup> Each of the coastal States of the Arctic also enjoys exclusive sovereign rights for the exploration of the continental shelf and the exploitation of its natural resources.<sup>30</sup> The continental shelf may extend over 200 nm from the point where the baseline is adequately drawn if the established geological criteria in article 76 UNCLOS are met.<sup>31</sup>

For the contracting Parties to UNCLOS, the Convention establishes a procedure for the establishment of the outer limits of the continental shelf over 200 nm.<sup>32</sup> If the coastal State sets forth its external limits on the basis of the recommendation of the Convention's Commission on Continental Shelf Limits (CLCS), the limits are considered conclusive and binding.<sup>33</sup> The establishment of the outer limit of the continental shelf is of extreme importance to the coastal States of the Arctic Ocean considering the enormous resources that are expected to be found there.<sup>34</sup>

The first among the Arctic States to request an extension of the outer limit of the continental shelf was the Russian Federation.<sup>35</sup> On 20 December 2001, pursuant to article

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<sup>27</sup> Robert Beckman and Tara Davenport, 'The EEZ Regime: Reflections after 30 Years', LOSI Conference Papers, Papers from the Law of the Sea Institute, UC Berkeley–Korea Institute of Ocean Science and Technology Conference, held in Seoul, Korea, May 2012, pp. 1-41, at p. 23.

<sup>28</sup> Ibid.

<sup>29</sup> J. Ashley Roach and Robert W. Smith, 'Exclusive Economic Zone', in *Excessive Maritime Claims*, Series: Publications on Ocean Development, Volume 73, January 2012, pp. 161-180, at p. 173.

<sup>30</sup> Wojciech Janicki, 'Why Do They Need the Arctic? The First Partition of the Sea', *Arctic*, Vol. 65, No. 1, March 2012, pp. 87-97, at p. 92.

<sup>31</sup> Bjørn Kunoy, 'Assertions of entitlement to the outer continental shelf in the Central Arctic Ocean', *The International and Comparative Law Quarterly*, Vol. 66, No. 2, April 2017, pp. 367-409, at p. 387.

<sup>32</sup> Gian Pierre Campos Maza, 'The legal regime of the continental shelf and the establishment of the outer limits of the continental shelf beyond the 200 nautical miles', *The United Nations-Nippon Foundation Fellowship Programme 2011 – 2012*, Divisions for Oceans Affairs and the Law of the Sea office of legal affairs, The United Nations, New York, 2012.

<sup>33</sup> B. Kunoy, 'The Terms of Reference of the Commission on the Limits of the Continental Shelf: A Creeping Legal Mandate', in *Leiden Journal of International Law*, Vol.25 N.1, (201203), February 2012, pp. 109-130, at p. 115.

<sup>34</sup> Christian Reichert, 'Determination of the Outer Continental Shelf Limits and the Role of the Commission on the Limits of the Continental Shelf', in *The International Journal of Marine and Coastal Law*, pp. 387-399, January 2009, at p. 394.

<sup>35</sup> Viatcheslav Gavrilov, Ted L. McDorman, Clive Schofield, 'Canada and Russian Federation: Maritime Boundaries and Jurisdiction in the Arctic Ocean', *Arctic Review on Law and Politics*, Vol. 13 (2022), pp. 219-231, at p. 221.



76 UNCLOS, the Russian Federation submitted its first request to the CLCS containing scientific material supporting an extension of the continental shelf comprising four distinct regions: two in the Arctic and two in the North-West Pacific.<sup>36</sup> This proposal was presented only 4 years after the ratification of UNCLOS by Russia and well within the ten-year period set out in article 4 of Annex II.<sup>37</sup> Taking into account the extension, in total the Russian continental shelf amounts to 1.2 million square kilometers.<sup>38</sup> In the submission, Russia extends the outer limit to the geographical north pole and into the Central Arctic Ocean Basin along two large features of the Amerasia Basin: the LR and the AM.<sup>39</sup>

The outer limits of submission in the Amerasian Basin combine a border agreement with the US, the sector line extending from the geographical north pole and the lines measuring 100 nm from the isobate of 2500 m along the LR.<sup>40</sup> From the north pole moving westward, the outer boundary line joins with the foot-of-slope measurements relative to the GR in the Eurasian Basin and the outer limits extending north of the West Siberian platform.<sup>41</sup> In the Eurasian Basin the GR is excluded from the submission. In the Barents Sea, the Russian Federation applies the sectoral principle, in line with the state practice used in negotiations with Norway.<sup>42</sup>

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<sup>36</sup> Russian Federation, Executive Summary (20 December 2001) at:

[http://www.un.org/Depts/los/clcs\\_new/submissions\\_files/submission\\_rus.htm](http://www.un.org/Depts/los/clcs_new/submissions_files/submission_rus.htm) at 14 May 2008.

<sup>37</sup> Article 4 of Annex II, LOSC reads: 'a coastal state . . . shall submit particulars of such limits to the Commission along with supporting scientific and technical data as soon as possible but in any case, within 10 years of the entry into force of this Convention for that State.' A decision by the States Parties in 1999 has effectively extended the timeframe for states that signed LOSC prior to 1999 to 2009, ten years following the 13 May 1999 decision. See SPLOS/72 of 29 May 2001, Decision Regarding the Date of Commencement of the Ten-Year Period for Making Submissions to the Commission on the Limits of the Continental Shelf set out in Article 4 of Annex II to the United Nations Convention on the Law of the Sea at: at 30 April 2008. A further decision in 2008 states that a coastal state may satisfy the ten-year deadline by submitting preliminary information indicative of the outer limits accompanied by an indication of the status of the preparation, and intended date, for a full submission.

<sup>38</sup> 'Russia presents 1.2 million square kilometers Arctic claim to the UN', in High North News, published in 2016, available at <https://www.highnorthnews.com/nb/russia-presents-12-million-square-kilometers-arctic-claim-un>

<sup>39</sup> Mel Weber, 'Defining the Outer Limits of the Continental Shelf across the Arctic Basin: The Russian Submission, States' Rights, Boundary Delimitation and Arctic Regional Cooperation', in the International Journal of Marine and Coastal Law 24 (2009), pp. 653-681, at p. 660.

<sup>40</sup> Agreement between the United States of America and the Union of Soviet Socialist Republics on the maritime boundary, done at Washington 01 June 1990 (29 ILM 1990, p. 942).

<sup>41</sup> Supra note 39.

<sup>42</sup> Ibid.

The CLCS recommended Russia to submit a revised proposal regarding its continental shelf extension in the Central Arctic Ocean.<sup>43</sup> Between December 2001 and June 2002, the CLCS examined the Russian submission and made a number of recommendations.<sup>44</sup> It recommended that upon the entry into force of the maritime delimitation agreements with the US in the Bering Sea and Norway in the Barents Sea, Russia will forward the maps and coordinates of the demarcation line to the commission, as they would represent the outer limits of the continental shelf for Russia in those seas.<sup>45</sup> In August 2015, Russia provided additional data and on February 9, 2016 it formally submitted a revised application to the CLCS. This question contained comprehensive new evidence of the claims including those of large continental shelf under the North Pole.<sup>46</sup> On 31 March 2021, the Russian government presented two additional elements to the agreement at the revised 2015 presentation at the CLCS. Currently, the claims of the Russian continental shelf includes about 700,000 square kilometers.<sup>47</sup>

In 2006, Norway was the second Arctic State to claim an extension of its outer limit to the CLCS.<sup>48</sup> Denmark and the Faroe Islands followed in 2009 with a partial presentation regarding the continental shelf north of the Faroe Islands and in 2010 with a limited submission south of the continental shelf of the Faroe Islands.<sup>49</sup> Data collecting for the submission of an application in the north, north-east and south Greenland is still

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<sup>43</sup> UN General Assembly, Oceans and the law of the sea, Report of the Secretary-General, Addendum, 8 October 2002, UN Doc. A/57/57/Add.1, para 41.

<sup>44</sup> UN Publication A/57/57/Add.1 of 08 October 2002, Report of the Secretary-General of the United Nations to the Fifty-seventh Session of the United Nations General Assembly under the agenda item Oceans and the Law of the Sea, New York, at: at 14 May 2008, para. 38-41.

<sup>45</sup> Ibid. at para. 39.

<sup>46</sup> Valentin A. Koshkin, 'Delimitation of the Continental Shelf in the Central Arctic Ocean: Is It Possible Nowadays?', in Arctic Review on Law and Politics, Vol. 13, 2022, pp. 393-406, at p. 394.

<sup>47</sup> Martin Breum, "Russia extends its claim to the Arctic Ocean seabed," in Arctic Today, 2022, available at <https://www.arctictoday.com/russia-extends-its-claim-to-the-arctic-ocean-seabed/>

<sup>48</sup> CLCS, Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Kingdom of Norway, submitted 27 November 2006, available at [http://www.un.org/depts/los/clcs\\_new/submissions\\_files/submission\\_nor.htm](http://www.un.org/depts/los/clcs_new/submissions_files/submission_nor.htm)

<sup>49</sup> Partial Submission of the Government of the Kingdom of Denmark together with the Government of the Faroes to the Commission on the Limits of the Continental Shelf, The Continental Shelf North of the Faroe Islands, submitted 29 April 2009, at [http://www.un.org/Depts/los/clcs\\_new/submissions\\_files/dnk28\\_09/dnk2009executivesummary.pdf](http://www.un.org/Depts/los/clcs_new/submissions_files/dnk28_09/dnk2009executivesummary.pdf) and Partial Submission of the Government of the Kingdom of Denmark together with the Government of the Faroes to the Commission on the Limits of the Continental Shelf, The Southern Continental Shelf of the Faroe Islands, submitted 2 December 2010, at [http://www.un.org/depts/los/clcs\\_new/submissions\\_files/dnk54\\_10/SFM-Executive\\_Summary\\_secure.pdf](http://www.un.org/depts/los/clcs_new/submissions_files/dnk54_10/SFM-Executive_Summary_secure.pdf)

underway.<sup>50</sup> Instead, the USA and Canada are in the process of gathering scientific data needed to support their claims, somehow working jointly.<sup>51</sup>

Article 234 UNCLOS guarantees coastal States the right to adopt and apply non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from ships in ice-covered areas within the limits of the EEZ. Particularly harsh climatic conditions and the presence of ice covering such areas for much of the year creates uncommon obstructions and risks to navigation. Furthermore, pollution of the marine environment could cause serious damage or irreversible threat to the ecological balance.<sup>52</sup> The laws and regulations of coastal States must consider respect for navigation, protection of the marine environment and must be based on the best available scientific evidence.<sup>53</sup>

Many times, article 234 UNCLOS has been referred to as Arctic article.<sup>54</sup> It was negotiated directly between the former Soviet Union, the USA and Canada.<sup>55</sup> It is the only provision of the UNCLOS part XII that ensure coastal States the right within their EEZ to adopt and enforce their laws for the prevention, reduction and control of marine pollution under the circumstances set out in the article.<sup>56</sup> It represents a *lex specialis*, especially with regard to articles 211(5) and (6) UNCLOSS and shall prevail when applied to a specific geographical area.<sup>57</sup> This area is singled out by the climatic conditions mentioned in the article.<sup>58</sup> This formulation raises various interpretative

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<sup>50</sup> Denmark Ministry of Science, Technology and Innovation, The Continental Shelf Project, available at [http://a76.dk/lng\\_uk/main.html](http://a76.dk/lng_uk/main.html)

<sup>51</sup> Foreign Affairs and International Trade Canada, Third Canada-U.S. Joint Continental Shelf Survey to Showcase Scientific Cooperation in the Arctic, 2010.

<sup>52</sup> Robert Neil Huebert, 'Article 234 and Marine Pollution Jurisdiction in the Arctic', in *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction*, pp. 249-267, 2001, at p. 255.

<sup>53</sup> Jan Jakub Solski, "The 'Due Regard' of article 234 of UNCLOS: Lessons from Regulating Innocent Passage in the Territorial Sea", in *Ocean Development & International Law*, Volume 52, pp. 398-418, 2021 – Issue 4, p. 402.

<sup>54</sup> Myron H Nordquist, Shabtai Rosenne and A. Jankov, 'United Nations Convention on the Law of the Sea, 1982: a commentary / Vol. 4, Articles 192 to 278, Final act, Annex VI / Shabtai Rosenne and Alexander Yankov vol. eds.; Neal R. Grandy ass. ed.', in *United Nations Convention on the Law of the Sea, 1982 Dordrecht [etc.]: Nijhoff, cop. 1991.*

<sup>55</sup> Erik Franckx, 'Should the Law Governing Maritime Areas in the Arctic Adapt to Changing Climatic Circumstances?', in *California Western International Law Journal*, Vol. 41 No.2 (2011231): 4, 2011.

<sup>56</sup> Jan Jakub Solski, 'The Genesis of Article 234 of the UNCLOS', *Ocean Development & International Law*, Volume 52, pp. 1-19, 2021 – Issue 1, p. 10.

<sup>57</sup> Roberto Virzo, 'Competência dos Estados Costeiros Relativa à Segurança da Navegação Marítima: tendências recentes', in *Sequencia: Publicação do Programa de Pós – Graduação em Direito da UFSC*, v. 36 n. 71 (2015), pp. 19-42, at p. 27.

<sup>58</sup> *Supra* note 56, at p. 11.

doubts. According to the Committee on Coastal State Jurisdiction relating to marine pollution of the International Law Association, the article is not clear at all.<sup>59</sup>

Controversial is the implementation of article 234 UNCLOS to international straits. Article 233 UNCLOS, which exempts the application of provisions on marine pollution to international straits, does not mention article 234 UNCLOS by implying that this article is applicable to international straits.<sup>60</sup> Furthermore, no provision excludes ice-covered straits from the regime of international straits established in part III UNCLOS.<sup>61</sup> The UNCLOS negotiating States did not deal with the issue, probably to prevent Canada and the USA from taking a position on the status of the North-West passage.<sup>62</sup>

Article 234 UNCLOS could however become unenforceable to the Arctic as soon as the amount and continuance of sea ice cover decreases due to climate change.<sup>63</sup> Sooner or later most of the Arctic could be officially certified as not covered by ice for most of the year.<sup>64</sup>

UNCLOS is the main international legal instrument establishing the general rights and duties of States for the conservation and sustainable use of living marine resources.<sup>65</sup> Fishing is one of the high seas freedoms guaranteed by article 87 UNCLOS that should be carried out with respect and consideration to the interests of other States in their exercise of high seas prerogatives.<sup>66</sup>

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<sup>59</sup> Jan Jakub Solski, 'Northern Sea Route Permit Scheme: Does Article 234 of UNCLOS Allow Prior Authorization?', in *Ocean Yearbook Online*, pp. 443-472, July 2021, at p. 457.

<sup>60</sup> Donat Pharand, 'The Northwest Passage in International Law', *The Canadian Yearbook of International Law*, Vol.17 (1980), 99-133, at 123.

<sup>61</sup> Nilufer Oral, 'Navigating the Oceans: Old and New Challenges for the Law of the Sea for Straits Used for International Navigation', *Ecology Law Quarterly*, Vol. 46, No. 1 (2019), pp. 163-190, at 171.

<sup>62</sup> Michael Byers and Suzanne Lalonde, 'Who controls the Northwest Passage?', *Vanderbilt Journal of Transnational Law* Vol. 42, No. 4 (2009), pp. 1133-1210, at 1182.

<sup>63</sup> Amanda H Lynch, Charles H Norchi and Xueke Li, 'The interaction of ice and law in Arctic marine accessibility', in *Proceedings of the National Academy of Sciences*, Vol. 119 No.26 (20220628), 2022, at pp. 1-3.

<sup>64</sup> 'Predicting the Future of Arctic Ice', National Centers for Environmental Information – National Oceanic and Atmospheric Administration, published on 28 February 2020, see <https://www.ncei.noaa.gov/news/arctic-ice-study#:~:text=Predictions%20using%20statistical%20models%20applied,2034%20as%20the%20most%20likely>.

<sup>65</sup> Philippe Sands, 'Principles of international environmental law', 2nd ed. (Cambridge: Cambridge Univ. Press, 2003), at 568.

<sup>66</sup> UN General Assembly, 'United Nations Convention on the Law of the Sea', article 87, opened for signature on 10 December 1982 and entered into force on 14 November 1994, available at [https://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf)

Article 116-120 UNCLOS focus on the conservation and management of high seas living resources. According to these provisions, all States have the right to engage in fishing on the high seas as long as three requirements are met: firstly, they must abide by treaty obligations which allow States to restrict their freedom to fish under cooperative fishing regulations. In addition States fishing on the high seas must take into account the rights and interests of coastal States as set forth by UNCLOS.<sup>67</sup>

Finally, conforming to articles 117-119, member Parties must respect the principles for exploitation on the high seas.<sup>68</sup> Article 117 affirms that States must take measures for their nationals that are necessary for the protection of the living marine entities of the high seas and cooperate with other countries to achieve this end.<sup>69</sup> This provision addresses the principle of flag State jurisdiction over fishing vessels on the high seas.<sup>70</sup> The quasi-exclusive jurisdiction of the flag State over vessels harvesting on the high seas is a significant limitation on effective safeguard of living marine resources.<sup>71</sup> Owing to the fact that all States enjoy the right to fish on the high seas, flag States often lack the ability to effectively exercise jurisdiction over vessels engaged in the generally large areas of the high seas.<sup>72</sup> Problems arising from ineffective exercise of flag State jurisdiction were not considered in the drafting of the UNCLOS provisions on the conservation of living species in international waters.<sup>73</sup>

Article 118 highlights the obligation of cooperation between States that exploit the same living resources or are committed in the utilization of the same area in terms of conservation and management.<sup>74</sup> This duty is weak because it does not assert what conservation measures should be implemented in practice nor how States should collaborate.<sup>75</sup> Furthermore, the duty to cooperate is not directed toward achieving a

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<sup>67</sup> Ibid. artt 116-120

<sup>68</sup> Ibid. artt.117-120

<sup>69</sup> Ibid. art 117

<sup>70</sup> Ellen Hey, 'The regime for the exploitation of transboundary marine fisheries resources: The United Nations law of the Sea Convention Cooperation between states', (Dordrecht: Nijhoff, 1989); Utrecht, Univ., Diss., 1989., at p. 50.

<sup>71</sup> Stuart B. Kaye, International fisheries management, International environmental law and policy series, (The Hague: Kluwer Law International, 2001), at p. 146.

<sup>72</sup> Ibid.

<sup>73</sup> Lan Ngoc Nguyen, 'Jurisdiction and Applicable Law in the Settlement of Marine Environmental Disputes under UNCLOS', The Korean journal of international and comparative law, pp. 337-353, December 2021, at p. 344.

<sup>74</sup> See note 66, article 118

<sup>75</sup> Shigeru Oda, 'Fisheries under the United Nations Convention on the Law of the Sea', American Journal of International Law 77 (1983), pp. 739-755, at 751.

positive outcome. It appears from the provision that it is sufficient for States to enter negotiations in good faith by being able to continue catching on the high seas without an effective cooperative conservation mechanism which can cope with a hypothetical failure of the phase of negotiations between countries.<sup>76</sup>

Article 119 provides with some indication of the conservation measures to be taken. It requires States to adopt rules to maintain or restore populations of caught species at levels that can produce the highest sustainable yield to take into account effects on associated or dependant species harvested. Various provisions of the Convention concern fish species which are not only fished on the high seas but also in other areas.<sup>77</sup>

Article 63 paragraph 2 deals with straddling stocks occurring within one or more exclusive economic zones (EEZs) or within an EEZ and an adjacent high seas zone. It envisages that the coastal State and the States fishing for such stocks in the adjacent area shall seek, either directly or through appropriate subregional or regional organisations, to agree on measures to protect those stocks.<sup>78</sup> As well as the duty to cooperate with regard to the management of biological marine resources of the high seas, this article contains a mere *pactum de negotiando* which is not subject to positive outcome.<sup>79</sup>

Article 64 provides for a similar obligation to cooperate in relation to highly migratory stocks such as tuna.<sup>80</sup> For anadromous stocks that are those living at sea but spawning in fresh water (i.e. salmon), the Convention prohibits fishing outside the EEZ except where such a rule would result in an economic dislocation for a State other than the State of origin.<sup>81</sup> In such special circumstances, the States concerned shall hold consultations with a view to reach an agreement on the terms and conditions of such fishing, taking into account the conservation needs and the interests of the State of origin in relation to those stocks. Instead, the catadromous stocks live in fresh water but reared in salt water (for instance eel) and must be caught only within the EEZ as dictated by article 67 paragraph 2.<sup>82</sup>

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<sup>76</sup> Supra note 8, p.149.

<sup>77</sup> Rudiger Wolfrum, Volker Rohen and Fred L. Morrison, 'Preservation of the Marine Environment', in *International, regional, and national environmental law*, ed. Fred L. Morrison and Rudiger Wolfrum, pp. 225–284 (The Hague; Boston: Kluwer Law International, 2000), at 235.

<sup>78</sup> Supra note 66, art. 63(2)

<sup>79</sup> Supra note 8, p.158.

<sup>80</sup> Supra note 66, art 64

<sup>81</sup> Supra note 66, art. 66(3)

<sup>82</sup> Supra note 66, art 67 (2)

Sedentary species are found in the continental shelf and are organisms that during the catching phase are motionless above or below the seabed or are not able to move except in continuous physical contact with the seabed or subsoil. These species are subject to the exclusive right of exploitation of the coastal State within the meaning of article 77.<sup>83</sup> However, to what extent can the right of sovereignty of the coastal State be exercised for the conservation of these species located in the continental shelf?<sup>84</sup> The right of the coastal States to prevent the exploration and exploitation of natural resources implicitly entails the more or less extensive right to regulate certain types of fishing activities, such as trawling that are conducted on the high seas, beyond the continental shelf but could have negative effects on sedentary species.<sup>85</sup> Moreover, the exercise of this right must not breach or determine unjustified interference with navigation and other rights and freedoms of other States, as laid down in article 78 paragraph 2.<sup>86</sup>

UNCLOS provisions for deep-sea fishing shows that no adequate regime for the conservation and management of marine resources is currently present.<sup>87</sup> The principle of freedom of the high seas has undergone some minor changes with UNCLOS because all States are free to engage in fishing activities in international waters but these activities are subordinate to the treaty's obligations and rights, duties and interests of coastal States.<sup>88</sup> Although States must adopt measures for the protection of living resources on the high seas, UNCLOS provides too little guidance on conservation rules to consider and does not prescribe sufficiently detailed minimum standards.<sup>89</sup> It also lacks requirements for the development and operation of Regional Fisheries Management Organisations (RFMOs) and the Convention is based entirely on the application by the flag States.<sup>90</sup>

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<sup>83</sup> Supra note 66, art 77(4)

<sup>84</sup> Joanna Mossop, 'Protecting Marine Biodiversity on the Continental Shelf Beyond 200 Nautical Miles', *Ocean Development & International Law* 38 (2007), pp. 283–304, at p. 289.

<sup>85</sup> E.J. Molenaar, 'Unregulated Deep-Sea Fisheries: A Need for a Multi-Level Approach,' *International Journal of Marine and Coastal Law* 19, no. 3 (2004), pp. 223–246, at 245.

<sup>86</sup> Moritaka Hayashi, 'Global Governance of Deep-Sea Fisheries,' *International Journal of Marine and Coastal Law* 19, no. 3 (2004), pp. 289–298, at p. 293.

<sup>87</sup> Chuanliang Wang, Qian Zhao and Yen-Chiang Chang, 'On the legal status of marine fishery resources: From the perspectives of international fishery law', *Heliyon*, Volume 9, Issue 4, pp. 1-8, April 2023, at p. 3.

<sup>88</sup> Julie R. Mack, 'International Fisheries Management: How the U.N. Conference on Straddling and Highly Migratory Fish Stocks Changes the Law of Fishing on the High Seas,' *California Western International Law Journal* 26 (1995–1996), pp. 313–333, at p. 317.

<sup>89</sup> See note 66, art 118

<sup>90</sup> Alison Rieser, "International Fisheries Law, Overfishing and Marine Biodiversity," *The Georgetown International Environmental Law Review* 9 (1996–1997), pp. 251–280, at p. 271.

### 1.1.2 United Nations Fish Stocks Agreement

After the entry into force of the UNCLOS, it was immediately clear that this Convention still left too much freedom for fishing on the high seas.<sup>91</sup> The demonstration was the collapse of several fish stocks such as the cod in the Northwest Atlantic or the pollock in the Bering Sea.<sup>92</sup>

In order to pinpoint and evaluate matters linked to the conservation of straddling and highly migratory fish stocks, outline means for better cooperation between States and make appropriate recommendations, the United Nations Conference on Straddling and Highly Migratory Fish Stocks was held on the request of the United Nations (UN) General Assembly in April 1993.<sup>93</sup> This meeting resulted in the adoption of the UNFSA.<sup>94</sup> All eight Arctic States have ratified the Agreement and are Parties of it. Its purpose is to ensure the long-term conservation and sustainable use of straddling and highly migratory fish stocks through the effective implementation of the relevant provisions of UNCLOS.<sup>95</sup> Many articles of the Agreement aim to ease the application of the pertinent UNCLOS provisions by indicating specific measures to be taken.<sup>96</sup>

UNFSA is built around three pillars:

1. conservation and management principles,
2. compliance measures and
3. dispute settlement.<sup>97</sup>

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<sup>91</sup> Ellen Hey, 'Developments in International Fisheries Law', The Hague; Boston: Kluwer Law International, October 2021, at p. 28.

<sup>92</sup> Kevin M. Bailey, 'An Empty Donut Hole: The Great Collapse of a North American Fishery', *Ecology and Society*, Vol. 16, No. 2 (Jun 2011), pp. 1-13, at p. 2.

<sup>93</sup> Tore Henriksen, Geir Hønneland and Are Sydnes, 'Law and politics in ocean governance: The UN fish stocks agreement and regional fisheries management regimes', *Publications on Ocean Development*, Volume 52, (Leiden: Nijhoff, 2006), at p. 11.

<sup>94</sup> UN General Assembly (48<sup>th</sup> sess.: 1993-1994), 'United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks', New York, 4 August 1995, entered into force 11 December 2001, available at [http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXI-7&chapter=21&lang=en](http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXI-7&chapter=21&lang=en)

<sup>95</sup> *Ibid.*, article 2,

<sup>96</sup> Moritaka Hayashi, 'The 1995 UN Fish Stocks Agreement and the Law of the Sea,' in *Order for the oceans at the turn of the century*, ed. Davor Vidas and Willy Østreng, (The Hague; Boston: Kluwer Law International, 1999), pp. 37–53, at 38.

<sup>97</sup> Andrew Serdy, 'New entrants, old problem: allocation principles in the UN Fish Stocks Agreement and other treaties', in *The New Entrants Problem in International Fisheries Law*, pp. 43-140, Cambridge University Press, February 2016, at p. 51.



For fisheries management, the agreement presented new concepts. Member States are required to apply the precautionary and ecosystem approaches to fisheries management and ensure that the measures to be adopted are based on the best available scientific evidence.<sup>98</sup> In addition, UNFSA has also drawn up the duties of the flag State that UNCLOS has never been able to angle accurately. The measures include control of vessels on the high seas by means of fishing licenses, authorisations or permits; establishment of a national register of vessels authorised to fish in international waters; requirements for recording and timely reporting of the vessel's position, catches of target and non-target species, requirements to verify the catch of target and non-target species through means such as observation programmes, discharge reports, transshipment supervision, monitoring of landed catches and market statistics.<sup>99</sup>

Unlike the UNCLOS which presents only very broad and imprecise provisions on the role of regional and subregional organisations or on the management of straddling and highly migratory fish stocks, UNFSA, thanks to the contribution of several articles, enhances these issues.<sup>100</sup> First, the agreement stipulates that States must follow the path of cooperation for the management and conservation of straddling and highly migratory stocks directly or through appropriate RFMOs.<sup>101</sup> Subsequently, it is stated that where such organisations or the Agreement itself are competent to set up conservation measures for the stocks above mentioned, States fishing for those stocks and coastal States should make the duty of cooperation operational by becoming members of such organisations or by taking part to the agreement.<sup>102</sup> Only those countries which fulfil the obligation to cooperate or apply the measures enacted by the competent organisations will have access to the fishery resources in which they are concerned.<sup>103</sup> In the absence of a relevant RFMO, the UNFSA declares that the States concerned must cooperate to establish such a fisheries management organisation or enter into specific negotiations to ensure good

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<sup>98</sup> Supra note 94, artt 5 and 6

<sup>99</sup> Ibid. art 18(3)

<sup>100</sup> Yannick J. Roucou, 'The Inclusion of Fisheries in a New Internationally Legally Binding Instrument for the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction', United Nations-Nippon Foundation of Japan Fellowship, pp. 1-108, December 2017, at p. 21.

<sup>101</sup> Supra note 94, art. 8(1)

<sup>102</sup> Ibid. art. 8(3)

<sup>103</sup> David A. Balton, 'Strengthening the Law of the Sea: The New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks', *Ocean Development and International Law* (1996), 27, pp. 125– 151, at 138.

management of the fish stocks to be exploited.<sup>104</sup> The agreement also sets out exhaustively the minimum requirements for the establishment of the RFMO, their functions, the rights of new member Parties and standards of transparency.<sup>105</sup>

The third key point of the UNFSA is represented by the provisions on the peaceful settlement of disputes.<sup>106</sup> The scope of the UNCLOS dispute settlement procedures shall also apply to those States that would not be bound by the UNCLOS and would be applicable to any contention between States Parties to the UNFSA, regardless of their membership of UNCLOS.<sup>107</sup> Likewise, the UNCLOS dispute resolution provisions apply to any controversy between members to the UNFSA concerning the two kind of stocks covered by the Agreement.<sup>108</sup> This leads to a substantial restriction in the application of the UNFSA as it only concerns straddling and highly migratory fish stocks.<sup>109</sup> In the Arctic, the new fishing prospects are also likely to affect anadromous species.<sup>110</sup> UNFSA does not deal with these stocks, leaving only the precarious and incomplete UNCLOS provisions as a concrete legal framework.<sup>111</sup> Although harvesting such stocks on the high seas is forbidden by the UNCLOS, there are exceptions that create gaps in safeguarding the sustainable management of these living marine resources.<sup>112</sup>

It has been showed that UNFSA elaborates and expands the UNCLOS provisions.<sup>113</sup> However, its limited scope leaves a noteworthy gap as this Convention does not apply to fish stocks that are not highly migratory or straddling.<sup>114</sup> This means that

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<sup>104</sup> Supra note 94, art. 8(5)

<sup>105</sup> Ibid. articles 9-12

<sup>106</sup> Michael W. Lodge and Satya N. Nandan, 'Some Suggestions towards Better Implementation of the United Nations Agreement on Straddling Fish Stocks and Highly Migration Fish Stocks of 1995', *International Journal of Marine and Coastal Law* 20 (2005), pp. 345–379, at p. 352.

<sup>107</sup> Supra note 94, art. 30(1)

<sup>108</sup> Tullio Treves, 'The Settlement of Disputes According to the Straddling Stocks Agreement of 1995', in *International Law and Sustainable Development: past achievements and future challenges*, pp.253-269, Oxford University Press, edited by Alan Boyle and David Freestone, September 1999, at p. 262.

<sup>109</sup> André Tahindro, 'Sustainable Fisheries: The Legal Regime of the 1995 United Nations Fish Stocks Agreement and Its Contribution to Subsequent Developments Promoting Sustainable Fisheries', In *Legal Order in the World's Oceans: UN Convention on the Law of the Sea*, Center for Oceans Law and Policy, Volume 21, April 2018, pp. 323-369, at p. 352.

<sup>110</sup> E.J. Molenaar, 'Climate Change and Arctic Fisheries,' in *Climate governance in the Arctic*, Environment and Policy, Volume 50, edited by Timo Koivurova, E. Carina H. Keskitalo, Nigel Bankes, pp. 145-169, 2009, at p. 165.

<sup>111</sup> Erik J. Molenaar and Robert Corell, 'Arctic Shipping: Background paper', *Arctic Transform*, 12 February 2009, at p. 18.

<sup>112</sup> John Warren Kindt, 'The Law of the Sea: Anadromous and Catadromous fish stocks, Sedentary Species, and the highly migratory species', *Syracuse Journal of International Law and Commerce*, Vol. 11, No. 1 [1984], Art. 3, pp. 9-46, at p. 17.

<sup>113</sup> See note 46

<sup>114</sup> Ibid.

deep-sea fish stocks do not fall within its scope, which in particular results in a lack of protection for deep-sea fish species that are threatened by bottom fishing.<sup>115</sup> Although the application of the UNFSA to deep-sea fish stocks has been encouraged by the UNGA and the FSA Review Conference, there is no legal obligation to do so.<sup>116</sup>

States fishing on the high seas and coastal States are personally obligated to take measures to conserve such fish stocks in areas under their jurisdiction and of vessels flying their flag fishing on the high seas.<sup>117</sup> These are required to cooperate in the conservation and management of fish stocks.<sup>118</sup> States have some flexibility in meeting this obligation: they may cooperate directly or through a regional fisheries management organization (RFMO).<sup>119</sup> Under the UNFSA, the obligation is precise: States (the Arctic States in our case) must become members of the RFMO or agree to implement its conservation and management measures.<sup>120</sup> This represents a condition for access to regulated fisheries on the high seas.<sup>121</sup> Therefore, active cooperation has become a criterion for allocation of fishing rights on the high seas.<sup>122</sup>

Straddling fish stocks and highly migratory species are transboundary by definition.<sup>123</sup> It means they are distributed in areas under the jurisdiction of one or more coastal States and in the adjacent areas of the high seas.<sup>124</sup> These stocks are subject to various management regimes: in areas under the national jurisdiction, the coastal State

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<sup>115</sup> Richard Caddell, 'Deep-Sea Bottom Fisheries and the Protection of Seabed Ecosystems: Problems, Progress and Prospects', in *The Law of the Seabed: Access, Uses, and Protection of Seabed Resources*, Publications on Ocean Development, Volume 90, pp. 255-284, January 2020, at p. 263.

<sup>116</sup> Richard Caddell, 'Precautionary Management and the Development of Future Fishing Opportunities: The International Regulation of New and Exploratory Fisheries', *The International Journal of Marine and Coastal Law* 33 (2018), pp. 199-260, at pp. 203-204.

<sup>117</sup> Francisco Orrego Vicuña, 'The International Law of High Seas Fisheries: From Freedom of Fishing to Sustainable Use', in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, Olav Schram Stokke (ed.), May 2001, pp. 22-52, at p. 35.

<sup>118</sup> *Supra* note 66, Article 63(1) and (2), Article 64 and Article 118.

<sup>119</sup> Bianca Haas, Jeffrey McGee, Aysha Fleming and Marcus Haward, 'Factors influencing the performance of regional fisheries management organizations', in *Marine Policy*, Volume 113, March 2020, 103787, pp. 1-9, at p. 4.

<sup>120</sup> *Supra* note 94, Article 8(3)

<sup>121</sup> *Supra* note 94, article 8(4)

<sup>122</sup> Tore Henriksen, 'Allocation of Fishing Rights: Principles and Alternative Procedures', In *Challenges of the Changing Arctic*, Series: Center for Oceans Law and Policy, Volume: 19, 9789004314252, Brill | Nijhoff, January 2016, pp.522-558, at p. 531.

<sup>123</sup> Juliano Palacios-Abrantes, Gabriel Reygondeau et al., 'The transboundary nature of the world's exploited marine species', *Scientific Reports*, Volume 10, Article number 17668, pp. 1.12, 21 October 2020, at p. 2.

<sup>124</sup> *Ibid.*

has sovereign rights to manage, conserve and exploit the stock.<sup>125</sup> On the high seas, the competent RFMO shall regulate the catches and utilisation of the stock in accordance with article 10 (a)-(b) of the UNFSA.<sup>126</sup> RFMOs may have member States with different and sometimes conflicting interests.<sup>127</sup> If the principles of the UNFSA have to be properly applied, it is necessary to coordinate the measures of the coastal States and the relevant RFMO for the shared stock.<sup>128</sup> Whether this is not accomplished, the TACs may exceed the levels deemed sustainable leading to overfishing and the collapse of the stock.<sup>129</sup>

Article 7 paragraph 2 of the UNFSA responds to the needs to coordinate measures between the parties involved and to counter potential conflicts between different jurisdictions by requiring compatibility among measures established for fishing on the high seas and those for harvesting in areas under national jurisdictions.<sup>130</sup>

Article 7 UNFSA encompasses both material and procedural obligations in the management of straddling fish stocks.<sup>131</sup> According to paragraph 2 of the same provision, an essential obligation for the coastal States concerned and the States fishing on the high seas is to cooperate in order to achieve compatible measures for the fish stock.<sup>132</sup> This obligation should be framed in the context of the obligation for coastal States and States catching on the high seas to cooperate through RFMOs for the adoption of measures for the conservation and management of stocks on the high seas.<sup>133</sup> When the member States of a RFMO agree on measures linked to a specific stock, they must be compatible with the measures laid down by the coastal States concerned.<sup>134</sup> Paragraphs 4 and 6 of the article 7 UNFSA provide for procedures in situations where the States involved cannot

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<sup>125</sup> Supra note 66, article 56(1)(a),

<sup>126</sup> Erik Jaap Molenaar, 'Addressing Regulatory Gaps in High Seas Fisheries', in *The International Journal of Marine and Coastal Law*, Vol. 20, No. 3-4, p. 533-570, 2005, at p. 546.

<sup>127</sup> Supra note 119, at p. 5.

<sup>128</sup> Michael Lodge, 'Managing International Fisheries: Improving Fisheries Governance by Strengthening Regional Fisheries Management Organizations', Chatham House, Energy, Environment and Development Programme EEDP BP 07/01, March 2007, pp. 1-8, at p. 3. <https://www.chathamhouse.org/sites/default/files/public/Research/Energy,%20Environment%20and%20Development/bpfisheries0307.pdf>

<sup>129</sup> Ibid.

<sup>130</sup> Sean D. Murphy, 'Taking Stock of the 'Compatibility Requirement': What Limitations Does It Impose for High Seas Fishing?', in *Persistent and Emerging Challenges in International Fisheries Law* (Bjørn Kunoy, ed.) (Brill, Forthcoming), pp. 1-21, 9 May 2023, at p. 7.

<sup>131</sup> Supra note 108, at p. 257.

<sup>132</sup> Supra note 94, article 7(2)

<sup>133</sup> Supra note 131, at p. 258.

<sup>134</sup> Michael W. Lodge, David Anderson et al., 'Recommended Best Practices for Regional Fisheries Management Organizations: Report of an independent panel to develop a model for improved governance by Regional Fisheries Management Organizations', Chatham House, 2007, at p. 35.

agree on compatible measures to be taken for a given stock in a reasonable timeframe.<sup>135</sup> UNFSA dispute resolution procedures are mentioned. This inclusion indicates a need for rapid resolution of conflicts in the event of unresolved conservation and stock management problems.<sup>136</sup>

Article 7(2)(a)-(c) UNFSA takes into account three factors concerning conservation and management measures for a specific stock.<sup>137</sup> States should take into consideration the conservation measures agreed by coastal States within their national jurisdiction and at the same time the conservation measures taken by RFMO responsible for the same stock in the adjacent areas of the high seas.<sup>138</sup> In these three listed factors, the UNCLOS is the pivotal point since the measures of the coastal States must be adopted in compliance with article 61 UNCLOS while the measures adopted for the high seas are taken having regard to the rules of UNCLOS as well.<sup>139</sup>

As far as conservation and management measures of straddling fish stocks are concerned, article 5 and 6 of the UNFSA are pertinent as they provide with conduct obligations for coastal States and States fishing on the high seas.<sup>140</sup> For the measures to be compatible, it is necessary to fulfil the States' conservation measures for each of them.<sup>141</sup> Since the content of these obligations is not clear at all, it could represent a cause of dispute between coastal States and States fishing on the high seas if those measures meet the compatibility requirement.<sup>142</sup> Member States must take into account the measures adopted for straddling and highly migratory fish stocks, therefore it is natural that a consolidated and well-established practice in the management and conservation of

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<sup>135</sup> Supra note 94, article 7 (4) – (6)

<sup>136</sup> Bianca Haas, Camille Goodman et al., 'Fact or fiction? Unpacking the terminologies used in fisheries allocation discussions', *Marine Policy*, Volume 152, June 2023, 105630, pp. 1-7, at p. 2.

<sup>137</sup> Supra note 94, art. 7(2)(a)-(c)

<sup>138</sup> Robin R. Churchill and Daniel Owen, 'The international framework of fisheries management', in *The EC Common Fisheries Policy*, Oxford EC Law Library, pages 75–128, March 2010, at p. 84.

<sup>139</sup> Camille Goodman, 'The Framework for Coastal State Jurisdiction over Fishing in the EEZ', in *Coastal State Jurisdiction over Living Resources in the Exclusive Economic Zone*, Oxford University Press, November 2021, pp. 25-62, at p. 45.

<sup>140</sup> C. Hedley, E.J. Molenaar and A.G. Elferink, 'The implications of the UN Fish Stocks Agreement (New York, 1995) for Regional Fisheries Organisations and International Fisheries Management', European Parliament Directorate-General for Research, Fisheries Series, FISH 112 EN, pp. 1-94, January 2004, at p. 57.

<sup>141</sup> Alex G Oude Elferink, 'The determination of compatible conservation and management measures for straddling and highly migratory fish stocks', in *Max Planck yearbook of United Nations law*, Vol. 5, p. 551-607, 2001, at p. 567.

<sup>142</sup> Alex G Oude Elferink, 'Coastal States and MPAs in ABNJ: Ensuring Consistency with the LOSC', in *The International Journal of Marine and Coastal Law*, V.33 N.3 (20180822), pp. 437-466, 2018, at p. 449.

these stocks should be developed.<sup>143</sup> This will ensure predictability in the conservation and management of stocks for both coastal States and those engaged in catching on the high seas.<sup>144</sup> States may only disregard established practice if they have good reason to do so.<sup>145</sup> In any case, this makes sense since States are only bound to take into account the measures but there is no any obligation of compliance.<sup>146</sup>

However, in performing its role in the conservation and management of straddling fish stocks, the competent RFMOs are required to take the precautionary approach for the exploitation of such stocks and must consider to undertake fishing activities in the broadest ecosystem scenario to protect living marine resources and protect the marine environment.<sup>147</sup>

The precautionary approach constitutes a significant change and shift from the mainstream fisheries management approach, which used to respond to fish stocks management matters only after they reached critical levels.<sup>148</sup> This approach requires RFMOs caution when information about a fish stock is uncertain, unreliable or inadequate and the effect of harvesting on that stock has uncertain consequences for the ecosystem itself.<sup>149</sup> The specific actions to be taken in carrying out fishing activities must be based on the best available scientific information.<sup>150</sup> In the event of natural phenomena having a significant negative impact on stocks, conservation and emergency management measures must be taken in a timely manner to prevent fishing from further aggravating this impact.<sup>151</sup> In the case of new fishing activities or for exploratory purposes, balanced conservation and management measures shall be adopted until sufficient data are

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<sup>143</sup> Supra note 141, at p. 567.

<sup>144</sup> Supra note 139.

<sup>145</sup> Supra note 88, at p. 321.

<sup>146</sup> Erik J. Molenaar and Richard Caddell, 'International Fisheries Law: Achievements, Limitations and Challenges', in *Strengthening International Fisheries Law in an era of Changing Oceans*, pp. 3-10, Oxford: Hart, 2019, at p. 5.

<sup>147</sup> Supra note 94, art.6

<sup>148</sup> Fernando González-Laxe, 'The Precautionary Principle in Fisheries Management', in *Marine policy: The International Journal for Economics planning and politics of ocean exploitation*, Vol. 29, No. 6, p. 495-505, 2005, at p. 498.

<sup>149</sup> Warwick Gullett, 'The Contribution of the Precautionary Principle to Marine Environmental Protection: from Making Waves to Smooth Sailing?', in *Frontiers in international environmental law: oceans and climate challenges: essays in honour of David Freestone*, pp.368-406, Leiden; Boston: Brill Nijhoff, 2021, at p. 389.

<sup>150</sup> Paul De Bruyn, Hilario Murua and Martín Aranda, 'The Precautionary approach to fisheries management: How this is taken into account by Tuna regional fisheries management organisations (RFMOs)', in *Marine Policy*, V.38 (201303), pp. 397-406, 2013, at p. 401.

<sup>151</sup> Supra note 94, art. 6(3)

available to allow the framing of measures for long-term sustainability and progressive improvement of fishing.<sup>152</sup> For example, a RFMO called South East Atlantic Fisheries Organisation (SEAFO) has banned fishing on many seamounts in implementing the precautionary approach until there is more information on the ecosystems that will be affected by these activities.<sup>153</sup>

Furthermore, under article 10(b) UNFSA, one of the main tasks of an RFMO is to regulate member States' access to fishing activities and to apportion fishing opportunities between them in a fair manner in addition to adopting conservation and management measures for stocks collected in its area of competence.<sup>154</sup>

Access to the fisheries resources of individual States may be ruled by allocation of quotas for a particular stock or by fishing efforts.<sup>155</sup> Where access is not regulated, member States shall be free to fish within the limits set by conservation measures.<sup>156</sup> If a TAC has been established for a certain stock, States may harvest the stock until the TAC has been reached.<sup>157</sup> In a fishery where access is not regulated, there will inevitably be high competition between the various States and new States will be attracted by fishing opportunities.<sup>158</sup>

This situation progressively leads to an excess of capacity of the stock whose fishing is not regulated.<sup>159</sup> To balance this capacity, States may agree to increase the TAC with possible negative effects on the stock to be taken into account.<sup>160</sup> In the case of overcapacity, it is easier for overfishing phenomena to occur than in scenarios where there

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<sup>152</sup> Supra note 116, at p. 241.

<sup>153</sup> Supra note 115, at p. 272.

<sup>154</sup> Maria Cecilia Engler-Palma, 'Allocation of Fishing Opportunities in Regional Fisheries Management Organizations: from Power to Law?', in *Recasting transboundary fisheries management arrangements in light of sustainability principles: Canadian and international perspectives*, pp. 473-518, Leiden [etc.]: Nijhoff, 2010, at p. 484.

<sup>155</sup> J. J. Poos, J. A. Bogaards, F. J. Quirijns, D. M. Gillis and A. D. Rijnsdorp, 'Individual quotas, fishing effort allocation, and over-quota discarding in mixed fisheries', *ICES Journal of Marine Science*, Volume 67, Issue 2, March 2010, pp. 323-33, at p. 325.

<sup>156</sup> Food and Agriculture Organization of the United Nations (FAO), 'Code of Conduct for Responsible Fisheries', Rome, 1995.

<sup>157</sup> Kristin McQuaw and Ray Hilborn, 'Why are catches in mixed fisheries well below TAC?', in *Marine Policy*, Volume 117, July 2020, 103931, pp. 1-7, at p. 3.

<sup>158</sup> Trong Hieu Nguyen, Timothée Brochier, Pierre Auger, Viet Duoc Trinh and Patrice Brehmer, 'Competition or cooperation in transboundary fish stocks management: Insight from a dynamical model', in *Journal of Theoretical Biology*, Vol.447 (20180614), pp. 1-11, 2018, at p. 6.

<sup>159</sup> S. Pascoe and D. Gréboval, 'Measuring capacity in fisheries', *FAO Fisheries Technical Paper*. No. 445, Food and Agriculture Organization of the United Nations Rome, 2003, pp. 1-56, at p. 29.

<sup>160</sup> E. A. Kane, A. C. Ball and P. Brehmer, 'Dilemma of total allowable catch (TACs) allocated as shareable quotas: Applying a bio-economic game-theoretical approach to Euro-Mauritanian fisheries agreements', in *Aquaculture and Fisheries* (202205), 2022, pp. 1-8, at p. 3.

is an equilibrium between the catch capacity and the amount of stock available.<sup>161</sup> It is feasible to note a connection between the conservation of the stock and access to fishing for that fish species.<sup>162</sup>

Although they should be obliged by virtue of the deployment of the term ‘must’ in the article 10 (b) UNFSA, States appear to be granted a wide discretion in deciding on the regulation of access to fisheries by distributing participation rights among States.<sup>163</sup> Nevertheless, as explained and pinpointed in article 11 UNFSA, States are constrained instead to provide acceptance mechanisms for newcomers in the fisheries sector.<sup>164</sup> The introduction of newcomers could be accomplished under a free access regime, but it could probably be fulfilled better with a limited access system.<sup>165</sup> States are also bound to avert and put an end to excess stock capacity and must ensure that fishing does not go beyond what is considered a sustainable use of the stock.<sup>166</sup> The best way to achieve this objective is that States agree on the allocation of participation rights among themselves and in turn to share out those rights among the vessels authorised to participate in the fishing activities.<sup>167</sup>

It is also possible to state that in most cases the States agree on the distribution of rights to participate in fishing activities through the RFMOs and in turn allocate them among their fishing vessels.<sup>168</sup> It should be noted and remarked that non-members of the RFMO also have the right to catch on non-regulated stocks as long as they agree to comply with and apply the conservation and management measures envisaged.<sup>169</sup> In the

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<sup>161</sup> Jamaludin Malik, Achmad Fahrudin, Dietrich Geoffrey Bengen and Taryono Khodiron, ‘Overfishing and Overcapacity small scale fisheries in Semarang City’, in *Jurnal Ilmu dan Teknologi Kelautan Tropis*, Vol. 11 N.2 (20190821), pp. 427-435, 2019, at p. 430.

<sup>162</sup> Ray Hilborn, Ricardo Oscar Amoroso et al., ‘Effective fisheries management instrumental in improving fish stock status’, in *Proceedings of the National Academy of Sciences*, Vol.117 N.4 (20200128), pp. 2218-2224, 2020, at p. 2220.

<sup>163</sup> Quentin Hanich and Yoshitaka Ota, ‘Moving Beyond Rights-Based Management: A Transparent Approach to Distributing the Conservation Burden and Benefit in Tuna Fisheries’, in *The International Journal of Marine and Coastal Law*, Vol.28 N.1 (2013), pp. 135-170, at p. 147.

<sup>164</sup> *Supra* note 94, art.11

<sup>165</sup> Bernt Arne Bertheussen, Bent Magne Dreyer et al., ‘Institutional and financial entry barriers in a fishery’, *Marine Policy*, Volume 123, January 2021, 104303, pp. 1-9, at p. 4.

<sup>166</sup> *Supra* note 94, art. 5 (h)

<sup>167</sup> Dorothy Dankel, Gunnar Haraldsson et al., ‘Allocation of Fishing Rights in the NEA – Discussion paper’, *TemaNord* 2015, 546 ISSN 0908-6692, pp. 1-91, at p. 67.

<sup>168</sup> Ruth A. Davis, Quentin Hanich et al., ‘Who Gets the Catch? How Conventional Catch Attribution Frameworks Undermine Equity in Transboundary Fisheries’, *Front. Mar. Sci.*, 09 March 2022, Sec. Marine Affairs and Policy, Volume 9 – 2022, pp. 1-13, at p. 5.

<sup>169</sup> Erik J. Molenaar, ‘Participation in Regional Fisheries Management Organizations’, in *Strengthening international fisheries law in an era of changing oceans*, Oxford: Hart, 2019, pp. 103-129, at p. 121.



end, the RFMO will automatically be competent to regulate the participation of non-members in fisheries.<sup>170</sup>

It is therefore necessary to understand the criterion for allocating participation rights among States that catch the same straddling or highly migratory fish stock on the high seas.

There are 5 criteria: the existing level of fishing of a given stock, the fishing patterns and practices employed, compliance with conservation measures, the needs of coastal communities and the overwhelming dependence on the fisheries sector.<sup>171</sup>

The current state of the stock is the first criterion to be considered.<sup>172</sup> It assesses the degree of exploitation and is directly relevant if newcomers are admitted to fishing activities.<sup>173</sup> If the stock is considered to be fully used or overexploited, the criterion shall negate the rights to participate in fishing activities.<sup>174</sup> It favours States with existing rights especially where there is a shortage of a certain stock.<sup>175</sup> A new entrant has more opportunities in a fishery that has not been totally exploited, such as fishing for a previous unregulated stock.<sup>176</sup>

The second factor takes into account the respective interests, patterns and fishing practices of new and existing States.<sup>177</sup> It points out that previous fishing catches are important.<sup>178</sup> Partially, the concepts of pattern and practice overlap. With the term pattern we indicate the types and extensions of fishing activities in which the State is involved whereas the practice is a concept that examines the history and the background of that

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<sup>170</sup> Tore Henriksen, 'Revisiting the Freedom of Fishing and Legal Obligations on States Not Party to Regional Fisheries Management Organizations', in *Ocean Development and International Law*, Vol.40 N.1 (2009/0101), pp.80-96, January 2009, at p. 84.

<sup>171</sup> Bianca Haas, Kamal Azmi and Quentin Hanich, 'The unintended consequences of exemptions in conservation and management measures for fisheries management', in *Ocean and Coastal Management*, Volume 237, 2023, pp. 1-9, at p. 3.

<sup>172</sup> *Supra* note 94, art. 11(a)

<sup>173</sup> J.F. Caddy, 'An alternative to equilibrium theory for management of fisheries', Marine Resources Service  
FAO Fisheries Department Rome, Italy, at p. 5, available at  
<https://www.fao.org/3/ac749e/AC749E15.htm>

<sup>174</sup> *Supra* note 117, at p. 31.

<sup>175</sup> Ralf Doering, Leyre Goti et al., 'Equity and ITQs: About Fair Distribution in Quota Management Systems in Fisheries', in *Environmental Values* Vol. 25, No. 6 (December 2016), pp. 729-749, at p. 732.

<sup>176</sup> *Ibid.*

<sup>177</sup> *Supra* note 94, art.11(b)

<sup>178</sup> Suresh A. Sethi, Trevor A. Branch, and Reg Watson, 'Global fishery development patterns are driven by profit but not trophic level', in *Proceedings of the National Academy of Sciences*, Vol.107 N.27 (2010/0706), pp. 12163-12167, June 21, 2010, pp. 12164.

type of fishing.<sup>179</sup> The principle does not delimit any geographical area of application and shows that a State with a long tradition and past of extensive fishing should be awarded more rights than a State with a poor fishing history or limited fishing.<sup>180</sup> Since the provision rules the access to the regulatory area of an RFMO, it is clear that fishing practices and patterns relate to the area of regulation of the competent RFMO.<sup>181</sup>

As regards the third criterion, the good management activity of RFMOs on specific stocks depends on the outstanding application of conservation measures by the member States of the RFMOs.<sup>182</sup> Under this view, it can be considered as an incentive to States that rewards those who actively participate in conservation efforts.<sup>183</sup> Moreover, in the case of States that do not comply with the defined conservation measures, the criterion could serve to fill them in a sort of blacklist, in order not to assign them quotas or other types of participating rights.<sup>184</sup>

The fourth requirement concerns the needs of coastal communities which are primarily dependant on stocks harvesting.<sup>185</sup> It represents a more specific and detailed principle than the previous ones since States that can document and witness the presence of specific communities dependant on fishing for stocks regulated by the competent RFMO will find themselves in a position of advantage.<sup>186</sup> Though, it is not enough for a

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<sup>179</sup> Stephen K Brown, Manoj Shrivani et al., 'Patterns and practices in fisheries assessment peer review systems', in *Marine Policy*, Volume 117, July 2020, 103880, pp. 1-11, at p. 4.

<sup>180</sup> Paul Margat, 'Considering the significance of historic and traditional fishing rights in today's law of the sea, illustrated with the post-Brexit fisheries legal regime', Faculty of Law UIT The Arctic University of Norway, Master's thesis in Law of the Sea, JUR-3910, September 2020, at p. 29.

<sup>181</sup> Kristina M. Gjerde with the assistance of Harm Dotinga, Sharelle Hart, Erik Jaap Molenaar, Rosemary Rayfuse and Robin Warner, 'Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction', IUCN Environmental Policy and Law Papers online – Marine Series No. 1, 2008, pp. 1-74, at p. 29.

<sup>182</sup> Bianca Haas, Marcus Haward et al., 'The influence of performance reviews on regional fisheries management organizations', *ICES Journal of Marine Science*, Volume 76, Issue 7, December 2019, Pages 2082–2089, at p. 2084.

<sup>183</sup> Mervin Ogawa and Joseph Anthony L. Reyes, 'Assessment of Regional Fisheries Management Organizations Efforts toward the Precautionary Approach and Science-Based Stock Management and Compliance Measures', *Sustainability* 2021, 13(15), 8128, pp. 1-24, at p. 13.

<sup>184</sup> *Supra* note 153

<sup>185</sup> *Supra* note 94, art.11(d)

<sup>186</sup> Erik Sulanke and Sandra Rybicki, 'Community Development Quotas and Support of Small-Scale Fisheries as Two Key Concepts for Blue Growth in Fisheries', Review article *Front. Mar. Sci.*, 15 November 2021 *Sec. Marine Fisheries, Aquaculture and Living Resources*, Volume 8 – 2021, pp. 1-20, at p. 10.

community that fishing is an important resource for their economy; it is strictly required that such States rely predominantly on fishing for stocks on the high seas.<sup>187</sup>

While this criterion is anchored at the local level of micro communities, the fifth one introduces a similar socio-economic reflection at the macro-state level.<sup>188</sup> States must observe and take into account the needs of coastal States whose economies depend overwhelmingly on the exploitation of living marine resources.<sup>189</sup> The use of the term ‘coastal State’ indicates that the application of the criterion is limited to coastal States which are part of a particular RFMO.<sup>190</sup> The requisite of an economy overwhelmingly dependant on deep-sea fishing for fish stocks must be understood to mean that a large percentage of the country’s Gross National Product (GNP) is tied to the fish industry.<sup>191</sup>

### **1.1.3 The FAO Compliance Agreement and the Code of Conduct for Responsible Fisheries**

The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, better known as FAO Compliance Agreement, initially aimed to tackle the issue of reflagging fishing vessels with flags of convenience belonging to countries which are not parties to fisheries agreements, thus avoiding the obligation to comply the relevant conservation and management measures.<sup>192</sup> In 1992, following an International Conference on Responsible Fisheries in Cancun, Agenda 21 and a technical consultation of the FAO on deep-sea fishing, the need for measures to combat reflagging was reiterated.<sup>193</sup>

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<sup>187</sup> Yoshinobu Takei, ‘Filling regulatory gaps in high seas fisheries: Discrete High Seas Fish Stocks, Deep-Sea Fisheries and Vulnerable Marine Ecosystems’, *Publications on Ocean Development, volume 75\_0924-1922*, Leiden ; Boston : Martinus Nijhoff Publishers, 2013, at p. 113.

<sup>188</sup> *Supra* note 83, art.111

<sup>189</sup> Erik J. Molenaar, ‘Relative Stability in Context International Fisheries Law’, *Pew Workshop Relative Stability – Quo Vadis*, Brussels 17-18 May 2017, pp. 1-11, at p. 6.

<sup>190</sup> *Supra* note 169

<sup>191</sup> Robert Gillett and Chris Lightfoot, ‘The Contribution of Fisheries to the Economies of Pacific Island Countries’, A report prepared for the Asian Development Bank, the Forum Fisheries Agency, and the World Bank, December 2001, at p. 146.

<sup>192</sup> Gerald Moore, ‘The FAO Compliance Agreement’, in *Current fisheries issues and the Food and Agriculture Organization of the United Nations, Center for Oceans Law and Policy, Volume 5*, ed. Myron H. Nordquist and John N. Moore, 77–91 (The Hague; Boston: M. Nijhoff Publishers, 2000), at 78.

<sup>193</sup> Budislav Vukas and Davor Vidas, ‘Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework’, in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, Oxford Scholarship Online, ed. Olav Schram Stokke, May 2001, pp. 53–90, at 57.

FAO intervened by adopting two documents: the FAO Compliance Agreement and the Code of Conduct for responsible fisheries.<sup>194</sup> The Compliance Agreement is a binding treaty which entered into force in April 2003. Within the circle of Arctic States, Russian Federation and Iceland have not ratified the agreement. There are two main points in the legal document: the concept of the flag State responsibility for vessels fishing on the high seas and the exchange of information records on offshore fishing operations.<sup>195</sup>

Pursuant to the Agreement, the basic obligation of flag States is to take such measures to make sure that fishing vessels flying their flag do not engage in any activities that would undermine the efficacy of international conservation and management measures.<sup>196</sup> No member States shall permit the use of vessels authorized to fly its flag for fishing on the high seas unless it has been approved to be so employed, nor shall any Party authorize fishing in international waters by its own vessels unless the Party is satisfied that it can, having regard to the links between the State and the vessel concerned, effectively exercise its responsibilities under these regulations in respect of that vessel.<sup>197</sup> These rules were innovative from the perspective of fishing in international waters.<sup>198</sup> They constrain flag States to successfully supervise the fishing activities on the high seas of vessels flying their flag if those States are unable to exercise their responsibility over fishing vessels.<sup>199</sup> These principles have never been clearly expressed in an international convention although they come from the more general provisions of UNCLOS.<sup>200</sup> To discourage reflagging, the Agreement asserted that no Party shall authorize fishing vessels previously registered in the territory of another member State that has jeopardized the effectiveness of international conservation and management measures to be complied

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<sup>194</sup> Code of Conduct for Responsible Fisheries, Food and Agriculture Organization of the United Nations, 1995, consult the website <https://www.fao.org/3/v9878e/v9878e.pdf>

<sup>195</sup> Hedley, C., 'FAO Compliance Agreement', in *International Agreements*, Vol. 1, Section 1.3, Ocean Law Publishing, London 2008.

<sup>196</sup> United Nations, 'Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on High Seas', Rome, 24 November 1993, *International Legal Materials* (1994), 33:968, article 3(1)(a).

<sup>197</sup> *Ibid.* art. 3(2) and 3(3)

<sup>198</sup> David Balton, 'Making the New Rules Work: Implementation of the Global Fisheries Instrument', in *Current Fisheries Issues and the Food and Agricultural Organization of the United Nations*, ed. Myron H. Nordquist and John Norton Moore, 107–135 (The Hague: Kluwer Law International, 2000), at p. 108.

<sup>199</sup> Jaeyoon Park, Jennifer Van Osdel et al., 'Tracking elusive and shifting identities of the global fishing fleet', in *Science Advances* v9 n3 (20230118), 2023, at p. 4.

<sup>200</sup> David A. Balton, 'The Compliance Agreement,' in *Developments in international fisheries law*, ed. Ellen Hey, 31–53 (The Hague; Boston: Kluwer Law International, 1999), at p. 49.

with during fishing on the high seas. Therefore, vessels involved in illegal fishing should be prevented from seeking a new flag.<sup>201</sup>

The second crux of the Agreement is to have an appropriate flow of information about fishing activities on the high seas.<sup>202</sup> This means that States are required to establish and maintain a register of their fishing vessels authorized to fish on the high seas, containing the information specified in article 6.<sup>203</sup>

In October 1995, the FAO established the High Seas Vessels Authorization Record (HSVAR), a database encompassing the distinguishing features of vessels involved in fishing on the high seas as well as information on their registration and permit status.<sup>204</sup> However, only 20 of the 38 Parties to the Agreement have sent data after acceptance.<sup>205</sup> Moreover, just 8 countries have kept data that can be considered up-to-date.<sup>206</sup> The frequency of updates varies widely among the parties implicated, ranging from an annual basis to a monthly update to simply improved information whenever there has been a change in the status of certain vessels.<sup>207</sup> The Agreement applies to all vessels used or intended for fishing on the high seas; nevertheless, member States may exempt vessels less than 24 meters in length.<sup>208</sup> The arrangement is open to acceptance by any FAO member and any non-member of the UN or the International Atomic Energy Agency.<sup>209</sup> 39 States have ratified the agreement so far but unfortunately major open registry States such as Russia have not joined yet.<sup>210</sup> A limiting factor in this document is constituted by the numerous exceptions to the main requirements and the wide room its provisions leave

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<sup>201</sup> Supra note 94, art. 3(5)

<sup>202</sup> Gerald Moore, 'The Food and Agriculture Organisation of the United Nations Compliance Agreement', *International Journal of Marine and Coastal Law* 9 (1994), 412–425, at 414.

<sup>203</sup> Supra note 94, art.4

<sup>204</sup> Solène Guggisberg, 'Transparency in the activities of the Food and Agriculture Organization for sustainable fisheries, *Marine Policy*, Volume 136, February 2022, 104498, pp. 1-10, at p. 4.

<sup>205</sup> Ibid.

<sup>206</sup> Ibid.

<sup>207</sup> The data file currently 37rt37erence3737 7 600 records, of which 6 169 correspond to vessels which appear as directly authorised to fish in the high seas, (data providers have not provided any reason, dates or data for deletion). The difference between the total number of records kept in the dataset and the number of authorised vessels arises from the fact that historical information is being retained as part of the records (e.g., ownership, changes of flags, duplicate registries, and terminated authorisations), Information brought back from FAO website, available at: [www.fao.org](http://www.fao.org)

<sup>208</sup> Supra note 193, at p. 69.

<sup>209</sup> Supra note 94, art. 10(1).

<sup>210</sup> Supra note 187, at p. 85.

to flag States.<sup>211</sup> For example, a Party to the Agreement may authorize a vessel that has weakened the success of international conservation and management measures if the Party has ruled that authorizing the vessel to harvest on the high seas would not subvert the objectives and purpose of the Agreement.<sup>212</sup> The contracting States are granted a high degree of discretion.<sup>213</sup>

In 1995, the Code of Conduct for Responsible Fisheries supplemented the Compliance Agreement.<sup>214</sup> Albeit it has the nomenclature of a code, its provisions do not prescribe any legal rights or obligations.<sup>215</sup> The scope is also very broad as it is aimed at FAO members and non-members, fishing entities, subregional, regional, global organizations and all those affected by fisheries conservation, management and development such as fishermen, those involved in fish transformation and marketing and so on.<sup>216</sup> The code is a comprehensive tool that provides principles and standards applicable to fisheries development.<sup>217</sup> The ten goals of the code are listed in article 2.<sup>218</sup> The instrument is addressed to supply States with a framework for responsible fisheries and to set up guidelines on how to build fisheries legislation and institutional structures.<sup>219</sup> Some important principles that emerge are: call on States to prevent overfishing and overcapacity of fisheries, apply the precautionary approach, cooperate subregionally, regionally and globally through fisheries management organizations or through other arrangements to promote knowledge of responsible fishing through education and training.<sup>220</sup>

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<sup>211</sup> Camille Jean Goodman, 'The Regime for Flag State Responsibility in International Fisheries Law – Effective Fact, Creative Fiction, or Further Work Required?', *Australian and New Zealand Maritime Law Journal* 157, 2009, at p. 161.

<sup>212</sup> Christopher J. Carr, 'Recent Developments in Compliance and Enforcement for International Fisheries', *Ecology Law Quarterly*, Vol.24, No.4(1997), pp. 847-860, at p. 853.

<sup>213</sup> For instance see the soft formulation of article 3(8) FAO Compliance Agreement.

<sup>214</sup> Patricia Birnie, 'New Approaches to Ensuring Compliance at Sea: The FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas', *Review of European Community and International Environmental Law* 8(1), pp. 48 – 55, December 2002, at p. 51.

<sup>215</sup> *Supra* note 54, at 89.

<sup>216</sup> Yugraj Singh Yadava, 'Nature, Scope and Objectives of the Code of conduct for responsible fisheries', Report of the National Workshop on the Code of Conduct for Responsible Fisheries, Chennai 29-30 September 2000, at p. 31, available at <https://www.fao.org/3/ad921e/ad921e01.pdf>

<sup>217</sup> David J. Doulman, 'Code of Conduct for Responsible Fisheries: Development and Implementation consideration', in *Current fisheries issues and the Food and Agriculture Organization of the United Nations*, 307–330, Series: Center for Oceans Law and Policy, Volume: 5, January 2000, at p. 312.

<sup>218</sup> *Supra* note 194, art.2

<sup>219</sup> *Supra* note 169.

<sup>220</sup> William Edeson, 'Towards Long-term Sustainable Use: Some Recent Developments in the Legal Regime of Fisheries,' in *International law and sustainable development: Past achievements and future*

### 1.1.4 Agreement on Port State measures to prevent illegal, unreported and unregulated (IUU) fishing

IUU fishing has long been regarded as a major threat to the management of living marine resources.<sup>221</sup> The costs associated with it have been estimated to range from 10 to 23,5 billion dollars per year.<sup>222</sup> Combating such fishing has proven tough, particularly due to the failure of flag States to exercise their responsibilities concerning illegal operators.<sup>223</sup> A short time ago, there has been an increased focus on the role of port state measures (PSM) as a successful means of deterring IUU fishing.<sup>224</sup> Over the years, a consistent amount of such measures have been embraced by a conspicuous number of RFMOs as well as individual States as international tools to contrast this phenomenon.<sup>225</sup> While UNCLOS deals with port state jurisdiction in a limited way, PSMs related to fishing have also been progressively developed with the adoption of the FAO Compliance Agreement, UNFSA and the FAO Code of Conduct for Responsible Fisheries.<sup>226</sup>

In 2005, the FAO Committee on Fisheries (COFI) approved the FAO Model Scheme on Port State Measures to counter IUU fishing,<sup>227</sup> it is a voluntary legal

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challenges, ed. Alan E. Boyle and David Freestone, 165–203, (New York: Oxford University Press, 1999), at p. 168.

<sup>221</sup> Xidi Chen, Qi Xu and Lun Li, ‘Illegal, Unreported, and Unregulated Fishing Governance in Disputed Maritime Areas: Reflections on the International Legal Obligations of States’, Academic Editors: Yen-Chiang Chang and Dimitrios Moutopoulos, *Fishes*, 2023, 8, 36, pp. 1-11, at p. 2.

<sup>222</sup> David J. Agnew, John Pierce et al., ‘Estimating the Worldwide Extent of Illegal Fishing’, *PLOS ONE*, Vol. 4, No. 2 (2009), pp. 1-8, at p. 3, see <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0004570&type=printable>

<sup>223</sup> Emma Witbooi, ‘Illegal, Unreported and Unregulated Fishing on the High Seas: The Port State Measures Agreement in Context’, *The International Journal of Marine and Coastal Law*, pp. 290-320, June 2014, at p. 296.

<sup>224</sup> PSM are terms set or interventions took up by port States which a foreign fishing vessel must conform or is subjected to as a requirement for use of ports in the port State; see A. Skonhofs, Database on Port State Measures, FAO Fisheries and Aquaculture Department, available at: <http://www.fao.org/fishery/psm/en>

<sup>225</sup> Lonna Bethel, Henning Jessen and Johan Hollander, ‘Implementing the Port State Measures Agreement to combat illegal, unreported and unregulated fishing in the Caribbean’, *Marine Policy*, Volume 132, October 2021, 104643, pp. 1-9, at p. 4.

<sup>226</sup> The development and implementation of PSM is principally a sovereign decision of each state because they exercise full sovereignty over their ports, with just few minor exceptions, see Articles 25 and 218 UNCLOS, [https://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf); see Arron N. Honnibal, ‘Extraterritorial Port State Measures: The Basis and Limits of Unilateral Port State Jurisdiction to Combat Illegal, Unreported and Unregulated Fishing’, *Max Planck Society for the Advancement of the Sciences – Max Planck Foundation for International Peace and the Rule of Law*, March 2020, at p. 95.

<sup>227</sup> FAO, ‘Model Scheme on Port State Measures to Combat Illegal, Unreported and Unregulated Fishing’, Rome 2007, pp. 1-56, at p. 17.

instrument that provides with basic standards for a variety of activities and also includes requirements to be fulfilled.<sup>228</sup> However, the Agreement on Port State Measures (PSMA) has never been consistently implemented and IUU fishing continues to pose a major threat to sustainable fisheries.<sup>229</sup> Recognizing the need for effective application of PSMA, in 2007 COFI asked members to develop a new legally binding instrument on PSMA, based on the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) and the 2005 FAO Model Scheme.<sup>230</sup>

The PSMA was approved by the FAO Conference on 22th November 2009.<sup>231</sup> Upon completion, it was signed by 24 States plus the European Union (EU).<sup>232</sup> Signatories include the Arctic States Iceland, Norway, the U.S., the Russian Federation and Canada.<sup>233</sup> The goal of the agreement was to prevent and counter IUU fishing through the implementation of beneficial PSMs and thereby ensure the long-term conservation and sustainable use of living marine resources.<sup>234</sup> Contracting Parties generally apply the PSMA to any vessel not authorized to fly their flag that seeks to enter their ports or is in one of their ports.<sup>235</sup>

The PSMA provides minimum standards for PSMs.<sup>236</sup> Its provisions incorporate prohibiting access to ports or the use of port services.<sup>237</sup> It also aims to improve

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<sup>228</sup> Supra note 66

<sup>229</sup> Marilyn Labasan Jaal, 'Implementation of the Port State Measure Agreement (PSMA) to combat IUU Fishing in the Philippines', World Maritime University Dissertations. 2092, October 2022, pp. 1-62, at p. 21.

<sup>230</sup> FAO, 'International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing' Rome 2001, see <ftp://ftp.fao.org/docrep/fao/012/y1224e/y1224e00.pdf> ; See also Karine Erikstein and Judith Swan, ' Voluntary Guidelines for Flag State Performance: A New Tool to Conquer IUU Fishing', The International Journal of Marine and Coastal Law, March 2014, pp. 116-147, at p. 131.

<sup>231</sup> FAO, Thirty-sixth Session, Resolution No 12/2009, available at:

<http://www.fao.org/Legal/treaties/037s-e.htm>

<sup>232</sup> Ibid.

<sup>233</sup> The Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing. It was approved by the FAO Conference at its Thirty-sixth session (Rome, 18-23 November 2009) under paragraph 1 of Article XIV of the FAO Constitution, through Resolution No 12/2009 dated 22 November 2009. The Agreement entered into force on 5 June 2016. In order to see the Parties to the Agreement and for more information consult <https://www.fao.org/port-state-measures/background/parties-psma/en/>

<sup>234</sup> Agreement on Port State measure to prevent, deter and eliminate illegal, unreported and unregulated fishing (PSMA), article 2, entered into force on June 5, 2016. In order to see the mentioned provision, consult the following website:

[https://www.wto.org/english/tratop\\_e/rulesneg\\_e/fish\\_e/2009\\_psma.pdf](https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/2009_psma.pdf)

<sup>235</sup> Ibid., art. 3(1)

<sup>236</sup> Ibid., art.4(1)(b)

<sup>237</sup> Ibid., art.9(4)



information sharing on vessel linked to IUU catches details, systematize requirements for information from vessels looking for entering and regulating inspections and inspectors training.<sup>238</sup> Nonetheless, the assistance directed to developing countries for the application of this regulatory instrument is noteworthy too.<sup>239</sup> If the Agreement obtains large-scale ratification, it could take on greater value in countering IUU fishing.<sup>240</sup> The only way to make such a legal apparatus truly effective is to secure that it is implemented globally in a manner that leaves no escape clauses for landings of IUU harvests.<sup>241</sup> However, it should be observed that PSMs are not a universal remedy for conservation measures because port state controls cannot ascertain whether certain types of conservation measures have been breached at sea.<sup>242</sup> Therefore, complementary measures remain pivotal.

Unregulated fishing falls into two categories: firstly, within a scope covered by a relevant RFMO, fishing by non-nation vessels or by vessels flying the flag of member States of an RFMO constitutes unregulated fishing where such fishing activities do not comply with or breach the conservation and management rules drawn up by a given RFMO.<sup>243</sup> Secondly, in an area where an RFMO is not present or where conservation and management measures are not applicable, fishing is not considered regulated where it is practiced in a manner inconsistent with the State's responsibilities for the conservation of living marine resources.<sup>244</sup>

The parties to the PSMA agree to select ports to which ships may request entry under the agreement and to ensure that those ports have the capacity to carry out the

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<sup>238</sup> *Ibid.*, art.6(16); art. 8, Annex A; art.13, Annex B; art.17, Annex E

<sup>239</sup> *Ibid.*, art.21

<sup>240</sup> Interpol, 'International Law Enforcement Cooperation in the Fisheries Sector: A Guide for Law Enforcement Practitioners', February 2018, pp. 1-163, at p. 62.

<sup>241</sup> Erik J. Molenaar, 'Port state jurisdiction to combat IUU fishing: the Port State Measures Agreement,' in *Recasting transboundary fisheries management arrangements in light of sustainability principles: Canadian and international perspectives*, ed. Dawn A. Russell and David VanderZwaag, pp. 369–386, Legal aspects of sustainable development (Leiden: Martinus Nijhoff, 2010), at p. 373.

<sup>242</sup> Rosemary G. Rayfuse, "To our children's children's children: From promoting to achieving compliance in high seas fisheries," *International Journal of Marine and Coastal Law* 20, ¾ (2005), pp. 509–532, at p. 528.

<sup>243</sup> Mercedes Rosello, 'Regional fishery management organisation measures and the imposition of criminal and administrative sanctions in respect of high seas fishing', in *Marine Policy*, Volume 144, October 2022, 105213, pp. 1-6, at p. 2.

<sup>244</sup> Juan He, 'A Jurisdictional Assessment of International Fisheries Subsidies Disciplines to Combat Illegal, Unreported and Unregulated Fishing', in *Sustainability* 2022, 14(21), 14128, pp. 1-15, at p. 8.

required instructions.<sup>245</sup> Parties must request certain information provided by vessels intending to enter their ports before granting such entry, including information on catches on board and whether a transshipment of catches has taken place, as well as identifying details of the vessel.<sup>246</sup> On the ground of this and other relevant information available to it, the Parties shall determine whether the vessel in question is engaged in IUU fishing or whether it is engaged in activities in support of it.<sup>247</sup> If a Party has demonstrated sufficient evidence of IUU fishing, it shall deny entry of the vessel also for the purpose of inspection or other appropriate action.<sup>248</sup> Articles 12 and 13 systematize the process that member States use to give priority to ships to be inspected, as well as the basic requirements for conducting such inspections.<sup>249</sup> The Agreement also provides for cooperation and exchange of information and for the transmission of the results of inspections to the Parties, the States concerned and the RFMOs. Overall, the provisions of the PSMA allow Parties to identify fish caught through IUU fishing and prevent such fish from entering the market.<sup>250</sup>

### **1.1.5 International guidelines for the management of deep-sea fisheries on the high seas**

Lately, fishing activities have increasingly taken place in the depths of the oceans.<sup>251</sup> The sharp enlargement in deep-sea fishing is mainly due to the depletion of a multitude of traditional stocks exacerbated by the overcapacity of international fishing fleets, a growing global demand for fish and technological advances which have made resources

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<sup>245</sup> Simeon Dukic and Matteo Zerini, 'Port State Measures Agreement: Tackling IUU fishing through inspections', in *Vertic Brief*, 28, June 2017, pp. 1-12, at p. 5.

<sup>246</sup> M.A. Palma, M. Tsamenyi, and W. Edeson, 'Port State Measures', in *Promoting Sustainable Fisheries: The International Legal and Policy Framework to Combat Illegal, Unreported and Unregulated Fishing*, Series: Legal Aspects of Sustainable Development, Volume: 6, January 2010, pp. 157-172, at p. 161.

<sup>247</sup> Alexis J. Ortiz, 'Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing', in *International Legal Materials*, Vol. 55, No. 6 (2016), pp. 1157-1179, at p. 1159.

<sup>248</sup> Sanchez, Jean-Baptiste, 'Port State Measures to combat IUU fishing: the role of the FAO and the EU', *Faculté de droit et de 42rt42erence42*, Université catholique de Louvain, 2017, at p. 51.

<sup>249</sup> Tang Jianye, *The Agreement on Port State Measures: A Commentary*, *China Oceans Law Review*, Vol.2, No.2, 2009, pp.312-332, at p. 317.

<sup>250</sup> S. Widjaja, T. Long, H. Wirajuda, et al., 'Illegal, Unreported and Unregulated Fishing and Associated Drivers', Washington, DC: World Resources Institute, 2020, at p. 13.

<sup>251</sup> Callum M. Roberts, 'Deep impact: The rising toll of fishing in the deep sea', *Trends in Ecology & Evolution* 17(5), pp. 242-245, May 2002, at p. 243.

located in deep waters available for fishing.<sup>252</sup> There is no single and agreed definition of deep-sea fisheries (DSFs).<sup>253</sup> The most popular definition is fisheries that occur below the continental shelf.<sup>254</sup> The International Council for the Exploration of the Sea (ICES) considers fisheries that happen in waters deeper than about 400 meters to be DSF.<sup>255</sup> Deep-sea fish species are often long-lived, late-maturing, slow-growing and low fecundity.<sup>256</sup> As a result, deep-sea species are highly reproductive, exceedingly vulnerable to overfishing and have little resilience to inordinate exploitation.<sup>257</sup> In particular, bottom trawling has been noted as a destructive practice that is extremely harmful to deep-sea ecosystems.<sup>258</sup>

In its famous resolution 61/105, the UNGA addressed international concerns about the negative impacts of deep-sea fishing.<sup>259</sup> The resolution did not include a ban on trawling although it was advocated by some States.<sup>260</sup> Instead, it called on countries and RFMOs to regulate bottom fishing on the high seas by carrying out environmental impact assessments to determine whether significant adverse impacts on the vulnerable marine ecosystem (VMEs) were cropping up.<sup>261</sup> It also required that zones on the high seas known to be populated by VMEs or where there was a likelihood were to be closed to

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<sup>252</sup> Supra note 22, p. 223

<sup>253</sup> D.W. Japp/S. Wilkinson, 'Deep-sea resources and fisheries', in: FAO Fisheries Report No. 838, FIEP/R838, Report and documentation of the expert consultation on deep-sea fisheries in the high seas, Bangkok, Thailand, 21–23 November 2006, p. 39.

<sup>254</sup> Malcolm R. Clark, Franziska Althaus et al., 'The impacts of deep-sea fisheries on benthic communities: a review', ICES Journal of Marine Science, Volume 73, Issue suppl\_1, January 2016, pp. 51–69, at p. 57.

<sup>255</sup> Pascal Lorange, 'Deep-Sea fisheries resources and ecosystem', Directorate General Internal Policies of the Union, Policy Department Structural and Cohesion Policies, Fisheries, Brussels, European Parliament, 2007, pp. 1-25, at p. 9.

<sup>256</sup> Lissette Victorero, Les Watling et al., 'Out of Sight, But Within Reach: A Global History of Bottom-Trawled Deep-Sea Fisheries From >400 m Depth', *Front. Mar. Sci.*, 11 April 2018, pp. 1-17, at p. 12. *Sec. Deep-Sea Environments and Ecology*, Volume 5 – 2018.

<sup>257</sup> J. Koslow, 'Continental slope and deep-sea fisheries: implications for a fragile ecosystem,' *ICES Journal of Marine Science* 57, no. 3 (2000), 548–557, at 548.

<sup>258</sup> Antonio Pusceddu, Silvia Bianchelli et al., 'Chronic and intensive bottom trawling impairs deep-sea biodiversity and ecosystem functioning', *PNAS*, Edited by David M. Karl, University of Hawaii, Honolulu, HI, May 19 2014, 111 (24) 8861-8866, at p. 8863.

<sup>259</sup> UNGA Res. 61/105, UN Doc. A/RES/61/105 (December 8, 2006), paragraph 80, available at [https://www.bmel.de/SharedDocs/Downloads/DE/\\_Fischerei/UN-ResolutionA-RES-61-105.pdf?\\_\\_blob=publicationFile&v=2](https://www.bmel.de/SharedDocs/Downloads/DE/_Fischerei/UN-ResolutionA-RES-61-105.pdf?__blob=publicationFile&v=2)

<sup>260</sup> UNGA, Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its seventh meeting, Letter dated 14 July 2006 from the Co-Chairpersons of the Consultative Process addressed to the President of the General Assembly, A/61/156, para. 100.

<sup>261</sup> Glen Wright, Julien Rochette et al., 'High seas fisheries: what role for a new international instrument?', *IDDRY STUDY*, No. 03/16, August 2016, *Oceans*, pp. 1-20, at p. 8.

fishing unless such activities could be managed to prevent significant adverse impacts (SAIs).<sup>262</sup>

In addition, FAO was invited to improve data collection and dissemination, promote information exchange and greater knowledge of deep-sea fisheries, maturing standards and criteria for use by States and RFMOs in pinning down VMEs and fisheries impact on them, and stabilize requirements for deep-sea fisheries management.<sup>263</sup> FAO brought together a delegation of experts to draft technical guidelines including rules for the management of deep-sea fisheries in Bangkok in 2007 and two technical consultations were held in Rome in February and August 2008 respectively to analyse the guidelines from a policy perspective and finalise the document.<sup>264</sup> These guidelines were adopted at the second meeting in Rome.<sup>265</sup> The aim is to facilitate and encourage the commitment of States and RFMOs towards the sustainable use of marine biological resources exploited by deep-sea fishing, the prevention of SAIs on deep-sea EMVs and the protection of marine biodiversity that these ecosystems comprise.<sup>266</sup> The guidelines have been designed for deep-sea fishing activities occurring in the Areas Beyond National Jurisdiction.<sup>267</sup>

Under the guidelines, DSFs are present if two conditions are fulfilled: the total catch must embrace species that can sustain only low levels of exploitation and fishing gear must have a high probability of coming into contact with the seabed during the normal course of fishing operations.<sup>268</sup> The guidelines do not employ a specific depth to qualify DSFs, although the likely contact depends on the depth of the equipment used.<sup>269</sup>

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<sup>262</sup> Deep-Ocean Stewardship Initiative, 'A Review of Impact Assessments for Deep-Sea Fisheries on the High Seas Against the FAO Deep-Sea Fisheries Guidelines', Fisheries Working Group Report, July 2022, pp. 1-38, at p. 19.

<sup>263</sup> Ibid.

<sup>264</sup> FAO, 'International Guidelines for the Management of Deep-Sea Fisheries in the High Seas', Rome, 2008, preamble, no. 3., available at <https://www.fao.org/documents/card/en/c/b02fc35e-a0c4-545a-86fb-4fc340e13b52>

<sup>265</sup> FAO, Report of the Technical Consultation on International Guidelines for the Management of Deepsea Fisheries in the High Seas. Rome, 4–8 February and 25–29 August 2008, Annex F., see <https://www.fao.org/publications/card/en/c/473b76d6-5cb1-58e0-9c31-b17ec115f17e/>

<sup>266</sup> Ibid.

<sup>267</sup> Gabriela A. Oanta, 'International organizations and deep-sea fisheries: Current status and future prospects', Marine Policy, Volume 87, January 2018, Pages 51-59, at p. 52.

<sup>268</sup> Alyne Delaney, David G. Reid et al., 'Socio-Technical Approaches are Needed for Innovation in Fisheries', Reviews in Fisheries Science & Aquaculture, 2022, pp. 161-179, at p. 166.

<sup>269</sup> Alex D Rogers, Malcolm R Clark et al., 'The Science behind the Guidelines: A Scientific Guide to the FAO Draft International Guidelines (December 2007) for the Management of Deep-Sea Fisheries in the High Seas and Examples of How the Guidelines may be Practically Implemented', IUCN – The World Conservation Union, 2008, pp. 1-39, at p. 7.

Importance is given instead to the vulnerability of the species considered rather than to the depth in which they are harvested.<sup>270</sup> By and large, the guidelines call for the application of political, legal and institutional frameworks for the outstanding safeguard of deep-sea fisheries.<sup>271</sup> This bodywork demands strengthening the capacity of active RFMO with competence for the management of deep-sea fisheries and for cooperation in the implementation of new RFMOs to regulate bottom fishing.<sup>272</sup> Despite the relevance of these measures, their effectiveness depends on their correct implementation.<sup>273</sup> Therefore, their success is related to the work of member States.<sup>274</sup> They do not provide for any means of external application but require member States to take actions for the proper management of the DSF.<sup>275</sup>

Paragraph 21 of the Guidelines states that competent States and RFMOs should recognize the need, in the management of deep-sea fisheries, to do so in a manner consistent with the FAO Code of Conduct and the general principles established in the UNFSA.<sup>276</sup> In this regard, the Guidelines list the actions to be taken non-exhaustively in the same paragraph including some significant additions to those contained in the Code of Conduct and UNFSA.<sup>277</sup>

Subparagraph II requires States and RFMOs to identify areas or features where VMEs are likely to be found and the territory related to their fishing.<sup>278</sup> Subsequently, management must take place on the basis of the best scientific and technical information available, as opposed to the best scientific information available in the UNFSA and FAO Fisheries Code of Conduct.<sup>279</sup> In addition, when it is necessary, the fisher's knowledge

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<sup>270</sup> Ibid.

<sup>271</sup> Supra note 262.

<sup>272</sup> Ibid., paragraph 27 and 28

<sup>273</sup> Rod Moore and Julie Roberts Furgerson, 'Introductory note to international guidelines for the management of deep-sea fisheries in the high seas', *International Legal Materials*, Vol. 47, No. 6 (2008), pp. 994-997, pp. 995.

<sup>274</sup> Supra note 52

<sup>275</sup> Ibid.

<sup>276</sup> Lene Korseberg, 'The law-making effects of the FAO Deep-Sea fisheries guidelines', in *International and Comparative Law Quarterly*, Vol.67 n4 (201810), pp. 801-832, p. 806.

<sup>277</sup> Ibid.

<sup>278</sup> Richard Caddell, 'Deep-Sea Bottom Fisheries and the Protection of Seabed Ecosystems: Problems, Progress and Prospects', in *The Law of the Seabed: Access, Uses and Protection of Seabed Resources*, Series: Publications on Ocean Development, Volume: 90, published in January 2020, pp. 255-284, at p. 259.

<sup>279</sup> Robin R. Churchill and Daniel Owen, 'The international framework of fisheries management', in *The EC Common Fisheries Policy*, published in March 2010, pp. 75-128, at p. 113

must be taken into consideration.<sup>280</sup> According to the Guidelines, the actions to be taken with regard to fishing gear and techniques cannot be interpreted in order to prohibit less selective gear such as bottom trawling since the formulation ‘cost effective’ has been included as in article 5(f) UNFSA and Article 7.2.2(g) of the Code of Conduct.<sup>281</sup> Noteworthy in this paragraph is the recognition of difficulties in managing fisheries with mixed species or a high number of bycatch.<sup>282</sup>

Paragraph 28 is also to be paid attention and refers to the cooperation of States in the creation of new RFMOs and agreements. It calls on States to cooperate in the development of a provisional agreement before the imposition of measures.<sup>283</sup> It declares that prior to the creation of an RFMO, the States taking part to the negotiations should cooperate to adopt and implement provisional conservation and management measures aimed at ensuring the sustainable management of long-term deep-sea fisheries and to counter negative impacts on VMEs, taking full advantage of the measures of these guidelines.<sup>284</sup> The potential role of FAO is considered for areas where there is no RFMO.<sup>285</sup> The Guidelines include the presentation of FAO impact assessments and conservation and management measures as well as FAO’s role as an information gathering centre.<sup>286</sup>

Paragraph 83 of UN Assembly Resolution 61/105 states that an impact assessment constitutes an important complaint in the management of deep-seas fisheries.<sup>287</sup> It was agreed that States and RFMOs should assess to stabilize whether deep-sea fishing activities can produce significant adverse effects in a certain area.<sup>288</sup> It is not necessary to

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<sup>280</sup> Ibid.

<sup>281</sup> Daniel Steadman, John B. Thomas et al., ‘New perspectives on an old fishing practice: Scale, context and impacts of bottom trawling’, in *Fauna & Flora International, Report 2021*, pp. 1-44, at p. 33.

<sup>282</sup> Supra note 264, paragraph 23(V).

<sup>283</sup> Ibid., paragraph 28

<sup>284</sup> Walmsley S., Pack K., Roberts C. and Blyth-Skyrme, ‘Vulnerable Marine Ecosystems and Fishery Move-on-Rules – Best Practice Review’, published by the Marine Stewardship Council, June 2021, pp. 1-134, at p. 71.

<sup>285</sup> Eric Gilman, Kelvin Passfield and Katrina Nakamura, ‘Performance of regional fisheries management organizations: ecosystem-based governance of bycatch and discards’, in *Fish and Fisheries*, Volume 15, Issue 2, June 2014, pp.327-351, at p. 332.

<sup>286</sup> Supra note 272

<sup>287</sup> A Benn, A.D. Rogers et al., ‘The impact of deep-sea fisheries and implementation of the UNGA Resolutions 61/105 and 64/72. Report of an international scientific workshop’, National Oceanography Centre 2011-09-09, pp. 1-46, at p. 15.

<sup>288</sup> Diva J. Amon, Juliano Palacios-Abrantes et al., ‘Climate change to drive increasing overlap between Pacific tuna fisheries and emerging deep-sea mining industry’, *Ocean Sustainability* volume 2, Article number: 9 (2023), pp. 1-8, at p. 2.

carry out the risk assessments referred to in paragraph 47(6) uniformly. They should take into account the different conditions overriding in areas where deep-sea fishing is well established and in areas where it has not been practised or occurs only occasionally.<sup>289</sup> This provision appears to be aimed at avoiding excessive burden on established fisheries.<sup>290</sup>

However, it was remarked that areas that have been exposed to fishing on the high seas for a long time may still contain unknown VMEs so that the difference should not be interpreted as if lower standards applied to risk assessments in established fishing activity.<sup>291</sup> In other words, fishing in existing fishing zones could continue unchecked with unmodified risks for VMEs.<sup>292</sup> The Guidelines recognise that there may be circumstances in which States may have to rely on information and data obtained only from vessels flying their flag or from their research activities in assessing deep-sea fishing that takes place in zones where no competent RFMO is located.<sup>293</sup>

In compliance with paragraph 83 of the UN General Assembly Resolution 61/105, paragraph 73 of the Guidelines asserts that if deep-sea fisheries should contribute SAIs, States and RFMOs and agreements should make sure that these activities are managed to prevent such impacts.<sup>294</sup> In addition, the guidelines elaborated paragraph 74 on situations of substantial uncertainty. If the presence of VME or the likelihood that individual deep-sea fishing activities are the cause that SAIs on VMEs are not able to be adequately determined, States should only authorize to proceed in accordance with: precautionary conservation and management measures to limit SAIs as described in paragraph 65; a protocol for meetings with VMEs consistent with paragraphs 67-69 and 75 and measures

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<sup>289</sup> Judith Schäli, 'The Protection of the Marine Environment from Land-based Sources of Plastic Pollution in International Law', In *The Mitigation of Marine Plastic Pollution in International Law: Facts, Policy and Legal Implications*, Series: World Trade Institute Advanced Studies, Volume: 8, published in April 2022, pp. 107-377, at p. 211.

<sup>290</sup> Ibid.

<sup>291</sup> Malcolm R. Clark, Franziska Althaus et al. 'The impacts of deep-sea fisheries on benthic communities: a review', *ICES Journal of Marine Science*, Volume 73, Issue suppl\_1, January 2016, Pages 151–169, at p. 154.

<sup>292</sup> Ibid.

<sup>293</sup> Odile Delfour-Samama and Cédric Leboeuf, 'Review of potential legal frameworks for effective implementation and enforcement of MPAs in the high seas', *ICES Journal of Marine Science*, Volume 71, Issue 5, July/August 2014, Pages 1031–1039, at p. 1034.

<sup>294</sup> Alex D. Rogers and Matthew 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, London, United Kingdom, 2010, at p. 8.

to reduce uncertainty.<sup>295</sup> In summary, although the provision has not been worded in a negative way, deep-sea fishing is prohibited when substantial uncertainty remains unless and until conservation and management measures are taken to prevent SAIs.<sup>296</sup>

## **1.2 International Environmental legal framework applicable to the protection of the Arctic Ocean**

Important principles and rules of international environmental law applicable to the Arctic region originate from various legal instruments such as: the Convention for the protection of the marine environment in the North-East Atlantic (OSPAR Convention) and the Arctic Environmental Protection Strategy (AEPS).

### **1.2.1 The Convention for the Protection of the Marine Environment in the North-East Atlantic (OSPAR Convention)**

The OSPAR Convention provides the framework for international cooperation to protect the North-East Atlantic marine environment.<sup>297</sup> It came into force in March 1998 and replaced and enhanced both the 1972 Oslo Convention for the North East Atlantic and the 1974 Paris Convention on Pollution of the North Sea and adjacent areas from land-based sources.<sup>298</sup>

Its objective was to designate a universal regime in a single legal instrument to prevent and eliminate marine pollution and perform sustainable management of the maritime zone i.e. manage human activities so that the marine ecosystems will continue to support legitimate uses of the sea and go on meeting the needs of current and future

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<sup>295</sup> Richard Caddell, 'Deep-sea bottom fisheries and the protection of seabed ecosystems: problems, progress and prospects', in *The law of the seabed: access, uses, and protection of seabed resources*, Leiden: Brill Nijhoff, 2020, pp. 255-284, at p. 261.

<sup>296</sup> *Supra* note 274

<sup>297</sup> Louise De La Fayette, 'The OSPAR Convention comes into force,' *International Journal of Marine and Coastal Law* 14 (1999), 247–297, at 247.

<sup>298</sup> Rainer Lagoni, 'Regional Protection of the Marine Environment in the Northeast Atlantic Under the OSPAR Convention of 1992,' in *The Stockholm declaration and law of the marine environment*, ed. Myron H. Nordquist, John N. Moore and Said Mahmoudi, pp. 183–203 (The Hague; New York: Kluwer Law International, 2003), at 183.



generations.<sup>299</sup> The maritime area referred to consists of the North-East Atlantic and parts of the Arctic Ocean.<sup>300</sup>

Initially, it was seen as a treaty for the prevention and elimination of pollution while nowadays OSPAR Convention can be described as a mechanism for the protection of the marine environment.<sup>301</sup> It contains a set of fundamental principles and rules governing all human activities with the surprising exception of fisheries management and with some restrictions for the regulation of maritime transport.<sup>302</sup>

In the OSPAR entourage, the work is guided by six strategies updated in 2003, including the OSPAR strategy on the protection and conservation of marine ecosystems and biological diversity, the OSPAR strategy on hazardous substances, the OSPAR strategy on environmental goals and management mechanisms for offshore activities, the OSPAR strategies on radioactive substances, the OSPAR strategy on combating eutrophication and the one on biological diversity and ecosystems.<sup>303</sup> Each strategy has its own committee which supports the Commission and which in turns is supported by working groups.<sup>304</sup>

The Commission is the body through which the contracting parties collaborate.<sup>305</sup> Its central task is to monitor the implementation of the Convention.<sup>306</sup> The Commission must also appraise the conditions of the maritime area and the conclusiveness of the measures adopted, evaluate the framework programmes and measures for the prevention

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<sup>299</sup> Supra note 154, p. 250

<sup>300</sup> Timo Koivurova and Erik J. Molenaar, 'International Governance and Regulation of the Marine Arctic: Overview and Gap Analysis,' report prepared for the WWF International Arctic Programme, January 2009, at p. 15.

<sup>301</sup> Rainer Lagoni, 'Monitoring Compliance and Enforcement of Compliance through the OSPAR Commission,' in *Marine issues: From a scientific, political and legal perspective*, ed. Peter Ehlers, Rüdiger Wolfrum and Elisabeth M. Borgese, pp. 155–63 (The Hague: Kluwer Law International, 2002), at 157.

<sup>302</sup> Article 4 Annex V to the OSPAR Convention, consult <https://www.ospar.org/convention/text> ; see Koivurova and Molenaar, supra note 157, p. 16.

<sup>303</sup> Strategies of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic, Chapter I (OSPAR Agreement 2003–21; Summary Record OSPAR 2003, OSPAR 03/17/1-E, Annex 31), available at:

[http://www.ospar.org/html\\_documents/ospar/html/Revised\\_OSPAR\\_Strategies\\_2003.pdf#nameddest=hazardous\\_substances](http://www.ospar.org/html_documents/ospar/html/Revised_OSPAR_Strategies_2003.pdf#nameddest=hazardous_substances)

<sup>304</sup> Ibid.

<sup>305</sup> Ellen Hey, 'The OSPAR NEAFC Collective Arrangement and Ocean Governance: Regional Seas Organisations as the Setters of Conservation Standards in ABNJ?', *International Journal of Marine and Coastal Law*, July 2022, pp. 610-633, at p. 619.

<sup>306</sup> Angela Carpenter, 'OSPAR Review of the State of the North Sea – oil inputs and their impact on the marine environment of the North Sea', in *Oil Pollution in the North Sea* 41, pp. 255-282, 2016, at p. 258.

and elimination of pollution, establish subsidiary bodies and define their mandate.<sup>307</sup> The Commission shall generally take decisions and recommendations by unanimity of the member parties.<sup>308</sup> The decisions become binding after a period of 200 days for the parties who voted them and who did not point out that they could not accept it in that time frame.<sup>309</sup> This opt-out procedure, although it may be regarded as highly flexible to allow further development of legislation, could actually carry the risk of imperfect validity and incomplete application of decisions.<sup>310</sup> The recommendations in any case have no binding force.<sup>311</sup>

The OSPAR Convention was the first international treaty that explicitly adopted the precautionary principle by virtue of which preventive actions must be taken when there are reasonable grounds to dread that substances have been introduced into the marine environment that may trigger hazards to human health, damage to marine ecosystems, interfere with legitimate uses of the sea even when there is no incontrovertible evidence of a causal relationship between inputs and effects.<sup>312</sup> The precautionary approach is directly recognised in article 2 paragraph 1 of the Convention according to which the Parties to the Agreement must take all possible measures to prevent and eliminate pollution and adopt appropriate measures to protect the maritime zone from the adverse effects of human activities so as to rescue human health, conserve ecosystems and where possible restore marine areas negatively affected by such effects.<sup>313</sup>

The Convention's view of pollution concept is interesting: it is defined as the introduction by man, directly or indirectly, of energy or substances into the marine areas which cause or is likely to cause danger to marine ecosystems or human health.<sup>314</sup> In compliance with their duties under the OSPAR Convention, contracting parties must

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<sup>307</sup> Article 6 OSPAR Convention, see the website <https://www.ospar.org/convention/text>

<sup>308</sup> Chantal Jarlier-Clément, 'The Ospar Convention and its Implementation: Radioactive Substances', in Nuclear law bulletin No. 67 (2001), p. 21-26., at p. 23.

<sup>309</sup> Article 13(2) OSPAR Convention, <https://www.ospar.org/convention/text>

<sup>310</sup> Alex G. Oude Elferink and Donald Rothwell, 'The law of the sea and polar maritime delimitation and jurisdiction', Publications on Ocean Development, Volume 37, 2001, p. 244.

<sup>311</sup> Article 13(5) OSPAR Convention.

<sup>312</sup> Article 2(2)(a) OSPAR Convention.

<sup>313</sup> Runyu Wang, 'The precautionary principle in maritime affairs', WMU Journal of Maritime Affairs, volume 10, pp. 143-165 (2011), at p. 146.

<sup>314</sup> Office of the UN High Commissioner for Human Rights, 'Mapping Human Rights Obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Individual Report on global and regional environment agreements', Report no.9, December 2013, pp. 1-43, at p. 14.

apply the “Polluter pays” principle in addition to the precautionary one.<sup>315</sup> They must also adopt programmes and elaborate strategies containing preferably an end date, to define best available techniques (BAT) and best environmental practices (BET) according to the criteria of Appendix I, plus clean technology where necessary.<sup>316</sup>

Even if the Convention does not mention it, the Commission concurred to apply the ecosystem approach at the Joint Ministerial Meeting of the HELCOM and OSPAR Committees, held in Bremen in 2003, where the “Statement towards an Ecosystem Approach to the Management of Human Activities” was approved.<sup>317</sup> In the Declaration, both Committees jointly determined the ecosystem approach as the comprehensive and consolidated management of human activities based on the best available science knowledge about the ecosystem and its dynamics, in order to recognize and act on the forces that are decisive for the health of marine ecosystems, thus achieving sustainable use of ecosystem goods and services and maintaining the integrity of biodiversity.<sup>318</sup>

An essential contribution to the application of the ecosystem approach has been the adoption of Ecological Quality Objectives (EcoQOs).<sup>319</sup> An EcoQO represents the desired level of ecological quality, which is in turn defined as the complex expression of the structure and function of the marine ecosystem taking into account the biological community and natural climatic and geographical factors as well as chemical and physical conditions including those derived from human activity.<sup>320</sup> OSPAR developed the EcoQO system in conjunction with the ICES through a pilot project in the North Sea on invitation of the Ministers of the Fifth North Sea Conference in 2002.<sup>321</sup> This system first detects

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<sup>315</sup> Article 2(2)(b) OSPAR Convention.

<sup>316</sup> *Ibid.*, art. 2(3)(a)

<sup>317</sup> Rosemary Rayfuse and David Langlet ‘The Ecosystem Approach in Ocean Planning and Governance: An Introduction’, in *The Ecosystem Approach in Ocean Planning and Governance: Perspectives from Europe and Beyond*, Brill Nijhoff, 2018, pp. 1-14, at p. 6.

<sup>318</sup> Statement on the Ecosystem Approach to the Management of Human Activities, Towards an Ecosystem Approach to the Management of Human Activities, Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions (JMM), Bremen: 25–26 June 2003, paragraph 5.

<sup>319</sup> Peter Heslenfeld and E. Lisette Enserink, ‘OSPAR Ecological Quality Objectives: the utility of health indicators for the North Sea’, *ICES Journal of Marine Science*, Volume 65, Issue 8, November 2008, pp. 1392–1397, at p. 1394.

<sup>320</sup> Hein Rune Skjoldal, ‘Overview report on ecological quality (EcoQ) and ecological quality objectives (EcoQOs)’, Report prepared within the framework of the OSPAR Commission, Institute of Marine Research, Bergen, Norway, June 1999, pp. 1-20, at p. 11.

<sup>321</sup> OSPAR Commission, ‘Bergen Declaration’, Fifth International Conference on the Protection of the North Sea, 20– 21 March 2002, Bergen, Norway.

ecological quality problems. Secondly, one or more elements of ecological quality are set up, such as the dimensions that must be calculated and the scales against which to measure them. Finally, the EcoQOs are determined.<sup>322</sup>

The implementation of the EcoQO system in the North Sea must be considered as a means of applying the ecological approach to the governance of human activities.<sup>323</sup> It seems to be a useful tool to make the ecological approach operational, to estimate the conditions of the marine environment with respect to defined baselines.<sup>324</sup> However, for a successful environmental protection in all areas, so much still needs to be done.<sup>325</sup> For example, the OSPAR Commission has yet to apply the EcoQO system to the rest of the maritime area covered by the OSPAR Convention, with the exception of the North Sea.<sup>326</sup> Nevertheless, progress in the development of EcoQO has been slow due to the lack of cooperation of some contracting Parties and limited financial resources.<sup>327</sup> The OSPAR Commission was sceptical about the effectiveness of the earliest EcoQO system in the further development of EcoQO, taking into account the EU Marine Strategy Framework Directive (MSFD) which adopted a different approach by setting Good Environmental Status (GES) and its generic qualitative indicators as a basis.<sup>328</sup> The Commission does not object to the acceptance of this mechanism as its guiding framework. It wants to detect a comprehensive plan with priority themes for each OSPAR area. Anyway, the stagnation of the EcoQO ongoing since 1992 demonstrates a shortage of commitment between the Parties, which is the leading obstacle to a full implementation of the project.<sup>329</sup>

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<sup>322</sup> OSPAR Commission, Report on North Sea Pilot Project on Ecological Quality Objectives, 2006, at p. 59.

<sup>323</sup> Ole Arve Misund and H.R. Skjodal, 'Implementing the ecosystem approach: Experiences from the North Sea', ICES, and the Institute of Marine Research, Norway, in *Marine Ecology Progress Series*.300, pp.260-265, September 2005, at p. 261.

<sup>324</sup> Jong Seong Khim, Seongjin Hong et al., 'A comparative review and analysis of tentative ecological quality objectives (EcoQOs) for protection of marine environments in Korea and China', in *Environmental Pollution*, Volume 242, Part B, November 2018, pp. 2027-2039, at p. 2031.

<sup>325</sup> *Supra* note 178

<sup>326</sup> J.E. Tamis, J. Heusinkveld, J. Asjes, M.F.L. Leopold & C.C. Karman, 'Developments in North Sea policy and their impact on the offshore oil and gas industry', Report number C067/07, Institute for Marine Resources and Ecosystem studies Wageningen IMARES, July 6, 2007, pp. 1-61, at p. 44.

<sup>327</sup> Anne-Sophie Barnay, Eva Degre et al., 'Evaluation of the OSPAR system of Ecological Quality Objectives for the North Sea', OSPAR Commission, Biodiversity series, 2009, pp. 1-101, at p. 14.

<sup>328</sup> David Johnson, 'Environmental indicators: Their utility in meeting the OSPAR Convention's regulatory needs', *ICES Journal of Marine Science* 65(8), September 2008, pp. 1387-1391, at p. 1388.

<sup>329</sup> The Ospar System of Ecological Quality Objectives for the North Sea, OSPAR Commission, Update 2010, available at [https://qsr2010.ospar.org/media/assessments/EcoQO/EcoQO\\_P01-16\\_complete.pdf](https://qsr2010.ospar.org/media/assessments/EcoQO/EcoQO_P01-16_complete.pdf)

Since the meeting of the OSPAR Commission in Sintra in 1988, the latter has been committed to create a network of marine protected areas (MPAs) as a means of protecting and conserving the biological diversity of the maritime areas and ecosystems involved.<sup>330</sup> The commitment was recognized at the first joint ministerial meeting of the Helsinki and OSPAR Committees in 2003.<sup>331</sup> It was agreed that by 2010 a joint network of well-managed marine protected areas should be concluded.<sup>332</sup> In Recommendation 3/2003 the OSPAR Commission defined the MPA as a zone within the maritime area for which conservation, protection and precaution measures have been established in compliance with international law with the aim of protecting ecosystems and ecological processes of the marine environment.<sup>333</sup>

The 2010 ministerial meeting adopted the decisions setting up six MPAs in areas beyond national jurisdiction (ABNJ) and recommendations on their initial management.<sup>334</sup> However, the OSPAR Commission cannot alter the rights and duties of non-contracting Parties enjoying full rights on the high seas.<sup>335</sup> Moreover, the OSPAR must consider the competence of other international organisations in the ABNJ.<sup>336</sup> Once this is taken into account, OSPAR is working to strengthen collaboration between different bodies responsible for managing different sectoral activities of ABNJ such as ISA or the North East Atlantic Fisheries Commission (NEAFC).<sup>337</sup> Until now, no MPA has been fully designated in the ABNJ because areas thought to be outside the national jurisdiction resulted to be located on the member State's outer continental shelf.<sup>338</sup> Thus,

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<sup>330</sup> Erik J. Molenaar and Alex G. Oude Elferink, 'Marine protected areas in areas beyond national jurisdiction: The pioneering efforts under the OSPAR Convention', in *Utrecht Law Review*, Volume 5, Issue 1, June 2009, pp. 5-20, at p. 8.

<sup>331</sup> Declaration of the First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions, Bremen, Germany, 25–26 June 2003.

<sup>332</sup> *Ibid.*

<sup>333</sup> OSPAR Recommendation 2010/2 on amending Recommendation 2003/3 on a network of Marine Protected Areas, OSPAR 10/23/1, Annex 7, OSPAR Commission Protecting and Conserving the North-East Atlantic and its resources.

<sup>334</sup> OSPAR Commission, Ministerial Meeting of the OSPAR Commission, Bergen, 23–24 September 2010, para. 28.

<sup>335</sup> Rui Jiang and Ping Guo, 'Sustainable Management of Marine Protected Areas in the High Seas: From Regional Treaties to a Global New Agreement on Biodiversity in Areas beyond National Jurisdiction', *Sustainability* 2023, 15(15), 11575, pp. 1-14, at p. 3.

<sup>336</sup> Ellen Hey, 'The OSPAR NEAFC Collective Arrangement and Ocean Governance: Regional Seas Organisations as the Setters of Conservation Standards in ABNJ?', *The International Journal of Marine and Coastal Law*, 37 (2022), pp. 610–633, at p. 617.

<sup>337</sup> *Ibid.*, at p. 618.

<sup>338</sup> Marta C. Ribeiro, "The 'Rainbow': The First National Marine Protected Area Proposed Under the High Seas," *International Journal of Marine and Coastal Law* 25 (2010): 183–207, at p. 185.

it remains to be seen how MPAs will be managed in the ABNJ. In any case, if OSPAR continues to chase its work of coordinating different organisations with responsibilities in ABNJ, it could influence the role that regional environmental organisations will play in the management of MPAs in ABNJ.<sup>339</sup>

### 1.2.2 Arctic Environmental Protection Strategy (AEPS)

Cooperation between Arctic States has a recent history.<sup>340</sup> Only at the end of the Cold War a greater attempt towards cooperation was made.<sup>341</sup> A starting point was the speech of Soviet General Secretary Mikhail Gorbachev in Murmansk on October 1, 1987.<sup>342</sup> The trigger for closer Arctic cooperation was the shared concern for the single and weak polar environment.<sup>343</sup> Recognizing that most environmental problems do not stop at national borders but are transboundary, the Finnish Ministers of Foreign Affairs and Environment launched an initiative aimed at protecting the Arctic environment through intergovernmental cooperation in 1989.<sup>344</sup> At the invitation of the Finnish government, officials from the eight Arctic countries met in Rovaniemi, Finland in September 1989 to discuss effective cooperation measures to protect the Arctic environment.<sup>345</sup> It was the first circular meeting at this level to address regional problems and challenges with the so-called Rovaniemi process.<sup>346</sup> This led to numerous technical

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<sup>339</sup> Supra note 330, at p. 18.

<sup>340</sup> Jan Dusik, 'A new and perhaps last? Chance for resuming Arctic cooperation', WWF Sweden, May 10, 2023.

<sup>341</sup> Willy Østreg, 'The post-Cold War Arctic: Challenges and transition during the 1990s,' in *Arctic Development and Environmental Challenges: Information needs for decision-making and international co-operation*, Ringkjøbing/Gentofte: Scandinavian Seminar College, distributed by Erling Olsens Forlag, 1997, at p. 37.

<sup>342</sup> Donald Rothwell, 'The polar regions and the development of international law' 1. Publ., *Cambridge studies in international and comparative law: New series*; 3 (Cambridge: Cambridge University Press, 1996), p. 229.

<sup>343</sup> Bernt Bull, 'Arctic development and environmental challenges: Information needs for decision-making and international co-operation,' in *Arctic Development and Environmental Challenges*, pp. 25–32, at p. 28.

<sup>344</sup> Arctic Environmental Protection Strategy, Declaration on the Protection of Arctic Environment, Rovaniemi, 14 June 1991, available at [http://library.arcticportal.org/1542/1/artic\\_environment.pdf](http://library.arcticportal.org/1542/1/artic_environment.pdf)

<sup>345</sup> Ibid.

<sup>346</sup> Markku Heikkilä, 'The Rovaniemi Process: The Beginning of the Arctic Era', Arctic Finland, due to be published in spring 2019.

and scientific reports and finally to the adoption of the Arctic Environmental Protection Strategy (AEPS) document in 1991.<sup>347</sup>

The joint action plan of the AEPS included cooperation in scientific research and sharing data on sources, pathways and effects of pollution, assessment of the potential environmental effects of the development of activities and full implementation and consideration of further measures to control pollutants and reduce their negative effect on the Arctic environment.<sup>348</sup> The five objectives set out in the AEPS were: to protect the Arctic ecosystem including humans, to provide for the protection, enhancement and restoration of environmental quality and sustainable use of natural resources; to recognize and seek to meet the needs, values, cultural traditions and practices of indigenous peoples related to the protection of the Arctic environment; to constantly review the state of the Arctic environment and to pick out, lessen and eliminate pollution as an ambitious ultimate goal.<sup>349</sup>

To achieve this target, six pollution matters in the Arctic region have been pinpointed as priority actions: Persistent Organic Pollutants (POPs), petroleum pollution, heavy metals, noise, radioactivity and acidification.<sup>350</sup> On each of these environmental issues a state of the environment report was emanated and a short analysis of each problem was added in the AEPS.<sup>351</sup> In addition, the international and bilateral agreements regarding the Arctic environment until that time have been revised.<sup>352</sup> Subsequently, action plans to settle each single environmental concern were outlined.<sup>353</sup> The AEPS also provided for specialized working groups in certain fields of pollution to be ascertained.<sup>354</sup> The AEPS has established the grounds for Arctic monitoring and Assessment programme (AMAP), Protection of the Arctic Marine Environment (PAME), Emergency Prevention,

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<sup>347</sup> Geir Hønneland and Olav S. Stokke, "Introduction," in *International cooperation and arctic governance: Regime effectiveness and northern region building*, ed. Olav Schram Stokke and Geir Hønneland, (London: Routledge, 2007), pp. 1–12, at 3.

<sup>348</sup> *Supra* note 191, p.2

<sup>349</sup> Linda Nowlan, 'Arctic Legal Regime for Environmental Protection', IUCN Environmental Policy and Law Paper No. 44, IUCN – The World Conservation Union 2001, pp. 1-72, at p. 57.

<sup>350</sup> Arctic Monitoring and Assessment Programme, 'Arctic Pollution Issues: a state of the Arctic environment report', 1997, pp. 1-12, at p. 10.

<sup>351</sup> *Supra* note 191, p.12 et seqq.

<sup>352</sup> Jon Rahbek-Clemmensen, 'When Do Ideas of an Arctic Treaty Become Prominent in Arctic Governance Debates?', *Arctic*, Vol.72, No.2, (June 2019), pp.116-130, at p. 121.

<sup>353</sup> *Supra* note 191, p.25 et seqq

<sup>354</sup> Evan T. Bloom, 'Establishment of the Arctic Council', in *The American Journal of International Law*, Vol.93, No. 3 (Jul., 1999), pp. 712-722, at p. 715.

Preparedness and Response (EPPR), and Conservation of Arctic Flora and Fauna (CAFF) Working Groups.<sup>355</sup>

Furthermore, each member country was constrained to build up a national agency to harmonize the cooperation set forth in the AEPS.<sup>356</sup> The Inuit Circumpolar Conference (ICC), the Nordic Council of Sami People and the previous Soviet Association of Small Peoples of the North were hosted as observers.<sup>357</sup> According to the AEPS, other observers could be invited based on their involvement to the Arctic environmental problems.<sup>358</sup> The eight Arctic States agreed to hold meeting on the Arctic environment aimed at identifying and coordinating actions to implement and further develop the AEPS, to initiate cooperation in new fields relevant to the environmental protection of the Arctic; to make the recommendations necessary to protect the Arctic region, improve existing environmental regimes and assess and report on the progress of agreed actions.<sup>359</sup>

At the 1993 Nuuk meeting in Greenland, the Nuuk Declaration was ratified.<sup>360</sup> At this meeting, the structure of the AMAP was changed from a task force to a working group and a new task force on sustainable development was created.<sup>361</sup> The Danish government in cooperation with Greenland offered to set up a secretariat for an AEPS programme that would address all questions relating to the participation of indigenous peoples, which eventually assumed the name of Arctic Council's Indigenous Peoples Secretariat.<sup>362</sup> The Nuuk Ministerial Meeting was influenced by the United Nations Conference on Environment and Development (UNCED) which was held in Rio De Janeiro in June 1992.<sup>363</sup>

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<sup>355</sup> Erik J. Molenaar, Timo Koivurova et al., 'Introduction to the Arctic', in *Arctic Marine Governance: Opportunities for Transatlantic Cooperation*, pp.3-19, 2014, at p. 7.

<sup>356</sup> *Supra* note 191, p. 40

<sup>357</sup> Carina Keskitalo, 'International Region-Building: Development of the Arctic as an International Region', *Cooperation and Conflict*, Vol.42, No.2, (June 2007), pp. 187-205, at p. 194.

<sup>358</sup> Piotr Graczyk and Timo Koivurova, 'A new era in the Arctic Council's external relations? Broader consequences of the Nuuk observer rules for Arctic governance', *Polar Record* 50(3), October 2012, pp. 225-236, at p. 320.

<sup>359</sup> Yoshinobu Takei, 'The Role of the Arctic Council from an International Law Perspective: Past, Present and Future', in *The Yearbook of Polar Law Online*, v6 n1 (20140311), pp. 349-374, at p. 358.

<sup>360</sup> Seventh Ministerial Meeting of The Arctic Council, 'The Nuuk Declaration', Nuuk, 16 September 1993, available at [http://library.arcticportal.org/1254/1/Nuuk\\_Declaration\\_FINAL.pdf](http://library.arcticportal.org/1254/1/Nuuk_Declaration_FINAL.pdf)

<sup>361</sup> *Ibid.*

<sup>362</sup> Page Wilson, 'Society, steward or security actor? Three visions of the Arctic Council', *Cooperation and Conflict* Vol.51, No.1 (March 2016), pp. 55-74, at p. 64.

<sup>363</sup> Donald R. Rothwell, 'International Law and the Protection of the Arctic Environment', *The International and Comparative Law Quarterly*, Vol.44, No.2 (April 1995), pp. 280-312, at p. 284.



The Nuuk Declaration explicitly recognizes the importance of applying the result of UNCED to the Arctic region and welcomes the efforts of the eight Arctic countries to implement through the AEPS relevant provisions of the Rio Declaration and Agenda 21.<sup>364</sup> The second ministerial meeting was held in Canada and led to the adoption of the Inuvik Declaration on March 21, 1996.<sup>365</sup> At this time, plans for the creation of an Arctic council were taking shape.<sup>366</sup> The SAO was tasked with elaborating an initial work plan for the Arctic Council's sustainable development work with the assistance of permanent participants.<sup>367</sup> In the declaration, support for relevant international agreements and the application to Arctic regions was again expressed, as well as support for the important contributions that AEPS countries are making to the improvement and implementation of these arrangements.<sup>368</sup>

As the Ilulissat Declaration for the Arctic coastal States showed, the main obstacle to the existence of an outstanding legal regime for the protection of the Arctic marine environment is the lack of political will among the Arctic States.<sup>369</sup> There are currently no signs that these countries can change their minds and support a legally successful approach.<sup>370</sup> Having dealt with the legal framework that currently governs fishing in the Arctic region, we will now come across and analyse the maritime delimitations between the Arctic coastal States. Determining the spatial scope of coastal States' jurisdiction is critical to ocean governance and the same is for the Arctic Ocean.<sup>371</sup> At this point, the question arises as to how it is feasible to delimit marine spaces in which the jurisdiction of two or more coastal States overlaps.<sup>372</sup> Without rules on the maritime delimitation of marine spaces in which the jurisdiction overlaps, the legal uses of these spaces cannot be

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<sup>364</sup> Lassi Heininen, Karen Everett et al., 'Arctic Policies and Strategies — Analysis, Synthesis, and Trends', International Institute for Applied Systems Analysis, February 2020, at p. 165.

<sup>365</sup> Arctic Council, 'The Inuvik Declaration (1996)' – Declaration from the Ministerial meeting of the Arctic Environmental Protection Strategy (AEPS), held in Inuvik, Canada.

<sup>366</sup> *Ibid.*

<sup>367</sup> Inuvik Declaration, Inuvik, 21 March 1996, paragraph 6.

<sup>368</sup> *Ibid.*

<sup>369</sup> Gabriela Argüello, 'Opportunities for Protecting Biological Diversity in the Arctic Ocean', in *The Yearbook of Polar Law Online*, published in April 2022, pp. 127-153, at p. 137.

<sup>370</sup> Oran R. Young, 'Arctic Governance – Pathways to the Future', in *Arctic Review on Law and Politics*, Vol. 1, No. 2 (2010), pp. 164-185, at p. 169.

<sup>371</sup> Sigrid Eskeland Schütz, 'Marine Spatial Planning – Prospects for the Arctic', in *Arctic Review on Law and Politics*, Vol. 9 (2018), pp. 44-66, at p. 52.

<sup>372</sup> Clive Schofield, 'Options for Overcoming Overlapping Maritime Claims: Developments in Maritime Boundary Dispute Resolution and Managing Disputed Waters', in *The Journal of Territorial and Maritime Studies*, Vol. 8, No. 2 (2021), pp. 21-41, at p. 28.

effectively enjoyed.<sup>373</sup> In this sense, maritime delimitation is of fundamental importance in the governance of the Arctic Ocean.

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<sup>373</sup> Yoshifumi Tanaka, 'Reflections on Maritime Delimitation in the Romania/Ukraine case before the International Court of Justice', in *Netherlands International Law Review*, Vol.56 No.3 (2009), pp. 397-427, at p. 409.

## CHAPTER II

### 2.1 Issues of Maritime Delimitations in the Arctic Ocean

UNCLOS lays down general rules governing maritime legal claims and the delimitation of maritime boundaries between national maritime zones.<sup>374</sup> An outstanding milestone of UNCLOS was the agreement on spatial limits, the national claims on maritime jurisdiction, defined primarily as extended to a certain distance from the baselines along the coast.<sup>375</sup> Therefore, the territorial sea, the contiguous zone and the EEZ must not exceed respectively 12, 24 and 200 nautical miles (nm) from the baselines along the coast.<sup>376</sup> The delimitation of the outer limits of each of these zones of maritime jurisdiction requires a comprehension of the baselines location along the coast.<sup>377</sup> Establishing the outer limits of the continental shelf is more tortuous and involves a number of geophysical criteria in addition to distance measurements.<sup>378</sup> Of the five coastal States of the Arctic Ocean, four (Russia, Norway, Denmark and Canada) are parts of UNCLOS, except the USA.<sup>379</sup> Albeit not part of it, the USA generally respects its core principles as they disclose customary international law and therefore binding on all States.<sup>380</sup>

All coastal States in the Arctic have submitted various maritime claims in line with both international law and their own national interests.<sup>381</sup> These maritime claims comprise territorial seas of 12 (nm) wide (with the exception of Greenland, where there is a

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<sup>374</sup> Pål Jakob Aasen, 'The Law of Maritime Delimitation and the Russian–Norwegian Maritime Boundary Dispute', Fridtjof Nansen Institute, FNI Report 1/2010, at p. 32.

<sup>375</sup> Vida Hamd, Soha Frem et al., 'The Maritime Boundaries and Natural Resources of the Republic of Lebanon: Challenges and Opportunities', United Nations Development Programme, December 2014, at p. 26.

<sup>376</sup> *Supra* note 66, article 3,4, 33 and 57

<sup>377</sup> Nugzar Dundua, 'Delimitation of maritime boundaries between adjacent States', United Nations – The Nippon Foundation Fellow, 2006-2007, at p. 45.

<sup>378</sup> Li Xiaolu, 'The application of international law principle in practice of the delimitation on continental shelf', in *The Maritime Commons: Digital Repository of the World Maritime University*, 2013, pp. 1-80, at p. 42.

<sup>379</sup> Lars Kullerud and Oran R. Young, 'Adding a Gakkel Ridge regime to the evolving Arctic Ocean governance complex', *Marine Policy*, Volume 122, December 2020, 104270, pp. 1-6, at p. 2.

<sup>380</sup> James L. Malone, 'The United States and the Law of the Sea after UNCLOS III', *Law and Contemporary Problems*, Vol. 46, No. 2, *The Law of the Sea: Where Now?* (Spring, 1983), pp. 29-36, at p. 31.

<sup>381</sup> Jon D. Carlson, Christopher Hubach et al., 'Scramble for the Arctic: Layered Sovereignty, UNCLOS, and Competing Maritime Territorial Claims', *The SAIS Review of International Affairs*, Vol. 33, No. 2 (Summer–Fall 2013), pp. 21-43, at p. 35.

territorial sea of 3 nm claimed).<sup>382</sup> Canada, Norway, Russia and the United States also claim contiguous zones rights up to 24 nm, although Norway's request does not apply to the Jan Mayen Island and the Svalbard archipelago.<sup>383</sup> In addition, all Arctic coastal States claim an EEZ up to 200 nm, despite the fact that Norway has only claimed a fisheries protection zone around Svalbard.<sup>384</sup>

Focusing specifically on the area of the Arctic Ocean, there are five bilateral maritime border situations on the Arctic Ocean: Russian Federation – USA, USA – Canada, Canada – Denmark in respect of Greenland, Denmark in respect of Greenland – Norway and Norway – Russian Federation.<sup>385</sup> Appreciable progress has been reached in settling overlapping maritime claims among adjacent Arctic States, at least within 200 nm of the coast.<sup>386</sup>

## 2.2 The USA and Russia Maritime Boundary

During the 1989 Washington summit between President Bush and Gorbachev, their mutual agreement on maritime borders was recorded and it was signed on June 1, 1990.<sup>387</sup> The maritime boundary extends from the North-Pacific Ocean through the Bering Sea and straits into the Chukchi Sea and ends in the Arctic Ocean after crossing a distance of about 1800 nm, making it the longest maritime boundary in the world.<sup>388</sup>

The brilliant conclusion of negotiations between the two Parties has occurred more or less simultaneously with the expansion of contacts and cooperation between them in the area; examples of this are the recent agreement on cooperation in marine search and

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<sup>382</sup> Ibid.

<sup>383</sup> Alexander S. Skaridov, 'The Seabed in the High North – How to Address Conflicts?', in *The Law of the Seabed: Access, Uses, and Protection of Seabed Resources*, published in January 2020, pp. 104-124, at p. 109.

<sup>384</sup> Robin Churchill, 'The Disputed Scope of the Svalbard Treaty Offshore: a New Approach to Resolving the Issue', in *Nordic Journal of International Law*, 91 (2022), pp. 544-567, at p. 557.

<sup>385</sup> Viatcheslav Gavrilov, Ted L. McDorman and Clive Schofield, 'Canada and the Russian Federation: Maritime Boundaries and Jurisdiction in the Arctic Ocean', *Arctic Review on Law and Politics*, Vol. 13 (2022), pp. 219-231, at p. 221.

<sup>386</sup> Xuexia Liao, 'Overlapping Entitlements to the Continental Shelf beyond 200 Nautical Miles', in *The Continental Shelf Delimitation Beyond 200 Nautical Miles: Towards A Common Approach to Maritime Boundary-Making*, October 2021, pp. 13-160, at p. 49.

<sup>387</sup> Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary, with Annex, signed at Washington, June 1, 1990. U.S. Senate, 101<sup>st</sup> Cong., 2d Sess., Treaty Doc. 101-22. Reproduced in *International Legal Materials* (July 1990), available at [https://www.state.gov/wp-content/uploads/2020/02/US\\_Russia\\_1990.pdf](https://www.state.gov/wp-content/uploads/2020/02/US_Russia_1990.pdf)

<sup>388</sup> Supra note 385, at p. 222.

rescue, the agreement establishing a joint regional commission for the Bering Strait area, and the agreement on mutual visits by inhabitants of the Bering Strait region.<sup>389</sup>

An important historical note to mention for the purposes of the agreement signed between the two countries is that when Alaska was purchased by the USA in 1867, there was no provision concerning the definition of a border in the 1867 Convention of the Cession.<sup>390</sup> In fact, the agreement limited itself to reporting the cession of Alaska to the USA and precisely indicated the geographical limits only with respect to the ceded territory.<sup>391</sup> Although the western boundary of Alaska as defined in the Convention was not clearly identified as a boundary line, it is described as such by at least one reliable commentator; it certainly carried out the pragmatic function of the allocation line.<sup>392</sup> Moreover, in 1867, the concept of sovereignty over the adjacent continental shelf and seas beyond one marine league from the relevant coast was not recognized by international law and it should come as no surprise that no maritime border was provided for in the original Convention of Cession.<sup>393</sup>

In more recent decades, the line of allocation was understood as the practical equivalent of a boundary, that is, as a dividing line for maritime jurisdiction as well as land territory.<sup>394</sup> In fact, by the time negotiations leading up to the current agreement were underway, the USA had come to consider the line of the 1867 Convention as a maritime boundary and as far as fisheries-related questions were concerned sought Soviet agreement on this position.<sup>395</sup> The Soviet Union started regulation of a 200 nm fishing zone in 1978 and the USA established a 200 nm fishing management zone in 1977.<sup>396</sup> Following the adoption of these contrasting fishing regimes by both countries, in various spots the fishing zone claimed by one Party overlaps with the zone claimed by the other

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<sup>389</sup> Betsy Baker, 'Beyond the Northern Sea Route: Enhancing Russian-United States Cooperation in the Bering Strait Region', *Polar Institute*, No. 8 | November 2021, pp. 1-27, at p. 16.

<sup>390</sup> Vlad M. Kaczynski, 'US-Russian Bering Sea Marine Border Dispute: Conflict over Strategic Assets, Fisheries and Energy Resources', *Russian Analytical Digest* 20/07, 2007, pp. 1-13, at p. 4.

<sup>391</sup> Camille M. Antinori, 'The Bering Sea: A maritime delimitation dispute between the United States and the Soviet Union', in *Ocean Development & International Law*, Volume 18, 1987 – Issue 1, pp. 1-47, at p. 23.

<sup>392</sup> John Bassett Moore, 'A Digest of International Law', in *The American Journal of International Law*, Vol. 1, No. 1 (Jan. – Apr., 1907), pp. 254-257, at p. 255.

<sup>393</sup> S. Whittemore Boggs, 'Delimitation of Seaward Areas Under National Jurisdiction', in *The American Journal of International Law*, Vol. 45, No. 2 (Apr., 1951), pp. 240-266, at p. 252.

<sup>394</sup> *Supra* note 374, at p. 35.

<sup>395</sup> *Supra* note 392

<sup>396</sup> Valery Konyshev and Alexander Sergunin, 'Russia's policies on the Territorial Disputes in the Arctic', in *Journal of International Relations and Foreign Policy* March 2014, Vol. 2, No. 1, pp. 55-83, at p. 76.

State as well.<sup>397</sup> The two governments, in discussing the exact location of the 1867 line, ended up agreeing on the 1990 Maritime Boundary Agreement currently in force.<sup>398</sup>

The latter sets the limits within which each Party may exercise authority over the territorial sea or EEZ in those areas where its asserted 12 nm of territorial sea or the 200 nm of the EEZ would overlap with those of the other or would remain controversial.<sup>399</sup> This agreement also regulates inter partes the jurisdiction of the continental shelf beyond 200 nm from its coasts which States may exercise in compliance with international law in the Arctic Ocean, the Bering and Chukchi Seas and a part of the North Pacific Ocean.<sup>400</sup> As President Bush observed, this agreement seems to have been tailored in the full interest of the USA. According to him, this discloses the opinion of the USA that the sea border should follow the line of the 1867 Convention.<sup>401</sup> This is mentioned in article 1.

Article 1 also encompasses the explicit declaration that a Party must respect the border as it limits its coastal State jurisdiction.<sup>402</sup> To sum up, this means that neither side will hold to manage offshore resources in areas on the opposite side of the border.<sup>403</sup> Article 2 of the agreement contains the legal description of the border.<sup>404</sup> It basically consists of the same allocation line established in the 1867 Convention. Therefore, the border extends from the point in the Bering Strait halfway between the Big and Small Islands of Diomedes to the north.<sup>405</sup> The EEZ ends in the Arctic Ocean at about 74 degrees north latitude, near the southern edge of the permanent ice shelf.<sup>406</sup> South of the Bering Strait, the border generally develops southwest to 167 degrees east longitude, ending

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<sup>397</sup> Robin R. Churchill and Daniel Owen, 'External aspects of fisheries management', in the EC Common Fisheries Policy, Oxford EC Law Library, published in March 2010, pp. 300-398, at p. 325.

<sup>398</sup> Andreas Østhagen, 'Maritime boundary disputes: What are they and why do they matter?', in Marine Policy, Volume 120, October 2020, 104118, pp. 1-9, at p. 3.

<sup>399</sup> Carl L. Olson, Mark J. Seidenberg and Robert W. Selle, 'U.S.-Russian maritime boundary giveaway', in Orbis, Volume 42, Issue 1, Winter 1998, Pages 75-89, at p. 79.

<sup>400</sup> Kurt M Shusterich, 'International jurisdictional issues in the Arctic Ocean', in Ocean Development and International law: The Journal of Marine Affairs, Vol. 14, 1984, p. 235-272, at p. 242.

<sup>401</sup> Michael A Becker, 'International Law of the Sea', in The international Lawyer, Vol. 42, No. 2, 2008, pp. 797-809, at p. 801.

<sup>402</sup> Supra note 387, art.1

<sup>403</sup> Clive Schofield, 'Options for Overcoming Overlapping Maritime Claims: Developments in Maritime Boundary Dispute Resolution and Managing Disputed Waters', in The Journal of Territorial and Maritime Studies, Vol. 8, No. 2 (SUMMER/FALL 2021), pp. 21-41, at p. 32.

<sup>404</sup> Supra note 387, art.2

<sup>405</sup> Michael Byers, 'Arctic Straits', in International Law and the Arctic, 2013, pp. 128-170, at p. 139.

<sup>406</sup> Michael Byers, 'Maritime Boundaries', in International Law and the Arctic, August 2013, pp. 28-55, at p. 36.

southwest of the Aleutian Island Chain at a point located just over 200 nm from both Russian and US territory.<sup>407</sup>

Article 3 asserts that the exercise by either Party of sovereign rights and jurisdiction in the special areas does not constitute unilateral extension of coastal state exclusive economic zone jurisdiction beyond 200 nautical miles of its coasts.: the transfer by one Party to another of the right to exercise sovereign rights and jurisdiction derived from the EEZ in the special areas set forth by the agreement.<sup>408</sup> According to article 3 of the 1990 Agreement between the USA and the URSS on the maritime boundary there are two special areas: the first is called eastern special area and is referred to in paragraph 1.<sup>409</sup> It consists of any area east of the maritime boundary that lies within 200 nautical miles of the baselines from which the breadth of the territorial sea of the Soviet Union is measured but beyond 200 nautical miles of the baselines from which the breadth of the territorial sea of the United States is measured.<sup>410</sup> The second one is the western special area and is indicated in paragraph 2.<sup>411</sup> It is constituted by any area west of the maritime boundary that lies within 200 nautical miles of the baselines from which the breadth of the territorial sea of the United States is measured but beyond 200 nautical miles of the baselines from which the breadth of the territorial sea of the Soviet Union is measured.<sup>412</sup> This was carried out in order to shirk the enlargement of the high-sea area of the Donut Hole.<sup>413</sup> This would have been the result if the Parties had not taken into account cases where one of them had asserted rights derived from the EEZ beyond the 1867 line in places where there was no overlap with the other Party's EEZ.<sup>414</sup> The consequence would have resulted in cutting or preventing the EEZ requests in these zones, thusly allocating fishery resources outside the jurisdiction of both signatories.<sup>415</sup> The so-called "Special Areas" created involve both Russia and the USA. In carrying out the transfer of the rights mentioned above, neither Party cedes one part of its EEZ to the other, neither Party

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<sup>407</sup> Ibid.

<sup>408</sup> Alex Oude Elferink and E. Shevardnadze, 'The 1990 USSR-USA Maritime Boundary Agreement', in *International Journal of Estuarine and Coastal Law*, Vol.6 No.1 (1991), pp. 41-52, at p. 46.

<sup>409</sup> *Supra* note 387, art. 3(1)

<sup>410</sup> Ibid.

<sup>411</sup> *Supra* note 387, art. 3(2)

<sup>412</sup> Ibid.

<sup>413</sup> Jennifer Jeffers, 'Climate Change and the Arctic: Adapting to Changes in Fisheries Stocks and Governance Regimes', *Ecology Law Quarterly*, Vol. 37, No. 3 (2010), pp. 917-977, at p. 927.

<sup>414</sup> Nugzar Dundua, 'Delimitation of maritime boundaries between adjacent States', New York, NY: United Nations, Division for Oceans Affairs and the Law of the Sea, 2006-2007, at p. 47.

<sup>415</sup> Ibid.

extends its EEZ.<sup>416</sup> To stress the non – EEZ nature of the special areas, each Party shall be forced to guarantee that its laws and regulations differentiate such areas from its EEZ.<sup>417</sup>

To conclude, article 6 provides that any dispute over the interpretation of the government shall be resolved through negotiations or other peaceful means agreed between the Parties.<sup>418</sup> This represents a step forward in terms of the readiness of the two countries to contemplate various solutions to settle down disputes.<sup>419</sup> In the most recent agreements between the US and Russia, disputes have been tightened to bilateral diplomatic channels, usually within an advisory body set up for a specific purpose. So far, it can be expected that the longest maritime border in the world will find concrete recognition as decisive proof of the enhanced stability that derives from the positive application of international law by the USA and Russia to the solution of mutual problems.<sup>420</sup>

### 2.3 The USA and Canada Maritime Boundary

In 1977, Canada's extension of fisheries jurisdiction gave rise to numerous border disputes in the Northwest Atlantic, Northeast Pacific and Arctic mostly with the USA but also with Denmark (the waters between Canada and Greenland).<sup>421</sup> In 1977, Canada and the USA entered into negotiations to resolve all four maritime border conflicts: in Dixon Entrance, Juan de Fuca, Beaufort Sea and the Gulf of Maine.<sup>422</sup> At that time, the dispute

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<sup>416</sup> Andreas Østhagen, 'High North, Low Politics—Maritime Cooperation with Russia in the Arctic', *Arctic Review on Law and Politics*, Vol. 7, No. 1 (2016), pp. 83-100, at p. 89.

<sup>417</sup> *Ibid.*

<sup>418</sup> *Supra* note 387, art.6

<sup>419</sup> Boris I. Tkachenko, 'Comparative analysis of the USA/USSR maritime boundary agreement of 1990 and treaty between Norway and Russia concerning maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean of 2010', in *Asia-Pacific Journal of Marine Science & Education*, Vol.2, No.2, 2012, pp. 35-69, at p. 43.

<sup>420</sup> Golunov Serghei, 'The Russian-U.S. Borderland: Opportunities and Barriers, Desires and Fears', in *Eurasia Border Review*, 2016, pp. 31-50, at p. 41.

<sup>421</sup> Ted. L. McDorman, 'Canada–United States Maritime Boundaries', in *Salt water neighbors: international ocean law relations between the United States and Canada*, Oxford University Press, 2009, pp. 115-206, at p. 167.

<sup>422</sup> Michael Byers and Andreas Østhagen, 'Why Does Canada Have So Many Unresolved Maritime Boundary Disputes?', in *The Canadian Yearbook of International Law*, Volume 59, 2021, pp. 1-62, at p. 27.



in the Gulf of Maine was noteworthy, at the center of an abundant fishing activity that was previously concentrated in international waters.<sup>423</sup>

### 2.3.1 Delimitation of the maritime boundary in the Gulf of Maine

The Gulf of Maine is located southwest of the Canadian provinces of Nova Scotia and New Brunswick. This represents an area rich in fishing, especially on the Georges Bank, which historically was located in international waters.<sup>424</sup> In 1977, Canada and the USA claimed fishing zones outside the 200 nm that overlapped with the eastern portion of the Georges Bank.<sup>425</sup> Each country preferred a different method of delimiting the maritime boundary. While Canada delimited its area in the Gulf of Maine by just applying the principle of equidistance, the USA drew a modified line of equidistance that took into account the specific circumstances, in particular the shape of the seabed.<sup>426</sup> Both States, in supporting their positions, made use of gas and oil licenses and seismic surveys in the 60s and 70s.<sup>427</sup> After three years of intense negotiations, the two countries signed two treaties in 1979 that were then submitted to the US Senate for its ratification.<sup>428</sup>

The East Coast Fisheries Agreement provided for a complex system of cross-border fishing rights: however, it was never put to a vote due to strong dissent from the US fishing industry.<sup>429</sup> Instead, the agreement to judge the maritime border receives the approval of the US Senate. In this second agreement, Canada and the USA agreed to submit the border dispute to a five-member chamber of the ICJ, who were called upon to demarcate a single maritime border for both the continental shelf and the EEZ.<sup>430</sup> The

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<sup>423</sup> George Steven Swan, 'That Gulf of Maine Dispute: Canada and the United States Delimit the Atlantic Continental Shelf', in *Natural Resources Lawyer*, Vol. 10, No. 2 (1977), pp. 405-456, at p. 432.

<sup>424</sup> Colleen Thompson, 'The Gulf of Maine in Context: State of the Gulf of Maine Report', *Gulf of Maine Council on the Marine Environment*, June 2010, pp. 1-58, at p. 4.

<sup>425</sup> Luc Cuyvers, 'Maritime Boundaries: Canada vs. United States', in *Marine Policy Reports*, Volume 2, Number 1, February 1979, pp. 1-6, at p. 4.

<sup>426</sup> Jan Schneider, 'The Gulf of Maine Case: The Nature of an Equitable Result', in *The American Journal of International Law*, Vol. 79, No. 3 (Jul., 1985), pp. 539-577, at p. 546.

<sup>427</sup> Louis De Vorse and Megan C. De Vorse, 'The World Court Decision in the Canada-United States Gulf of Maine Seaward Boundary Dispute: A Perspective from Historical Geography', in *Case Western Reserve Journal of International Law*, Volume 18, Issue 3, 1986, pp. 415-442, at p. 417.

<sup>428</sup> *Supra* note 422

<sup>429</sup> Michael V. Guimond, 'An Analysis of the U.S.-Canadian East Coast Fisheries Resource Agreement', in *Theses and Major Papers*, 1979, pp. 1-46, at p. 22.

<sup>430</sup> Sang-Myon Rhee, 'Equitable Solutions to the Maritime Boundary Dispute between the United States and Canada in the Gulf of Maine', in *The American Journal of International Law*, Vol. 75, No. 3 (Jul., 1981), pp. 590-628, at p. 604.

Chamber was excluded from the purview for the seabed and coast around Machias Seal Island; the Chamber was mandated for the demarcation to begin at a point south of that island.<sup>431</sup> In 1984, the Chamber demarcated a border up to 200 nm from the American coast that split the disputed zone almost exactly in half.<sup>432</sup> However, the end point of the updated line was only 175.5 nm from the Canadian coast; 163 nm of the water column and seabed located within 200 nm of the Canadian coast remained unsettled.<sup>433</sup> The USA still has not accepted Canada's jurisdiction to regulate fishing in that small area, beyond the 200 nm of the USA, which is a limit but south of the equidistance line.<sup>434</sup>

The choice to pay attention to negotiating efforts between Canada and the USA on this dispute was provoked by a number of developments in 1978, including a massive unrestricted fishing of cod, haddock, pollock and scallop stocks by US vessels in the Gulf of Maine and the mutual blocking of Canadian and American fishing vessels from each other's waters.<sup>435</sup> These developments led to a growing concern about the risk of being involved in a British-Icelandic conflict without the willingness of any of the Parties.<sup>436</sup> Another remarkable factor is the potential oil and gas of the Gulf of Maine: in fact, both countries had already issued exploration licenses.<sup>437</sup> All this created a situation where an agreement was essential in light of the high degree of human activity that occurred in the disputed area.<sup>438</sup>

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<sup>431</sup> Tafsir Malick Ndiaye and Rüdiger Wolfrum, 'Settlement of Disputes', In *Law of the Sea, Environmental Law and Settlement of Disputes*, 2007, pp. 845-1052, at p. 924.

<sup>432</sup> Ellen K. Eggleston, 'The Gulf of Maine Maritime Boundary Dispute', in *Denver Journal of International Law & Policy*, Volume 12, Number 1 Fall, Article 9, January 1982, pp. 120-127, at p. 122.

<sup>433</sup> *Supra* note 422.

<sup>434</sup> Mark B. Feldman and David Colson, 'The Maritime Boundaries of the United States', in *The American Journal of International Law*, Vol. 75, No. 4 (Oct., 1981), pp. 729-763, at p. 742.

<sup>435</sup> James T. Ball, 'Fisheries: Canada-United States Reciprocal Fisheries Relations under the Interim Fisheries Agreement of 1978', in *Case Western Reserve Journal of International Law*, Volume 11, Issue 1, Article 12, pp. 201-210, at p. 204.

<sup>436</sup> *Supra* note 426, at p. 547.

<sup>437</sup> David L. VanderZwaag, 'The Gulf of Maine Boundary Dispute and Transboundary Management Challenges: Lessons To Be Learned', in *Ocean and Coastal Law Journal*, Volume 15, Number 2, Article 5, 2010, pp. 241-260, at p. 249.

<sup>438</sup> Peter Ricketts, 'Geography and international law: the case of the 1984 Gulf of Maine boundary dispute', *Wiley Online Library*, published in September 1986, pp. 194-205, at p. 200.

### 2.3.2 The Beaufort Sea dispute between Canada and the USA

The Beaufort Sea is the shallow portion of the Arctic Ocean located between Alaska and the Canadian High Arctic Islands, just north of the Mackenzie River.<sup>439</sup> The dispute over the location of the border began in 1976 when the USA complained against the line used by Canada when issuing oil and gas concessions.<sup>440</sup> The existence of the dispute was confirmed the following year when both countries delimited fishing zones up to 200 nm employing different lines for this purpose.<sup>441</sup> The dispute focused on a treaty signed between Russia and Great Britain in 1825 (the USA assumed Russia's rights derived from the treaty when it purchased Alaska in 1867; Canada acquired Britain's rights in 1880).<sup>442</sup> This treaty fixed the eastern boundary of Alaska at the 141<sup>st</sup> degree meridian line, in its extension to the Arctic Ocean.<sup>443</sup>

Canada argued that these treaty's provisions established both the land and the sea borders and that both must follow a straight northern line.<sup>444</sup> The USA, on the other hand, considers that delimitation applies only to the territory and that traditional methods of delimiting maritime boundaries apply beyond the coast.<sup>445</sup> In the Beaufort Sea case, the USA retains that an equidistance line is legally and geographically appropriate.<sup>446</sup> As the coast of Alaska, the Yukon and the Northwest Territories tilts east – southeast from Point Barrow, Alaska, to the mouth of the Mackenzie River, that equidistance line tends progressively further east than the line Canada prefers at meridian 141 west, which runs

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<sup>439</sup> Andrea Hilborn and Emmanuel Devred, 'Delineation of Eastern Beaufort Sea Sub-regions Using Self-Organizing Maps Applied to 17 Years of MODIS-Aqua Data', in *Frontiers in Marine Science*, 01 July 2022, Sec. Coastal Ocean Processes, Volume 9, pp. 1-19, at p. 12.

<sup>440</sup> James S. Baker and Michael Byers, 'Crossed Lines: The Curious Case of the Beaufort Sea Maritime Boundary Dispute', in *Ocean Development & International Law*, Volume 43, 2012 – Issue 1, pp. 70-95, at p. 78.

<sup>441</sup> Nora Refai, 'The Beaufort Sea Boundary Dispute: A Consideration of Rights of Inuit in Canada and the United States', in *Alberta Law Review*, Volume 60, No.1, 2022, pp. 267-306, at p. 281.

<sup>442</sup> Michael Byers, 'Beaufort Sea Boundary', in *International law and the Arctic*, Cambridge University Press, 2013, pp. 56-91, at p. 66.

<sup>443</sup> David Hunter Miller, 'Political Rights in the Arctic', in *Foreign Affairs*, Vol. 4, No. 1 (Oct., 1925), pp. 47-60, at p. 52.

<sup>444</sup> Daniel Pomerants, *The Beaufort Sea Maritime Boundary Dispute: High Stakes for Canadian Arctic Sovereignty and Resource Extraction in a Changing Climate*, Faculty of Environmental Studies, York University, 2013, at p. 67.

<sup>445</sup> Pieter Bekker and Robert van de Poll, 'Unlocking the Arctic's Resources Equitably: Using a Law-and-Science Approach to Fix the Beaufort Sea Boundary', in *The International Journal of Marine and Coastal Law*, 2019, pp. 163-200, at p. 172.

<sup>446</sup> Andreas Østhagen & Clive H. Schofield, 'An ocean apart? Maritime boundary agreements and disputes in the Arctic Ocean', in *The Polar Journal*, 11:2, 2021, pp. 317-341, at p. 334.

in a roughly north-northeast direction from the end of the land boundary to the 200 nm limit.<sup>447</sup>

Canada declared itself ready to treat the disputes as a package, hoping to be able to exchange losses in the Beaufort Sea for gains elsewhere. However, the USA proved firm in dealing with each dispute separately.<sup>448</sup> Each summer from 2008 to 2011, two icebreakers, one American and the other Canadian worked together in the Beaufort Sea, collecting information about the shape of the ocean floor and the thickness of the seabed sediments.<sup>449</sup> This was a partnership that arose spontaneously because neither country had two icebreakers capable of carrying out the task and because both countries required a full scientific portrait of the seabed to determine the geographical extent of their sovereign rights over a continental shelf extended more than 200 nm from shore.<sup>450</sup> This common mapping beyond 200 nm could have contributed to the settlement of the boundary dispute, showing that the continental shelf in the Beaufort Sea could stretch 350 nm or even farther from shore.<sup>451</sup>

This is because the introduction of the extended continental shelf could represent a crucial point for the dispute over the boundaries of the Beaufort Sea, since if one extends the USA's preferred equidistance line beyond 200 nm, it changes direction and begins to draw to the northwest.<sup>452</sup> This is the consequence of a change in direction of the Canadian coast on the eastern side of the Mackenzie River Delta and especially due to the presence of Bank Island, a large feature on the Canadian shore of the Beaufort Sea.<sup>453</sup> This leaves a large and unclaimed area of extensive continental shelf west of meridian 141 and east

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<sup>447</sup> Supra note 444.

<sup>448</sup> Nicolas Castonguay, 'The Efficiency of Institutions in Regards to Disputes within the Arctic: A Case Study of the Beaufort Sea and the Barents Sea Disputes', *Mémoire présenté à l'École nationale d'administration publique dans le cadre du programme de Maîtrise en administration publique pour l'obtention du grade de Maître ès science (M. Sc.) concentration Administration internationale*, 2017, at p. 61.

<sup>449</sup> Rachel Hardy, 'A cold dispute over a hot issue: Settling Canada's Sovereignty in the Far North', Centre for International and Defence Policy, published in Contact Report, June 2019.

<sup>450</sup> Baker J.S., Betsy B., 'Filling an Arctic Gap: Legal and Regulatory Possibilities for Canadian-U.S. Cooperation in the Beaufort Sea', (June 17, 2010), *Vermont Law Review*, Vol. 34, 2009, at p. 57.

<sup>451</sup> Supra note 440.

<sup>452</sup> Elizabeth Riddell-Dixon, 'The seven-decade quest to maximize Canada's continental shelf', in *International Journal*, Vol. 69, No. 3 (September 2014), pp. 422-443, at p. 428.

<sup>453</sup> Eddy C. Carmack and Robie W. Macdonald, 'Oceanography of the Canadian Shelf of the Beaufort Sea: A Setting for Marine Life', in *Arctic*, Vol. 55, Supplement 1: The Beaufort Sea Conference 2000 on the Renewable Marine Resources of the Canadian Beaufort Sea (2002), pp. 29-45, at p. 36.

of the equidistance line.<sup>454</sup> In short, the US line seems to advantage Canada beyond 200 nm.<sup>455</sup>

No compromise seems to emerge from the current situation. The main internal obstacle to resolve the boundary dispute could be represented by the 1984 Inuvialuit Final Agreement, a constitutionally recognized land claims agreement in which the Canadian government and the Inuvialuit used the 141 West meridian to define the west of the Inuvialuit settlement region.<sup>456</sup> In the settlement area, in particular in the Yukon North Slope, which includes the offshore area northeast of the end of the international land boundary, Canada has recognized Inuvialuit harvesting rights over fish and wildlife and has committed to protecting the area.<sup>457</sup> Pursuant to international law, Canada could enter into a maritime boundary treaty with the USA that would likely be valid and successful regardless of the internal rights of the Inuvialuit.<sup>458</sup> According to Canadian law instead, the federal government is obligated to consult to limit any violation of Aboriginal rights as far as possible, making that limitation clear through an act of Parliament and providing compensation.<sup>459</sup>

### **2.3.2 The Dixon Entrance boundary dispute**

In 1903, the USA and Great Britain established an arbitration panel to demarcate the border between the Alaska Panhandle and British Columbia.<sup>460</sup> At the southern extreme of the Panhandle, the panel drew a boundary at the center of the Portland Canal,

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<sup>454</sup> Andrew Higdon, 'The Canadian Submission to the United Nations Commission on the Limits of the Continental Shelf', in *McGill International Journal of Sustainable Development Law and Policy / Revue internationale de droit et politique du développement durable de McGill*, Vol. 9, No. 2 (2013), pp. 43-68, at p. 47.

<sup>455</sup> *Supra* note 422.

<sup>456</sup> Peter J. Usher, 'Inuvialuit Use of the Beaufort Sea and Its Resources, 1960-2000', in *Arctic*, Vol. 55, Supplement 1: The Beaufort Sea Conference 2000 on the Renewable Marine Resources of the Canadian Beaufort Sea (2002), pp. 18-28, at p. 23.

<sup>457</sup> David L. Vanderzwaag and Cynthia Lamson, 'Ocean Development and Management in the Arctic: Issues in American and Canadian Relations', in *Arctic*, Vol. 39, No. 4 (Dec., 1986), pp. 327-337, at p. 331.

<sup>458</sup> Keith F. Miller, 'The Implications of UNCLOS for Canada's Regulatory Jurisdiction in the Offshore-The 200-Mile Limit and the Continental Shelf', in *Dalhousie Law Journal*, Volume 30, Issue 2, Article 2, 2007, pp. 341-382, at p. 353.

<sup>459</sup> Isabelle Brideau, 'The Duty to Consult Indigenous People', Publication No. 2019-17-E, Library of Parliament, June 2019, pp. 1-13, at p. 5.

<sup>460</sup> 'The Alaska Boundary Case (Great Britain, United States)', *Reports of International Arbitral Awards – 20 October 1903*, United Nations, 2006, Volume XV pp. 481-540, at p. 493.

just south of where it was located opens into the Dixon Entrance.<sup>461</sup> The panel designated that point just south of the mouth of the Portland Canal as point B and drew a straight line from there to point A at Cape Muzon on Dall Island, 72 nm distant. The resulting line A-B runs along the north side of the Dixon Entrance.<sup>462</sup> Canada considers point A and B to be part of the delimitation of the arbitrated borders, just like the other turning points, giving all of the Dixon Entrance to Canada.<sup>463</sup> However, the USA argues that the A-B line attributes ownership to land, leaving the maritime boundary to be decided in compliance with international law; according to the USA using the principle of equidistance.<sup>464</sup> In 1977, the USA implemented the principle of equidistance to designate a fisheries conservation zone for the entire extension of the Dixon Entrance.<sup>465</sup>

The divergence between the Canadian and US position amounts to 828 nm, spread over two areas south of the A-B line.<sup>466</sup> The dispute also has consequences towards the sea of the Dixon Entrance. The EEZs that Canada and the USA share should be settled according to the equidistance principle, depending on the border that is closest to the coast for its starting point.<sup>467</sup> Canada's preferred line starts at point A, while the USA's preferred line begins at a point equidistant between Cape Muzon and Langara Island. For Canada, the A-B line owns deep historical significance.<sup>468</sup> As a result of an arbitration decision, an arbitrator appointed by the United Kingdom broke ties with two of his Canadian colleagues and sided with three US negotiators to favor the USA over the location of the land border as well as several islands.<sup>469</sup> The reaction of Canada was strong: as a consequence, the position that the A-B line constitutes a maritime border to the

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<sup>461</sup> David H Gray, 'Canada's unresolved maritime boundaries', in *Boundary and Security Bulletin*, Vol. 5, No. 3, 1977, p. 61-70, at p. 64.

<sup>462</sup> *Supra* note 422.

<sup>463</sup> G. B. Bourne and D. M. McRae, 'Maritime Jurisdiction in the Dixon Entrance: The Alaska Boundary Re-Examined', in *Canadian Yearbook of International Law*, Cambridge University Press, 2016, pp. 175-223, at p. 204.

<sup>464</sup> R.R. Churchill, 'Fisheries issues in maritime boundary delimitation', in *Marine Policy*, Volume 17, Issue 1, January 1993, Pages 44-57, at p. 51.

<sup>465</sup> David H. Gray, 'Canada's Unresolved Maritime Boundaries', in *Boundary and Security Bulletin*, Vol. 5, No. 3, p. 61-70, 1997, at p. 64.

<sup>466</sup> *Supra* note 422

<sup>467</sup> *Supra* note 430.

<sup>468</sup> *Supra* note 422

<sup>469</sup> Morrissey Mary Kathleen, 'The Canadian-American Dispute Over Dixon Entrance', in *Theses and Major Papers*. Paper 203, 1990, pp. 1-62, at p. 15.

disadvantage of the USA has become a gathering point of the national public.<sup>470</sup> Even today, more than a century later, any Canadian government would be cautious of making concessions in the Dixon Entrance.<sup>471</sup>

As in the case of the Beaufort Sea, here too the USA and Canada are in contrasting positions where no dialogue to compromise can be seen.<sup>472</sup> In addition, any compromise resulting in a boundary somewhere between lines A and B and the equidistance lines would see both countries granting potentially fruitful fishing grounds, setting precedents that could prove damaging when it comes to resolving disputes elsewhere.<sup>473</sup>

### **2.3.4 The US-Canadian dispute over the Juan De Fuca Strait**

The border between Canada and the USA in the Strait of Juan de Fuca was established in 1846 but the development of offshore rights did not occur until the mid-20<sup>th</sup> century and led to the emergence of a new conflict just west of the Strait in the Pacific Ocean.<sup>474</sup> The dispute concerns only 15.4 nm squared of the EEZ, spread over two lens-shaped areas. West of the Juan de Fuca Strait, the continental shelf is configured very narrow and the potential for oil and gas is very limited.<sup>475</sup> However, there are salmon and halibut stocks on the Swiftsure Bank, part of which falls within the lens-shaped zone located closer to shore.<sup>476</sup> Canada and the USA agree on the application of the equidistance principle. The controversy focuses on Canada's straight baselines, which it adopted along the indented southwestern coast of Vancouver Island in 1969.<sup>477</sup>

The USA immediately objected because the baselines had been drawn contrary to the principles laid down in international law of the sea. The dispute came to prominence

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<sup>470</sup> Ted L. McDorman, 'Canada-U.S. International Ocean Law Relations In The North Pacific: Disputes, Agreements And Cooperation', in *Maritime Boundary Disputes, Settlement Processes, and the Law of the Sea*, 2009, pp. 176-197, at p. 184.

<sup>471</sup> *Supra* note 422.

<sup>472</sup> Robert L. Friedheim, 'The U.S.-Canada Arctic Policy Forum: Impressions from the American Co-Chair', in *Arctic*, Vol. 39, No. 4 (Dec., 1986), pp. 360-367.

<sup>473</sup> Ted L. McDorman, 'Canada-United States Cooperative Approaches to Shared Marine Fishery Resources: Territorial Subversion?', in *Michigan Journal of International Law*, Volume 30, Issue 3, 2009, pp. 665-687, at p. 673.

<sup>474</sup> Ted. L. McDorman, 'Canada-United States Maritime Boundaries', in *Salt Water Neighbors: International Ocean Law Relations Between the United States and Canada*, February 2009, pp. 115-206, at p. 127.

<sup>475</sup> *Ibid.*

<sup>476</sup> 'Swiftsure Bank', Wild Coast Wilderness Resort Ltd., 2022, available at <https://wildcoastwildernessresort.com/swiftsure-bank/>

<sup>477</sup> *Supra* note 458

in 1977 when Canada declared a 200 nm fishing zone.<sup>478</sup> The area in question was demarcated using an equidistance line based on the straight baselines of Canada to the north and the low tide limit along the coast of the USA to the south.<sup>479</sup> In the same year, the USA stated its fishing zone demarcated via an equidistance line based on the low tide limits of both coasts.<sup>480</sup> In addition to challenging the legality of Canadian baselines, the USA questioned whether straight baselines were employed appropriately to delineate an equidistance boundary.<sup>481</sup> Canada included the dispute in its proposed business package in 1977, but otherwise no negotiations took place.<sup>482</sup> According to MacDorman, the small area of disputed waters off the Strait of Juan de Fuca has caused little concern and has not been the subject of discussion between the US and Canada.<sup>483</sup>

There is no evidence of particular pressure from the fishing industry to resolve the dispute. As in the case of the Dixon Entrance, the cooperative fisheries management implemented by the Pacific Salmon Commission, combined with the application of flag States rules, has originated a viable situation for both parties.<sup>484</sup> For this reason, public opinion does not play a decisive role: in fact, very few Canadians or US citizens are aware of the existence of the dispute.<sup>485</sup> There is some regional interest, in the province of British Columbia: the view matured in the 1970s that the border should run through the Juan de Fuca submarine canyon and not be demarcated by an equidistance line was expressed.<sup>486</sup> As in other border disputes between the US and Canada, both countries seem intimidated

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<sup>478</sup> David L Vanderzwaag and Cynthia Lamson, 'Ocean Development and Management in the Arctic: Issues in American and Canadian Relations', in *Arctic*, Vol.39, No.4, 1986, pp. 327-337, at p. 333.

<sup>479</sup> H. Scott Fairley, 'Canadian federalism, fisheries and the constitution: external constraints on internal ordering', in *Ottawa Law Review*, Volume 12, No.2, 1980, pp. 257-318, at p. 274.

<sup>480</sup> Robert W. Smith, 'The Maritime Boundaries of the United States', *Geographical Review*, Vol. 71, No. 4 (Oct., 1981), pp. 395-410, at p. 401.

<sup>481</sup> Clive Schofield, 'A New Frontier in the Law of the Sea? Responding to the Implications of Sea Level Rise for Baselines, Limits and Boundaries', In *Frontiers in International Environmental Law: Oceans and Climate Challenges*, 2021, pp. 171-193, at p. 182.

<sup>482</sup> Megan Geuss, 'Reviving the Transit Pipeline Treaty of 1977: How a Michigan Pipeline could bring the US and Canada to Arbitration', in *Arbitration Law Review*, Volume 14, Article 8, 2023, pp. 1-15, at p. 4.

<sup>483</sup> Ted L MacDorman, 'Will Canada ratify the Law of the Sea Convention?', in *San Diego Law Review*, Volume 25, 1988, pp. 535-579, at p. 551.

<sup>484</sup> Thomas C. Jensen, 'The United States – Canada Pacific Salmon Interception Treaty: an historical and legal overview', *Environmental Law*, Vol. 16, No. 3, Symposium on Salmon Law (Spring 1986), pp. 363-422, at p. 392.

<sup>485</sup> *Ibid.*

<sup>486</sup> Christopher Kirkey, 'Delineating Maritime Boundaries: The 1977-78 Canada-U. S. Beaufort Sea Continental Shelf Delimitation Boundary Negotiations', in *Canadian Review of American Studies*, Vol.25, No.2, 1995, pp. 49-66, at p. 57.



that compromising on a boundary principle in one case might weaken their position in another.<sup>487</sup> The same concern might exist about the law governing straight baselines. In fact, the dispute between Canada and the USA in the Juan de Fuca Strait could be connected to a dispute over straight baselines around Canadian High Arctic archipelago in 1985, which provoked immediate protests from the US and the European Community.<sup>488</sup> Both Canada and the US might fear that any compromise on straight baselines along Vancouver Island could weaken their grounds in the Arctic, where the dispute over straight baselines is tied to the more notable dispute over the status of the Northwest Passage.<sup>489</sup>

## 2.4 The Canada and Denmark Maritime Boundary

In 1970, Canada extended its territorial sea from 3 to 12 nm. However, it was overlooked that in many places the new limit extended more than half through the Nares Strait, the narrow channel between Ellesmere Island and Greenland.<sup>490</sup> Once this fact is realized, border negotiations with Denmark began.<sup>491</sup> The border that was being negotiated was more extensive, because Greenland is within 400 nm of the long coasts of Ellesmere Island and Baffin Island.<sup>492</sup> In 1973 Canada and Denmark agreed to split the ocean floor employing an equidistance line. Since then, the two countries have also made use of the 1450 nm limit resultant to pinpoint fishing zones.<sup>493</sup> A provision of the Agreement on the continental shelf between Greenland and Canada included the possibility that hydrocarbon reserves straddle the new border.<sup>494</sup> But unlike some newer maritime border treaties, it only requires the Parties to negotiate in these circumstances:

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<sup>487</sup> Okoye, Uchechukwu, 'What Is the Status of the Northwest Passage in the Arctic Under International Law of the Sea?', Swansea University, (February 20, 2022), pp. 1-25, at p. 13.

<sup>488</sup> Dovile Petkunaite, 'Cooperation or Conflict in the Arctic? UNCLOS and the Barents and Beaufort Sea Disputes', in Dissertations and Theses, City College of New York, 2011, pp. 1-87, at p. 46.

<sup>489</sup> Jeremy Seth Geddert, 'Right of (Northwest) Passage: Toward a Responsible Canadian Arctic Sovereignty', in Canadian Journal of Political Science, 2019, at p. 8.

<sup>490</sup> Mark Killas, 'The legality of Canada's claims to the waters of its Arctic archipelago', in Ottawa Law Review, 1988, pp. 95-136, at p. 107.

<sup>491</sup> Ashley Burke and Richard Raycraft, 'Canada and Denmark sign deal to divide uninhabited Arctic Island', in CBC News, 2022.

<sup>492</sup> Martin Breum, 'Canada, Denmark agree on a landmark deal over disputed Hans Island', in Arctic Today Business Journal, 13 June 2022.

<sup>493</sup> Raphaël Roman, 'Settling Sovereignty Claims over the Hans Island', in The Pub MPPGA Student Media, October 10, 2017.

<sup>494</sup> Elin Hofverberg, 'The Hans Island "Peace" Agreement between Canada, Denmark, and Greenland', in Library of Congress Blogs, June 22, 2022.

it does not provide a process or mechanism for resolving the issue.<sup>495</sup> The treaty contains an ambiguous element, namely the way it treats a disputed island located on the line of equidistance.<sup>496</sup> It is the Hans Island/Ø, with an area of only 1.3 square kilometers and is not stated in the treaty.<sup>497</sup>

The maritime boundary stops just before the southern coast of the island and starts again just off the northern coast of the island.<sup>498</sup> As a result, the dispute over the Hans Island became almost irrelevant, as it now only looks at a tiny piece of land with the surrounding seabed and water columns assigned by the treaty.<sup>499</sup> Although the dispute continues, neither country seems to take it seriously. The Parties agreed not to extend the border beyond point 127 in the south of Lincoln, sea north of Ellesmere Island and Greenland, due to a separate dispute there.<sup>500</sup> By 1973, commercial fishing on Baffin Bay was scarce.<sup>501</sup> Fishing especially for shrimps and turbot has grown in the following decades, leading to several minor disputes between Canada and Greenland over straddling stocks.<sup>502</sup>

There has been some interest in the gas and oil potential in Baffin Bay which is entirely made up of the continental shelf.<sup>503</sup> In 1971 Shell obtained exploratory leases from the Canadian government for 860 square kilometers near the eastern entrance to Lancaster Sound.<sup>504</sup> Subsequently, some exploratory drilling took place in Baffin Bay although only on the Greenland side without any commercially viable deposit being

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<sup>495</sup> Snjólaug Árnadóttir, 'Termination of Maritime Boundaries Due to a Fundamental Change of Circumstances', in *Utrecht Journal of International and European Law*, 2016, pp. 94-111, at p. 98.

<sup>496</sup> Sean D. Murphy, 'Effects of islands on maritime boundary delimitation', in *International Law Relating to Islands*, 2017, pp. 221-276, at p. 235.

<sup>497</sup> *Ibid.*

<sup>498</sup> Nikoleta Maria Hornackova, 'Hans Island Case: A territorial dispute in the Arctic', Master Thesis – Aalborg University, May 2018, at p. 29.

<sup>499</sup> P. Whitney Lackenbauer & Rasmus Leander Nielsen, "'Close, like-minded partners committed to democratic principles": Settling the Hans Island/Tartupaluk Territorial Dispute', in *Arctic Yearbook*, 2022, pp. 1-11, at p. 3.

<sup>500</sup> Donat Pharand, 'The Legal Régime of the Arctic: Some Outstanding Issues', in *International Journal*, Vol. 39, No. 4, *Polar Politics* (Autumn, 1984), pp. 742-799, at p. 752.

<sup>501</sup> David L. VanderZwaag, Vitalii Vorobev and Olga Koubrak, 'Canadian and Russian Fisheries Management in the Arctic: Complexities, Commonalities and Contrasts', in *Arctic Review on Law and Politics*, June 2022, pp. 361-392, at p. 372.

<sup>502</sup> Alejandro Alvarez von Gustedt and Christopher C. Joyner, 'The Turbot War of 1995: Lessons for the Law of the Sea', in *The International Journal of Marine and Coastal Law*, Volume 11, No.4, 1996, pp. 425-458, at p. 446.

<sup>503</sup> Flemming G. Christiansen, 'Greenland petroleum exploration history: Rise and fall, learnings, and future perspectives', in *Resources Policy*, Volume 74, December 2021, 102425, pp. 1-21, at p. 8.

<sup>504</sup> Carol Linnitt, 'Shell Gives Up Nearly 40-Year Fight for Expired Arctic Permits, Opening Up Conservation Area', in *The Narwhal*, June 8, 2016.

found.<sup>505</sup> The 1973 Agreement contains provisions on both sides seeking the agreement on the other and finding the appropriate mechanisms if it imposes itself in the exploitation of resources beyond the agreed borders.<sup>506</sup> Canada and Denmark are said to have been stimulated by a wish to avoid future disputes in a largely unstable area where Greenland faces the Canadian Arctic.<sup>507</sup> Likewise, the Agreement shows the effort to enter the Parties to shirk conflicts in the exploitation of marine resources.<sup>508</sup>

The Lincoln Sea stands for the part of the Arctic Ocean situated north of Greenland and Ellesmere Island.<sup>509</sup> In 1973, negotiators demarcating the maritime border between Canada and Greenland stop at 82°13' north, where the Nares Strait opens into the Lincoln Sea.<sup>510</sup> Then in 1977, Canada claimed a 200 nm fishing zone along the coast of the Arctic Ocean. The area was bounded to the east by an equidistance line that used the low tide line of the Ellesmere Island and Greenland coasts and several marginal islands at base points.<sup>511</sup> Three years later Denmark adopted its own equidistance line but only after drawing straight baselines, two of which employed Beaumont Island as a base point.<sup>512</sup> Beaumont Island is located more than 12 but less than 24 nm from the coast of Greenland. The first of the baselines results was 42.6 nm long; the second was 40.9 nm long.<sup>513</sup> The use of straight baselines and Beaumont Island had the effect of shifting the equidistance line slightly westward, adding two lenticular areas of 31 nm and 34 nm to the Danish claim.<sup>514</sup>

Canada has opposed Danish straight baselines, particularly the use of Beaumont Island as a base point for four reasons: the island is a bit west of the other islands, therefore

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<sup>505</sup> Flemming G. Christiansen, 'Greenland mineral exploration history', in Springer Link, 2022, pp. 1-29, at p. 13.

<sup>506</sup> J.J.P. Smith, 'The Arctic's Final Frontier: Canada and Denmark Settle the Territorial Question of Hans Island', in *Asia-Pacific Journal of Ocean Law and Policy*, Vol.8, No.1, 2023, pp. 156-164, at p. 157.

<sup>507</sup> Jacques Hartmann, 'Canada and Denmark reach agreement on the Lincoln Sea Boundary', in *Dipublico.org – Derecho International*, 2013.

<sup>508</sup> *Ibid.*

<sup>509</sup> Michael Byers, 'Maritime Boundaries', in *International Law and the Arctic*, Cambridge University Press, 2013, at p. 38.

<sup>510</sup> Alexander S. Skaridov, 'The Seabed in the High North – How to Address Conflicts?', in *The law of the seabed: access, uses, and protection of seabed resources*, Leiden: Brill Nijhoff, 2020, pp. 104-124, at p. 113.

<sup>511</sup> Michael Byers, 'Arctic Oil: Canada's chance to get it right', SSHRC Knowledge Synthesis Report, University of British Columbia, 1 June 2016, TypePad, at p. 43.

<sup>512</sup> Michael Byers, 'Extended continental shelves', in *International Law and the Arctic*, Cambridge University Press, 2013, pp. 92-127, at p. 99.

<sup>513</sup> *Ibid.*, at p. 102.

<sup>514</sup> *Supra* note 422.

it is not part of a fringe of islands; straight baselines are long; they do not pursue the shoreline trend; they do not pass the mouths of the intermediate fjords but are further offshore.<sup>515</sup> These grounds seem to stem from the fundamental decision of the ICJ on straight baselines set forth in the Anglo-Norwegian fisheries case of 1951.<sup>516</sup> In 1982, Danish diplomats met to discuss the Lincoln Sea boundary dispute, with neither side budging from their positions.<sup>517</sup> In 2004, the scope of the dispute diminished when Denmark modified its straight baselines, replacing the 40.9 nm baseline east of the Beaumont Island with a series of shorter baselines, including the one connecting Beaumont Island to the next island in the chain, the John Murray Island.<sup>518</sup> The Danish changes reduced the size of the disputed northern area to almost the point of eliminating it.<sup>519</sup> These developments may have contributed to the Danish and Canadian Foreign Ministers' announcements in 2012 according to which negotiators reached a tentative agreement on where to stabilize the maritime border in the Lincoln Sea.<sup>520</sup>

The only issue remaining to be negotiated was a joint management system for all straddling hydrocarbon deposits.<sup>521</sup> The matter cannot be addressed only by Danish and Canadian negotiators because Denmark should retain control over Denmark's foreign policy, since 2008 the government of Greenland exercises control over natural resources, including those on the continental shelf.<sup>522</sup> In addition, in 2018, the two countries gave birth to a Joint Task Force on Boundary Issues in order to settle down outstanding problems connected to maritime border.<sup>523</sup> Due to four reasons the dispute over the

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<sup>515</sup> John Abrahamson, 'Joint Development of Offshore Oil and Gas Resources in the Arctic Ocean Region and the United Nations Convention on the Law of the Sea', in *The Law of the Sea* 1.4, 2017, pp. 1-105, at p. 62.

<sup>516</sup> 'Anglo-Norwegian Fisheries Case', in *International Law Reports*, Volume 18, 1957, pp. 86-144, at p. 93.

<sup>517</sup> Andreas Østhagen & Clive H. Schofield, 'The Arctic Ocean: Boundaries and Disputes', in *Arctic Yearbook*, 2021, at p. 7.

<sup>518</sup> Joachim Weber, 'Handbook on geopolitics and security in the Arctic: the high north between cooperation and confrontation', in Cham, Switzerland: Springer, 2020, at p. 177.

<sup>519</sup> *Ibid.*

<sup>520</sup> P. Whitney Lackenbauer, Suzanne Lalonde, and Elizabeth Riddell-Dixon, 'Canada and the Maritime Arctic: Boundaries, Shelves and Waters', in *North American and Arctic Defence and Security Network*, 2020, at p. 52.

<sup>521</sup> Timothy J. Tyler, James L. Loftis, Emilie E. Hawker, Hana V. Vizcarra and M. Imad Khan, 'Developing Arctic Hydrocarbon Resources: Delineating and Delimiting Boundaries for Field Development in the Arctic', in *The Regulation of Continental Shelf Development*, 2013, pp. 319-351, at p. 333.

<sup>522</sup> Marc Auchet, 'Greenland at the crossroads: What strategy for the Arctic?', in *International Journal*, Vol. 66, No. 4, part II (Autumn 2011), pp. 957-970, at p. 968.

<sup>523</sup> H  l  ne Ruiz Fabri, 'A bridge over troubled waters: dispute resolution in the law of international watercourses and the law of the sea', Leiden; Boston: Brill Nijhoff, 2021, at p. 213.

boundaries of the Lincoln Sea was of marginal relevance: the Parties agreed to apply the principle of equidistance, the dispute concerned a very narrow area of the EEZ, any resource discovered in the disputed areas would have been very tough to reach and therefore difficult to achieve commercially and there was never some divergence of opinion on the location where the Danish and Canadian jurisdictions cross 200 nm from the coast, which meant that any dispute with 200 nm from the coast had no legal relevance for the delimitation of the continental shelf extended beyond 200 nm.<sup>524</sup>

Like the 1973 treaty between Canada and Greenland, the main cause for trying to resolve this dispute was to address a situation before any issue arose.<sup>525</sup> The dispute also enjoyed a scarce political significance. From the Canadian perspective, the area of interest was located in the exclusive federal jurisdiction and in the most remote part of the Arctic land, which results in no public knowledge and engagement regarding the issue.<sup>526</sup> The opening of negotiations was tied to the Canadian Arctic Foreign Policy Statement in 2010, which conveyed the intention to resolve all controversies over the country's Arctic borders, not only in the Beaufort Sea where interest in oil and gas was augmenting.<sup>527</sup> Negotiations with Denmark and the USA started around the same time, denoting that the resolution of the Lincoln Sea dispute might have consolidated the right foundation to cope with the more complicated Beaufort Sea controversy.<sup>528</sup>

## 2.5 The Norway and Denmark Maritime Boundary

On 20 February 2006, the government of the Kingdom of Denmark together with the government of Greenland and Norway signed an agreement on the maritime border between Greenland and the Svalbard Islands.<sup>529</sup> The Svalbard Islands have been under

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<sup>524</sup> V.V. Gavrilov, 'The LOSC and the Delimitation of the Continental Shelf in the Arctic Ocean', in *The International Journal of Marine and Coastal Law*, Volume 31, No.2, pp.315-338, at p. 327.

<sup>525</sup> Jon D. Carlson, Christopher Hubach, Joseph Long, Kellen Minter, Shane Young, 'Scramble for the Arctic: Layered Sovereignty, UNCLOS, and Competing Maritime Territorial Claims', in *The SAIS Review of International Affairs*, Vol. 33, No. 2 (Summer–Fall 2013), pp. 21-43, at p. 32.

<sup>526</sup> Molly Watson, 'An Arctic Treaty: a solution to the international dispute over the polar region', in *Ocean and Coastal Law Journal*, Volume 14, Number 2, Article 8, January 2009, pp. 307-334, at p. 318.

<sup>527</sup> Ronald O'Rourke, 'Changes in the Arctic: Background and Issues for Congress', Congressional Research Service, July 5, 2013, at p. 37.

<sup>528</sup> Lieutenant – Colonel Alain Lafrenière, 'Can we just get along already? Canadian Arctic Sovereignty is American Security', Maxwell Air Force Base – Alabama, June 2017.

<sup>529</sup> 'Agreement between the Government of the Kingdom of Norway on the one hand, and the Government of the Kingdom of Denmark together with the Home Rule Government of Greenland on the other hand, concerning the delimitation of the continental shelf and the fisheries zones in the area between

Norwegian sovereignty since 1920 when the Spitsbergen Treaty was concluded.<sup>530</sup> In 1977, Norway claimed a 200 nm fisheries protection zone around the Svalbard archipelago and considered this zone did not fall within the scope of the Treaty since such areas did not exist in the international law of the sea in 1920.<sup>531</sup> To avoid intensifying the dispute with other countries over the scope of the treaty and access rights to offshore oil and gas resources, Norway has not requested an EEZ around the Svalbard Islands.<sup>532</sup> However, pursuant to international law a State does not need to claim a continental shelf since this is automatically generated by the adjacent territory.<sup>533</sup> Norway argues that the Svalbard Islands do not have a continental shelf of their own and that the continental shelf around Svalbard, as the Norwegian continental shelf is exclusively under Norwegian jurisdiction.<sup>534</sup> Despite some other countries contrast, a confirmation of the Norwegian claim came from the Commission on the Limits of the Continental Shelf (CLCS) in 2009 which issued a recommendation recognizing the existence of a Norwegian continental shelf north of the Svalbard Islands.<sup>535</sup>

The 2006 Agreement between Norway and Denmark mentioned above delimits the continental shelf and the EEZ of Greenland and the fisheries protection zone around the Svalbard archipelago.<sup>536</sup> The Agreement only covers demarcations within 200 nm. Article 1 specifies that the border was drawn on the ground of median line between the coasts of Greenland and the Svalbard Islands and on the basis of negotiations between the Parties.<sup>537</sup> The total overlap area 200 nm measures about 150000 square kilometers, and

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Greenland and Svalbard (with chart). Copenhagen, 20 February 2006', United Nations Office of Legal Affairs, Treaty Series 2378, pp.21-35, published in December 2011.

<sup>530</sup> Roald Berg, 'The genesis of the Spitsbergen/Svalbard Treaty, 1871-1920', in *The Cambridge History of the Polar Regions*, Cambridge University Press, 2023, pp. 354-377, at p. 361.

<sup>531</sup> Øystein Jensen, 'The Svalbard Treaty and Norwegian Sovereignty', *Arctic Review on Law and Politics*, Vol. 11 (2020), pp. 82-107, at p. 91.

<sup>532</sup> Clive Archer and David Scrivener, 'Frozen Frontiers and Resource Wrangles: Conflict and Cooperation in Northern Waters', in *International Affairs* (Royal Institute of International Affairs 1944-), Vol. 59, No. 1 (Winter, 1982-1983), pp. 59-76, at p. 67.

<sup>533</sup> *Supra* note 66, art.76

<sup>534</sup> Finn Sollie, 'Norway's Continental Shelf and the Boundary Question on the Seabed', in *Cooperation and Conflict*, Vol. 9, No. 2/3, *The challenge of new territories* (1974), pp. 101-113, at p. 109.

<sup>535</sup> Torbjørn Pedersen and Tore Henriksen, 'Svalbard's Maritime Zones: The End of Legal Uncertainty?', in *The International Journal of Marine and Coastal Law*, 2009, pp. 141-161, at p. 146.

<sup>536</sup> Torbjørn Pedersen, 'Denmark's Policies Toward the Svalbard Area', in *Ocean Development & International Law*, Volume 40, 2009, Issue 4, pp.319-332, at p. 326.

<sup>537</sup> *Supra* note 530, article 1

the length of the border is about 800 kilometers.<sup>538</sup> The northern terminus of the border is located at the intersection of the 200 nm limits of Greenland the Svalbard Islands.<sup>539</sup>

The same applies to the southern terminal of the border. The median line boundary was simplified for practical reasons and was adapted with respect to the Danish Tobias Island O.<sup>540</sup> This island is situated about 70 kilometers east of the northeast coast of Greenland and has a length of about 2 kilometers.<sup>541</sup> Tobias O is the only island off the northeast coast of Greenland that is not included in the system of straight baselines along the coast of Greenland.<sup>542</sup> The distance of the island from the mainland of 70 kilometers may hint the presence of a remarkable impact on the midline.<sup>543</sup> Since Tobias O is aligned with the general north-south direction of the islands bordering Greenland, its impact is not as pronounced.<sup>544</sup> Both sides have applied the median line principle to demarcate the 200 nm zones between Greenland and Svalbard in their national legislation.<sup>545</sup> However, they did not calculate the line due to the lack of information about the relevant basepoints.<sup>546</sup>

The new baselines for the Svalbard Islands were established in 2001 while for Greenland in 2004.<sup>547</sup> This gave the opportunity for the exact definition of the median line, and the Parties agreed to delimit their common boundary on the basis of the median line principle in consultations during the first half of 2005.<sup>548</sup> The 2006 agreement was

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<sup>538</sup> Bjarni Már Magnússon, 'Outer Continental Shelf Boundary Agreements', in *International and Comparative Law Quarterly*, Volume 62, No.2, 2013, pp. 345-372, at p. 357.

<sup>539</sup> John Abrahamson, 'Joint Development of offshore polar oil and gas resources and the United Nations Convention on the Law of the Sea', *Law Australian National University*, 2015, at p. 82.

<sup>540</sup> Bjørn Geirr Harsson and George Preiss, 'Norwegian Baselines, Maritime Boundaries and the UN Convention on the Law of the Sea', in *Arctic Review on Law and Politics*, Volume 3, 2012, pp.108-129, at p. 119.

<sup>541</sup> Ole Bennike, Naja Mikkelsen, Rene Forsberg and Lars Hedenas, 'Tuppiaq Qeqertaa (Tobias Island): a newly discovered island off northeast Greenland', in *Polar Record*, October 2006, pp. 309-314, at p. 311.

<sup>542</sup> *Ibid.*

<sup>543</sup> 'Limits in the Seas No.148 – Norway Maritime Claims and Boundaries', Office of Ocean and Polar Affairs Bureau of Oceans and International Environmental and Scientific Affairs U.S. Department of State, August 28, 2020.

<sup>544</sup> Malcolm D. Evans, 'Maritime Delimitation after Denmark v. Norway: Back to the Future?', in *The Reality of International Law: Essays in Honour of Ian Brownlie*, published in October 1999, pp. 153-176, at p. 161.

<sup>545</sup> *Supra* note 537

<sup>546</sup> *Supra* note 536

<sup>547</sup> Robin Churchill and Geir Ulfstein, 'The Disputed Maritime Zones around Svalbard', in *Changes in the Arctic environment and the law of the sea*, 2010, pp. 551-593, at p. 558.

<sup>548</sup> Alex G. Oude Elferink, 'Maritime Delimitation Between Denmark/Greenland and Norway', in *Ocean Development & International Law*, Volume 38, 2007, Issue 4, pp. 375-380, at p. 377.

concluded after two rounds of negotiations between the Danish, Norwegian and Greenlandic authorities in December 2005 and January 2006.<sup>549</sup>

The preamble to the 2006 Agreement indicates that the Parties intend to re-propose the delimitation of the continental shelf beyond 200 nm in connection to the definition of the outer limits of the continental shelf.<sup>550</sup> Article 3 of the Agreement conveys that this does not affect the views of the Parties on matters not covered by the Agreement.<sup>551</sup> This reference also encompasses the demarcation of the continental shelf beyond 200 nm. Norway submitted a request on the outer limits of its continental shelf beyond 200 nm to the Commission on the limits of the continental shelf on 27 November 2006.<sup>552</sup>

This also concerns the outer limit of a zone extending more than 200 nm north of the northern end of the 2006 Agreement on the boundary.<sup>553</sup> Denmark has not yet submitted any communication to the Commission.<sup>554</sup> The document presenting the 2006 Agreement to the Danish Parliament shows that the interpretation of the 1920 Spitsbergen Treaty is an example of a matter covered by the “without prejudice” provision of article 3 of the Agreement.<sup>555</sup> The Svalbard Treaty recognizes Norway’s jurisdiction over the Svalbard archipelago, but at the same time grants the other contracting Parties to the treaty equal rights to engage in specific economic activities in the Svalbard territory.<sup>556</sup>

Article 2 of the 2006 Agreement foresees a provision on the occurrence of transboundary mineral deposits.<sup>557</sup> The measure sets an advisory mechanism and the circumstances in which an agreement on the exploitation of such resources will be

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<sup>549</sup> Ulrik P Gad, ‘Greenland: A post-Danish sovereign nation state in the making’, in *Cooperation and Conflict*, Vol. 49, No. 1, Special Issue: Postimperial Sovereignty Games in Norden (March 2014), pp. 98-118, at p. 103.

<sup>550</sup> Xuexia Liao, ‘Interaction between Delineation and Delimitation of the Continental Shelf beyond 200 NM: from Part I – Overlapping Entitlements to the Continental Shelf beyond 200 Nautical Miles’, in *The Continental Shelf Delimitation Beyond 200 Nautical Miles: towards a common approach to maritime boundary -making*, Cambridge University Press, 2021, pp. 100-160, at p. 114.

<sup>551</sup> *Supra* note 530, article 3

<sup>552</sup> Harald Brekke, ‘Setting Maritime Limits and Boundaries: Experiences from Norway’, in *The Law of the Seabed: access, uses, and protection of seabed resources*, Leiden: Brill Nijhoff, 2020, pp.85-103, at p. 91.

<sup>553</sup> Vladimir Jares, ‘The Continental Shelf Beyond 200 Nautical Miles’, in *Vanderbilt Journal of Transnational Law*, Volume 42, Issue 4, Article 7, October 2009, at p. 163.

<sup>554</sup> *Ibid.*

<sup>555</sup> Ida Cathrine Thomassen, ‘The Continental Shelf of Svalbard: Its Legal Status and the Legal Implications of the Application of the Svalbard Treaty Regarding Exploitation of Non Living Resources’, *Small Master’s Thesis - Master of Law in the Law of the Sea*, UiT The Arctic University of Norway, Faculty of Law, Fall 2013, at p. 29.

<sup>556</sup> *Supra* note 532

<sup>557</sup> *Supra* note 530, article 2



conclusive. A provision was made on transboundary mineral deposits included in the 1995 delimitation Agreement between Denmark and Norway with respect to the area between Jan Mayen and Greenland.<sup>558</sup> Compared to the 1995 Agreement, the 2006 Agreement sets forth a number of additional elements.<sup>559</sup>

The 2006 Agreement specifies that a conclusive agreement under article 2 must specify how any deposit is to be most effectively exploited and how the proceeds are to be repaired.<sup>560</sup> Finally, the delimitation between Greenland and Svalbard is in accordance with the maritime delimitation law developed by international jurisprudence.<sup>561</sup> The coasts of Greenland and the Svalbard Islands in the area that is relevant for the delimitation within the 200 nm are opposite.<sup>562</sup> The rising coast of the Svalbard is made up by its main island, Spitsbergen and the island of Prins Karls Forlan, which is located about 10 kilometers west of Spitsbergen.<sup>563</sup> The coast of Greenland is formed by a chain of islands off the northeastern coast of Greenland itself. Although the rising coast of Greenland is longer than that of the Svalbard Islands, it includes a number of smaller islands considerably distant from each other.<sup>564</sup> There is a complex balance between the coasts and the application of the equidistance method leads to an equitable solution.<sup>565</sup>

## 2.6 The Norway and Russia Maritime Boundary

The history of the dispute over the delimitation of maritime borders between Norway and Russia on the Barents Sea goes back at least to the 1957 Varangerfjord Agreement, which fixed the border between the territorial seas of Norway and Soviet

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<sup>558</sup> Finn Laursen, 'Continental Shelf Policies', in *Small Powers at Sea: Scandinavia and the New International Marine Order*, 1993, pp. 67-96, at p. 75.

<sup>559</sup> *Ibid.*

<sup>560</sup> *Supra* note 532.

<sup>561</sup> Massimo Lando, 'Equidistance', in *Maritime Delimitation as a Judicial Process*, Cambridge University Press, 2019, pp. 102-166, at p. 123.

<sup>562</sup> Emmanuel Gounaris, 'The Delimitation of the Continental Shelf of Jan Mayen', in *Archiv des Völkerrechts*, 21. Bd., No. 4, *Staatsangehörigkeitsrecht / Nationality Law* (1983), pp. 492-501, at p. 494.

<sup>563</sup> Adam Augustyn, 'Svalbard', in *Britannica*, September 2023.

<sup>564</sup> Lauge Koch, 'Some New Features in the Physiography and Geology of Greenland', in *The Journal of Geology*, Vol. 31, No. 1 (Jan. – Feb., 1923), pp. 42-65, at p. 52.

<sup>565</sup> R.R. Churchill, 'The Greenland-Jan Mayen Case and its Significance for the International Law of Maritime Boundary Delimitation', in *The International Journal of Marine and Coastal Law*, 1994, pp. 1-29, at p. 16.

Union.<sup>566</sup> Since then, the issue of maritime boundaries has followed developments that have occurred over the years in the law of the sea.<sup>567</sup> After the adoption of the 1958 Convention on the Continental Shelf, in 1963 Norway claimed sovereign rights to the seabed and subsoil adjacent to its shores.<sup>568</sup> The Soviet Union responded similarly in 1967. Substantial parts of the Barents Sea seabed were considered continental shelf under the 1958 Convention and therefore the need for bilateral delimitation between Norway and the Soviet Union was current.<sup>569</sup> Formal negotiations began in Moscow in 1970 and in 1977 became more intense when both Norway and the Soviet Union established an EEZ of 200 nm in the area.<sup>570</sup>

In 2010, under the stipulated Barents Sea Treaty, Russia and Norway set a single demarcation line for their EEZs and continental shelves in areas within 200 miles of their coasts and a delimitation line between the Russian and Norwegian continental shelf where it extends over 200 nm.<sup>571</sup> The UN Commission on Continental Shelf Limits has confirmed that the seabed over the 200 nm in the Barents Sea falls within the outer limits of the continental shelf as defined in article 76 of UNCLOS.<sup>572</sup> According to a joint declaration of the Parties in April 2010, the delimitation line is based on international law in order to achieve a fair solution.<sup>573</sup> The two Parties confirm that they have applied relevant factors identified in this regard in international law, which can reasonably be read as a reference to the breadth of case law on the delimitation of maritime borders.<sup>574</sup> The

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<sup>566</sup> Robert W. Orttung and Andreas Wenger, 'Explaining Cooperation and Conflict in Marine Boundary Disputes Involving Energy Deposits', in *Region*, Vol. 5, No. 1 (2016), pp. 75-96, at p. 79.

<sup>567</sup> *Supra* note 488.

<sup>568</sup> Donat Pharand, 'The Continental Shelf Redefinition, with Special Reference to the Arctic', in *McJill Law Journal*, Volume 18:4, September 1972, at p. 11.

<sup>569</sup> David A. Colson, 'The Delimitation of the Outer Continental Shelf between Neighboring States', *The American Journal of International Law*, Vol. 97, No. 1 (Jan., 2003), pp. 91-107, at p. 98.

<sup>570</sup> Barnaby J. Feder, 'A Legal Regime for the Arctic', in *Ecology Law Quarterly*, Vol. 6, No. 4 (1978), pp. 785-829, at p. 793.

<sup>571</sup> Coalter Lathrop, 'Continental Shelf Delimitation Beyond 200 Nautical Miles: Approaches Taken by Coastal States Before The Commission On The Limits Of The Continental Shelf', in *International Maritime Boundaries Online*, 2014, pp. 4139-4160, at p. 4144.

<sup>572</sup> Constance Johnson and Alex G Oude Elferink, 'Submissions to the Commission on the Limits of the Continental Shelf in Cases of Unresolved Land and Maritime Disputes: The Significance of Article 76(10) of the Convention on the Law of the Sea', in *The Law of the Sea: Progress and Prospects*, 2006, pp. 161-179, at p. 167.

<sup>573</sup> Michał Jan Filipek and Dzmitry Hruzdou, 'Maritime Delimitation in the Barents Sea and International Practice in Maritime Delimitation', in *Polish Yearbook of international law*, Vol. 31 (2011), 2011, at p. 207-231, at p. 216.

<sup>574</sup> Robin Churchill, 'International Law Obligations of States in Undelimited Maritime Frontier Areas', in *Frontiers in International Environmental Law: Oceans and Climate Challenges*, 2021, pp. 141-170, at p. 152.

joint declaration however includes few references to specific principles or rules that have been developed by international courts and arbitration courts. The only determinant factor mentioned is the effect of huge disparities in respective coastal lengths.<sup>575</sup> It is worth noting that in the joint statement there is no reference to the median or equidistance line or sector line.<sup>576</sup> In addition to international law, the two sides took into account the progress achieved during long-term negotiations between the Parties. This implies that even non-legal factors may have been detected in the definition of the definitive bounding line.<sup>577</sup>

At a press conference following the conclusion of the agreement, the Norwegian Prime Minister denied that Norway had abandoned its position in favor of the equidistance line.<sup>578</sup> He stated that Norway made use of the midline as a starting point, but this principle was adapted to fit the longer coasts of Russia.<sup>579</sup> During the signing of the treaty in September 2010, the Norwegian stressed that the solution reached is based on modern principles of international law and the Russian Minister of Foreign Affairs said accordingly that the treaty fully complies with the norms and principles of international law.<sup>580</sup> The explicit reference of the Joint Declaration to the effect of the large difference in the relevant reference coastlines refers to a disparity among the coasts lengths acknowledged as one of the most overriding geographical circumstances. But according to jurisprudence, not all coasts are relevant.<sup>581</sup> According to the Black Sea case of 2009, only the coast in the disputed area should be taken into account. The question is whether all the coastline in the disputed area should be measured for an unbalanced effect or only that coastline in the southern part between the adjacent continental coasts.<sup>582</sup>

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<sup>575</sup> Tore Henriksen and Geir Ulfstein, 'Maritime Delimitation in the Arctic: The Barents Sea Treaty', in *Ocean Development & International Law*, Volume 42, 2011, Issue 1-2, pp. 1-21, at p. 7.

<sup>576</sup> Peter Ørebech, 'The Barents Sea 2010 Norway-Russia Border: The Triumph of the Negotiation Principle at the Expense of the Median- and Sector Line Pretentions', in *The Yearbook of Polar Law Online*, 2012, pp. 505-517, at p. 510.

<sup>577</sup> *Ibid.*

<sup>578</sup> Walter Gibbs, 'Russia and Norway Reach Accord on Barents Sea', in *The New York Times*, April 27, 2010.

<sup>579</sup> Thilo Neumann, 'Norway and Russia Agree on Maritime Boundary in the Barents Sea and the Arctic Ocean', in *American Society of International Law*, Volume 14, Issue 34, November 10, 2010.

<sup>580</sup> *Supra* note 576.

<sup>581</sup> International Court of Justice: *Case concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta)*, in *International Legal Materials*, Vol. 24, No. 5 (SEPTEMBER 1985), pp. 1189-1276, at p. 1197.

<sup>582</sup> Massimo Lando, 'Stability of maritime boundaries and the challenge of geographical change: A reply to Snjólaug Árnadóttir', in *Leiden journal of International Law*, Volume 35, No.2, 2022, pp.379-395, at p. 382.

Because of the lack of information on the relevant coasts and the calculation of their length, it is not feasible to give an assessment of this circumstance and its effect on the delimitation.<sup>583</sup> The delimitation line seems to indicate that the greatest effect of the coast discrepancy is present in the southern part, probably together with the reduction of the intrusion of the Varanger peninsula in the Russian maritime zones.<sup>584</sup> In the middle section where the continental shelf over 200 nm is bounded, it is difficult to assess whether geographical and geological factors have been applied.<sup>585</sup> With regard to the delimitation of maritime zones in which the coast of the Svalbard Islands is relevant, it should be observed that the demarcation line is not identical to the modified sectoral line supported by Russia.<sup>586</sup>

Access to natural resources does not appear to have been added as a relevant circumstance or factor to be taken into account.<sup>587</sup> The joint declaration also refers to the economic relevance of marine biological resources to Norway, Russia and their coastal communities as well as the historical exploitation of fishermen from both States.<sup>588</sup> The Parties agreed that the treaty will not affect the fishing opportunities of both States.<sup>589</sup> An earlier study would show a modified mid line to be considered primarily for the latest projection of the Norwegian mainland coast towards the sea; secondly, it is necessary to take into account the proper degree of proportionality between the lengths of the relative coasts of the Parties and the continental shelf areas belonging to them, and finally to give little importance to the various islands off the archipelago of Svalbard and Franz Joseph Land.<sup>590</sup> However, the division of the disputed area raises the question of whether the agreed border is best described as a modified midline (as Norway claims) or a modified

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<sup>583</sup> Massimo Lando, 'Relevant Circumstances', in *Maritime Delimitation as a Judicial Process*, Cambridge University Press, 2019, pp. 167-245, at p. 181.

<sup>584</sup> *Supra* note 574, at p. 154.

<sup>585</sup> Xuexia Liao, 'Geographical Circumstances: from part II – Delimitation Methodology for the Continental Shelf beyond 200 nautical miles', in *The Continental Shelf Delimitation Beyond 200 Nautical Miles: Towards A Common Approach to Maritime Boundary-Making*, Cambridge University Press, 2021, pp. 268-300, at p. 277.

<sup>586</sup> *Supra* note 548.

<sup>587</sup> *Supra* note 576.

<sup>588</sup> Richard Alan Barnes, 'International Regulation of Fisheries Management in Arctic Waters', in *German Yearbook of International Law*, 2011, pp. 193-230, at p. 204.

<sup>589</sup> Rosemary Rayfuse, 'Taming the Wild North? High Seas Fisheries in the Warming Arctic', in *Frontiers in International Environmental Law: Oceans and Climate Challenges*, 2021, pp.263-280, at p. 272.

<sup>590</sup> Pål Jakob Aasen, 'The Law of Maritime Delimitation and the Russian–Norwegian Maritime Boundary Dispute', in *Fridtjof Nansen Institute*, 2010, at p. 87.

sectoral line (as Russia asserts instead).<sup>591</sup> A special feature of the treaty is that Russia has the right to exercise sovereignty and jurisdiction in an area east of the delimitation line within 200 nm of Norway but over 200 nm from Russia. This is an interesting example of a country transferring its sovereign rights to another State and allowing Russia to exercise those rights beyond its 200 nm of EEZ.<sup>592</sup>

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<sup>591</sup> Ibid.

<sup>592</sup> Supra note 526.

## CHAPTER III

### 3.1 The Banana Hole Fisheries Regulation: Problems of Intensive Fishing

In accordance with 1995 United Nations Fish Stocks Agreement (UNFSA), RFMOs are the entities responsible for managing highly migratory and straddling fish stocks.<sup>593</sup> These organizations are composed of coastal States and relevant Distant Water Fishing States (DWFSs) interested in the high seas fisheries.<sup>594</sup>

In the North-East Atlantic there are numerous straddling stocks that are caught both within the EEZ of coastal States within 200 nm and on the high seas. Fisheries management of such stocks gives rise to particular issues that are governed by an RFMO called North East Atlantic Fisheries Commission (NEAFC).<sup>595</sup> In essence, the Regulatory Zone of the NEAFC consists of the North-East Atlantic.<sup>596</sup> A portion of this area, the high seas part known as the “Banana Hole” of the Norwegian Sea (located between the Norwegian mainland and the Jan Mayen Island) represents the Convention Area.<sup>597</sup> While the NEAFC has the power to set fishing quotas and other regulations in the Convention Area, it has no power in enforcing them.<sup>598</sup>

The four main fisheries in the Banana Hole area are Norwegian spring spawning herring (NSSH), mackerel, blue whiting and pelagic redfish.<sup>599</sup> These stocks are harvested by coastal States and DWFSs. According to NSSH, Norway, Russia, Iceland, the Faroe Islands and the EU are the coastal States interested in fishing while no DWFS is involved

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<sup>593</sup> Supra note 94, art.8(1)

<sup>594</sup> Bjørndal, T., and G. R. Munro, ‘The Management of High Seas Fisheries’, In *The International Yearbook of Environmental and Resource Economics*, 2003, ed. H. Folmer and T. Tietenberg, pp. 1–35, at p. 7.

<sup>595</sup> Bjørndal, T, ‘Overview, Roles, and Performance of the North East Atlantic Fisheries Commission (NEAFC)’, in *Marine Policy* 33(4), 2009, pp.685–697, at p. 688.

<sup>596</sup> ‘North-East Atlantic Fisheries Commission (NEAFC) with EEZs’, in *Arctic Portal.org – The Arctic Gateway*, September 2023.

<sup>597</sup> ‘Summary of the recommendations of the Commission on the limits of the continental shelf in regard to the submission made by Norway in respect of areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea on 27 November 2006’, adopted by the Subcommission on 13 March 2009, and submitted to the Commission on the Limits of the Continental Shelf for consideration and approval by the Commission, at p. 18.

<sup>598</sup> Michael W.Lodge, David Anderson et al., ‘Recommended best practices for regional fisheries management organizations’, Report of an independent panel to develop a model for improved governance by Regional Fisheries Management Organizations, The Royal Institute of International Affairs, 2007, p.113

<sup>599</sup> Peter Gullestad, Svein Sundby and Olav Sigurd Kjesbu, ‘Management of transboundary and straddling fish stocks in the Northeast Atlantic in view of climate-induced shifts in spatial distribution’, in *Fish and Fisheries*, Volume 21, Issue 5, September 2020, pp. 1008-1026, at p. 1013.

in this activity.<sup>600</sup> Mackerel and blue whiting are caught by the same coastal States but in this case Russia is a DWFS in the Banana Hole.<sup>601</sup> The management of these stocks within the Banana Hole is not simple and various matters have arisen, especially in relation to herring and mackerel.<sup>602</sup>

A non-cooperative management could lead to overexploitation, as pointed out by the Atlanto-Scandian herring case and the Mackerel War.<sup>603</sup> Based on the analysis of the game theory, some basic principles of cooperative management were identified and developed.<sup>604</sup> Considering the communication capacity of the various States interested in fishing a given fish species, there must be at least three conditions for a cooperative agreement to be preferred to competitive exploitation.<sup>605</sup> Furthermore, if a country wishes to earn more, it can only do so at the expense of others. Secondly, the benefits derived from cooperation must be at least equal to those derived from non-cooperation, which means that everyone must benefit from cooperation.

Finally, the solution must be consistent and resilient.<sup>606</sup> Cooperative management of straddling fish stocks is likely to be more complicated than cooperative management of shared fish stocks, i.e. cross-border fish stocks migrating between the EEZs of two or more coastal States.<sup>607</sup> An example is provided by Iceland in the mackerel fishery, since due to changes in the migration pattern, mackerel has also lately been found in the Icelandic EEZ.<sup>608</sup> This situation is akin to the problem of new members, when a new

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<sup>600</sup> Trond Bjørndal, Ragnar Arnason et al., ‘SFN Report No. 02/22 – Post-Brexit Management of Pelagic Fisheries in the North-East Atlantic: Norwegian Spring Spawning – Atlanto Scandian Herring, Mackerel, and Blue Whiting’, Centre for Applied Research at NHH Bergen, March 2022, p.15.

<sup>601</sup> *Ibid.*, p. 8

<sup>602</sup> Robin R. Churchill, ‘Managing Straddling Fish Stocks in the North-East Atlantic: A Multiplicity of Instruments and Regime Linkages—but How Effective a Management?’, in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, published in May 2001, pp. 234-272, at p. 244.

<sup>603</sup> Hannesson, R., ‘Game Theory and Fisheries’, In *Annual Review of Resource Economics*, vol. 3, ed. G. Rausser, V. K. Smith, and D. Zilberman, 2011, pp. 181–202, Palo Alto, CA: Annual Reviews, at p. 189.

<sup>604</sup> Bailey, M., U. R. Sumaila and M. Lindroos, ‘Application of Game Theory to Fisheries over Three Decades’, in *Fisheries Research* 102, 2010, pp. 1–8, at p. 2.

<sup>605</sup> Trond Bjørndal and Nils-Arne Ekerhovd, ‘Management of Pelagic Fisheries in the North East Atlantic: Norwegian Spring Spawning Herring, Mackerel, and Blue Whiting’, in *Marine Resource Economics*, Vol. 29, No. 1 (March 2014), pp. 69-83, at p. 69.

<sup>606</sup> *Ibid.* at page 70

<sup>607</sup> Torbjørn Trondsen, Thorolfur Matthiasson, James A Young, ‘Towards a market-oriented management model for straddling fish stocks’, in *Marine Policy*, Volume 30, Issue 3, May 2006, pp. 199-206, at p. 202.

<sup>608</sup> Olafur S. Astthorsson, Héðinn Valdimarsson et al., ‘Climate-related variations in the occurrence and distribution of mackerel (*Scomber scombrus*) in Icelandic waters’, in *ICES Journal of Marine Science*, Volume 69, Issue 7, September 2012, pp. 1289–1297, at p. 1291.

country begins to fish on the high seas a stock that other States have cooperatively managed.<sup>609</sup>

In addition, if the new entrant is prevented from accessing to coalitions with other States, the new participant will receive only its uncooperative profit.<sup>610</sup> According to UNFSA, potential new members cannot be excluded from an RFMO unless they refuse to comply with the RFMO management regime.<sup>611</sup> The resolution of the problem of new members may require the granting of the founding members of an RFMO of effective property rights to the relevant resources.<sup>612</sup> Possible solutions to the issue may consist of the fact that a new country can only join if an already existing country leaves after a waiting period for new entries or tariffs are imposed on new entries.<sup>613</sup>

Some of these issues are critically dependant on a legal interpretation of UNFSA.<sup>614</sup> As many of the world's fish stocks are severely depleted, including a lot of straddling stocks, RFMOs should face the challenge of establishing stocks.<sup>615</sup> If RFMOs lead to effective cooperative resource management, the high seas adjacent to the EEZ will become high seas not in concrete and the stock will be managed as a shared stock.<sup>616</sup> The matter is represented by sudden changes in migration of fish stocks between national EEZs which make it difficult to define and maintain cooperation agreements on the TAC and distribution of these species between the States concerned.<sup>617</sup>

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<sup>609</sup> Kaitala, V., and G. R. Munro, 'The Conservation and Management of High Seas Fishery Resources under the Law of the Seas', in *Natural Resource Modeling* 10, 1997, pp. 87-108, at p. 91.

<sup>610</sup> Ellefsen, H., 'The Stability of Fishing Agreements with Entry: The Northeast Atlantic Mackerel', in *Strategic Behavior and the Environment* 3, 2013, pp.67-95, at p. 74.

<sup>611</sup> *Supra* note 94, art.8

<sup>612</sup> Liang Yu, 'A Fairer Governance of High Sea Fishing through a Systemic Interpretation Approach', in *Fishes*, 2022, 7(6), 344, pp. 1-10, at p. 4.

<sup>613</sup> Pedro Pintassilgo and Clara Costa Duarte, 'The New-Member Problem in the Cooperative Management of High Seas Fisheries', in *Marine Resource Economics* 15(4), January 2000, pp. 361-378, at p. 369.

<sup>614</sup> Gordon R. Munro, 'The United Nations Fish Stocks Agreement of 1995: History and Problems of Implementation', in *Marine Resource Economics*, Vol. 15, No. 4 (2000), pp. 265-280, at p. 268.

<sup>615</sup> Camille Goodman, Ruth Davis et al., 'Enhancing cooperative responses by regional fisheries management organisations to climate-driven redistribution of tropical Pacific tuna stocks', in *Frontiers in Marine Science*, Sec. Ocean Solutions, Volume 9, 2022, pp. 1-21, at p. 9.

<sup>616</sup> Bianca Haas, Marcus Haward et al., 'The influence of performance reviews on regional fisheries management organizations', in *ICES Journal of Marine Science*, Volume 76, Issue 7, December 2019, pp. 2082-2089, at p. 2085.

<sup>617</sup> Sean D. Murphy, 'Taking Stock of the "Compatibility Requirement": What Limitations Does It Impose for High Seas Fishing?', in *Law, Persistent and Emerging Challenges in International Fisheries* (Bjørn Kunoy, ed.) (Brill, forthcoming), 2022, at p. 17.



Zonal attachment is a concept that was thought as a way to overcome disputes over how to allocate the quotas of such fish stocks.<sup>618</sup> The principle has been applied to the management of shared stocks between the EU and Norway.<sup>619</sup> The zonal attachment of a stock is the share of the stock that increases within a specific national EEZ assessed on the ground of the time spent by the stock in a country's zone over a year, if necessary.<sup>620</sup> This affects the quota each country gets of the total catch share for that stock.<sup>621</sup> With the division of catch quotas based on the zonal constraint of fish stocks, it is not strange that changes in fish migrations lead to the breakdown of existing agreements.<sup>622</sup>

This is an example where a cooperation agreement may not be consistent over time.<sup>623</sup> This was also the reason for the temporary interruption of the cooperative management agreement for NSSH in the period 2003-2007.<sup>624</sup> One might wonder if the zonal attachment criterion is the right solution for the distribution of fish stocks.<sup>625</sup> Stock sharing based on the zonal attachment criterion proved unacceptable as it would give the country with less interest a worse result than would follow its own interest in the absence of cooperation.<sup>626</sup>

It has also been shown that the scope of cooperation is greater if countries share more than one stock.<sup>627</sup> For this to happen, each State must be a dominant player with respect to the given stock. If a country is a minor player for both stocks, there is only an extended version of the minor player problem.<sup>628</sup> As it has been repeatedly reiterated, the countries involved share several stocks that all fluctuate over time in ways that seem

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<sup>618</sup> Robin Churchill, 'Fisheries Management in European Union and United Kingdom Waters after Brexit: A Change for the Better?', in *Ocean Yearbook Online*, published in May 2022, pp. 287-313, at p. 298.

<sup>619</sup> Rögnvaldur Hannesson, 'Zonal Attachment of Fish Stocks and Management Cooperation', in *Fisheries Research*, Vol. 140(2), February 2013, pp. 149-154, at p. 150.

<sup>620</sup> *Ibid.*, at p. 151.

<sup>621</sup> Rögnvaldur Hannesson, 'Shared stocks, game theory and the zonal attachment principle', in *Fisheries Research*, Volume 203, July 2018, pp. 6-11, at p. 8.

<sup>622</sup> Andrea Bryndum-Buchholz, Derek P. Tittensor and Heike K. Lotze, 'The status of climate change adaptation in fisheries management: Policy, legislation and implementation', in *Fish and Fisheries*, Volume 22, Issue 6, November 2021, pp.1248-1273, at p. 1254.

<sup>623</sup> *Ibid.*

<sup>624</sup> Bjørndal, T., and G. R. Munro, 'The Economics and Management of World Fisheries', Oxford, UK: Oxford University Press, 2012, at p. 87.

<sup>625</sup> Paul G. Fernandes and Niall Fallon, 'Fish distributions reveal discrepancies between zonal attachment and quota allocations', in *Conservation Letters*, Vol.13, No.3, January 2020, pp. 1-6, at p. 3.

<sup>626</sup> European Association of Fish Producers Organisations – Northern Pelagic Working Group, 'EU pelagic industry position paper on fishing opportunities and Coastal States negotiations for pelagic stocks for 2024', 5 October 2023, pp. 1-7, at p. 4.

<sup>627</sup> *Supra* note 620

<sup>628</sup> Rögnvaldur Hannesson, 'Sharing a Migrating Fish Stock', in *Marine Resource Economics* 28(1), 2013, pp. 1-17, at p. 4.

largely unrelated. The idea was to uphold that it would be more feasible to agree on the allocation of these stocks if they were considered jointly.<sup>629</sup> However, this is not the case within the Banana Hole. The problem is that the Faroe Islands and Iceland are minor players for all the Banana Hole area fish species and for this reason the agreement will not be easier if you take into account all of them together.<sup>630</sup>

### **3.2 Finding a Solution through the North East Atlantic Fisheries Commission**

Fish stocks regulated by NEAFC may be located both in areas under the NEAFC member States and in adjacent areas of the high seas within the Convention Area.<sup>631</sup> In the NEAFC Convention, two types of approaches for the management of straddling stocks are mentioned: separate conservation and joint conservation.<sup>632</sup> Joint conservation means that the fishery of the stock is managed and preserved in its entirety through the NEAFC. However, for such measures to be valid in areas under the jurisdiction of a member State, they must be requested by the contracting State and must vote in favour of the recommendation.<sup>633</sup>

Separate conservation instead entails that the NEAFC adopts recommendations for measures to be applied on the high seas and contracting Parties for such areas under its national jurisdiction.<sup>634</sup> In order to ensure coordination of measures to prevent overexploitation of fishing resources, NEAFC shall adopt recommendations to try to guarantee reliability between its recommendations and any measure taken by a contracting State for the conservation and management of the same stock within areas under its jurisdiction.<sup>635</sup> Unlike UNFSA, this provision does not provide any guidance on how to achieve consistency.<sup>636</sup>

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<sup>629</sup> Rögnvaldur Hannesson, 'Sharing the Northeast Atlantic Mackerel', in *ICES Journal of Marine Science* 70(2), 2013, pp. 259–269, at p. 262.

<sup>630</sup> *Supra* note 599.

<sup>631</sup> Andrew Serdy, 'Postmodern International Fisheries Law, or We are all Coastal States now', in *International & Comparative Law Quarterly*, May 2011, pp. 387–422, at p. 398.

<sup>632</sup> NEAFC, Convention on Future Multilateral Cooperation in the North-East Atlantic Fisheries, art.5 – 6. The Convention was adopted on 18 November 1980 and entered into force in 1982.

<sup>633</sup> *Ibid.*, art. 6(1)

<sup>634</sup> *Ibid.*, art. 5(1)

<sup>635</sup> *Ibid.*, art. 5(2)

<sup>636</sup> 'North East Atlantic Fisheries Commission (NEAFC)', Quality Status Report 2010 – Assessment of the environmental impact of fishing, see at [https://qsr2010.ospar.org/media/assessments/p00465\\_supplements/p00465\\_suppl\\_3\\_North\\_East\\_Atlantic\\_Fisheries\\_Commission.pdf](https://qsr2010.ospar.org/media/assessments/p00465_supplements/p00465_suppl_3_North_East_Atlantic_Fisheries_Commission.pdf)

Of the four straddling fish stocks ruled by the NEAFC, so far only redfish have been managed entirely by the organization.<sup>637</sup> The regulations were introduced in 1996 mainly for fishing on the high seas with doubts about the distribution of the stock between the high seas and the EEZ of coastal States.<sup>638</sup> This was probably why some coastal States such as Iceland and Denmark in respect of Greenland agreed that NEAFC regulations would apply in areas under their jurisdiction.<sup>639</sup> The regulations were influenced by UNFSA, as zonal attachment and dependency were the factors taken into account when allocating catches.<sup>640</sup> Nevertheless, in 1999 Iceland withdrew from this management plan inadequately claiming that several stocks of redfish existed and not just one. The NEAFC has set aside part of the TAC for Iceland.<sup>641</sup> When Denmark joined Iceland in 2004 in promoting a proposal to manage redfish like the stocks mentioned above there were not the necessary votes to adopt recommendations for redfish.<sup>642</sup>

The other straddling stocks are managed separately by the NEAFC and the coastal States concerned through a two-step mechanism: firstly, the coastal States sharing the stock agree on a TAC for areas under national jurisdiction and its allocation; then they introduce proposals in the NEAFC for the adoption of a TAC recommendation and its allocation for the high seas share of the stock.<sup>643</sup> Coastal States have stable management plans for blue whiting, mackerel and NSSH.<sup>644</sup> Coastal States may fish on part of their coastal State quotas on the high seas and on quotas allocated through the NEAFC in areas

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<sup>637</sup> Supra note 602, pp. 258-262.

<sup>638</sup> Rosemary Gail Rayfuse, 'Regional Fisheries Organisations Dealing with Straddling Fish Stocks', in *Non-Flag State Enforcement in High Seas Fisheries*, 2004, pp. 205-294, at p. 221.

<sup>639</sup> Working Group on Oceanic Redfish (*Sebastes mentella*), 2–5 October 1995, item 3.1.3.

<sup>640</sup> Maria Cecilia Engler-Palma, 'Allocation of Fishing Opportunities in Regional Fisheries Management Organizations: from Power to Law?', in *Recasting transboundary fisheries management arrangements in light of sustainability principles: Canadian and international perspectives*, 2010, pp. 473-518, at p. 479.

<sup>641</sup> Report of the 22<sup>nd</sup> Annual Meeting of the North-East Atlantic Fisheries Commission, 10–14 November 2003, item 8(a).

<sup>642</sup> Søren Eliassen, Sten Sverdrup-Jensen, Petter Holm and Jahn Petter Johnsen, 'Nordic experience of fisheries management seen in relation to the reform of the EU Common Fisheries Policy', *TemaNord* 2009:579, Nordic Council of Ministers, Copenhagen 2009.

<sup>643</sup> Ashley R. Wilson, Shana K. Miller and Grantly R. Galland, 'Management procedure development in RFMOs offer lessons for strategic and impactful stakeholder engagement and collaboration', in *Frontiers in Marine Science*, Sec. Marine Fisheries, Aquaculture and Living Resources, Volume 10 – 2023.

<sup>644</sup> 'North-East Atlantic coastal states reach agreement on mackerel, blue whiting and Atlanto-Scandian herring TACs for 2024', European Commission – Directorate-General for Maritime Affairs and Fisheries, published on 23 October 2023.

under national jurisdiction.<sup>645</sup> Indeed, the NEAFC has left it to the coastal States to decide the amount of the future TAC for the stock, and as a result for the high seas when the TACs for the high seas are to be established on the basis of the relationship between the TAC agreed by them and the TAC adopted by the NEAFC.<sup>646</sup> Similar recommendations were adopted for the NSSH stock.<sup>647</sup>

The separate conservation approach or two-step approach may seem to be inspired by the compatibility requirement of the UNFSA with the coastal States that stabilize standards for the regulation on the high seas of straddling fish stocks.<sup>648</sup> The balance of power of the NEAFC is remarkable since in this case the relevant coastal States have plenty votes to get the recommendations adopted.<sup>649</sup> This is confirmed by the failed attempt of the two coastal States Iceland and Denmark in respect of Greenland to introduce conservation measures for redfish stocks on the high seas.<sup>650</sup>

NEAFC may also adopt recommendations for the apportionment of TACs or fishing efforts between shared areas.<sup>651</sup> There are no principles listed in the NEAFC Convention for the allocation of fish stocks because the NEAFC seems free to decide how to assign catches.<sup>652</sup> The working groups instituted to develop proposals for the regulation of redfish and mackerel have set forth several principles for allocation: among them, zonal attachment, contribution to conservation, current fishing model, dependence and contribution to scientific research on stocks.<sup>653</sup> However, it is not possible to identify which exact principles are being applied from the NEAFC's practice. The quota distributed to the relevant coastal States for different straddling fish stocks are of no

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<sup>645</sup> Robin R. Churchill and Daniel Owen, 'The international framework of fisheries management', in *The EC Common Fisheries Policy*, 2010, pp. 75-128, at p. 82.

<sup>646</sup> Ingrid Kvalvik, 'The North East Atlantic Fisheries Commission and The Implementation Of Sustainability Principles: Lessons To Be Learned?', in *Recasting Transboundary Fisheries Management Arrangements in Light of Sustainability Principles*, 2010, pp. 387-417, at p. 395.

<sup>647</sup> Magnar Lillegård, Steinar Engen et al., 'Harvesting Strategies for Norwegian Spring-Spawning Herring', in *Oikos*, Vol. 110, No. 3 (Sep., 2005), pp. 567-577, at p. 569.

<sup>648</sup> *Supra* note 602, p.251

<sup>649</sup> *Supra* note 598, pp. 72-73

<sup>650</sup> Report of the NAFO/NEAFC Working Group on Oceanic Redfish, 13-14 February 2001, Reykjavik, Iceland, Serial No. N4354 – NAFO/FC Doc. 01/3, available at <https://www.nafo.int/Portals/0/PDFs/fc/2001/FC-01-003.pdf>

<sup>651</sup> *Supra* note 632, art.7 I and (f).

<sup>652</sup> Dorothy Dankel, Gunnar Haraldsson et al., 'Allocation of Fishing Rights in the NEA – Discussion Paper', *TemaNord* 2015:546.

<sup>653</sup> Working Group Oceanic Redfish, 4–5 October 1995, and Working Group on Mackerel and Blue Whiting, pp. 25–27, March 1998.

practical significance.<sup>654</sup> These stocks may be fished in areas subject to domestic legislation and quotas in areas under national jurisdiction may be caught on the high seas.<sup>655</sup>

Actual allocations are made through agreements with coastal States.<sup>656</sup> A central goal in NEAFC practice seems to be to maintain stability and predictability in its assignments.<sup>657</sup> In the 2005 recommendation on management measures for mackerel, an important element was the maintenance of the quota ratio in subsequent years.<sup>658</sup> But the allocation of quotas is the main reason for the use of opposition procedures, as well as explaining why the NEAFC has not adopted recommendations for management measures.<sup>659</sup>

The objective of stability has consequences for the fishing rights of potential future contracting States.<sup>660</sup> The NEAFC has established a programme for the cooperation of non-contracting Parties.<sup>661</sup> Those countries may harvest on the cooperating quota normally reserved for those States in the fishery of redfish and mackerel.<sup>662</sup> If they then become contracting States, they may be assigned a part of the cooperation quota which would give them a certain priority over other new contracting States without a close history of cooperation.<sup>663</sup>

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<sup>654</sup> Ruth A. Davis, Quentin Hanich et al., ‘Who Gets the Catch? How Conventional Catch Attribution Frameworks Undermine Equity in Transboundary Fisheries’, in *Frontiers in Marine Science*, Sec. Marine Affairs and Policy, Volume 9-2022.

<sup>655</sup> Andrew Serdy, ‘Quota trading in international fisheries commissions: an idea whose time has come?’, in *The New Entrants Problem in International Fisheries Law*, published in February 2016, pp. 279-374, at p. 288.

<sup>656</sup> Erik J. Molenaar, ‘Multilateral Creeping Coastal State Jurisdiction and the BBNJ Negotiations’, in *The International Journal of Marine and Coastal Law*, published in January 2021.

<sup>657</sup> Froukje Maria Platjouw and Alla Pozdnakova, ‘Strengthening the Rule of Law in Regional Seas and Oceans’, in *The Environmental Rule of Law for Oceans: Designing Legal Solutions*, 2023, pp. 281-358, at p. 293.

<sup>658</sup> Recommendation by Denmark (in respect of the Faeroe Islands and Greenland), the European Community and Norway, for a NEAFC Recommendation on Management Measures for Mackerel in 2005, available at [https://www.neafc.org/system/files/REC\\_1\\_mackerel\\_2005.pdf](https://www.neafc.org/system/files/REC_1_mackerel_2005.pdf)

<sup>659</sup> Report of the 23<sup>rd</sup> Annual Meeting of the North-East Atlantic Fisheries Commission, 8 – 12 November 2003, item 7(b) and (c) on blue whiting and Norwegian spring-spawning herring respectively.

<sup>660</sup> Michael Harte, Rachel Tiller et al., ‘Countering a climate of instability: the future of relative stability under the Common Fisheries Policy’, in *ICES Journal of Marine Science*, Volume 76, Issue 7, December 2019, Pages 1951–1958.

<sup>661</sup> ICES Advice, Vol. 9, October 2005, 1.4.2 Northeast Atlantic Mackerel (combined Southern, Western and North Sea spawning components), pp. 31–41, available at <http://www.ices.dk/I/acfm/comwork/report/2005/oct/mac-nea.pdf>

<sup>662</sup> Supra note 652.

<sup>663</sup> ‘Final Report – Building Resilience of Fisheries Governance in the North East Atlantic’, Environmental Defense Fund, January 2018, available at <https://www.edf.org/sites/default/files/documents/building-resilience-fisheries-governance.pdf>

It seems that the NEAFC's plan is to balance different interests in fishing on the high seas: interests of coastal States, newcomers and cooperating non-contracting Parties.<sup>664</sup> The lack of agreement on the distribution of most stocks can undermine the confidence of non-contracting States in the organization's ability to take care of its own interests; therefore if the NEAFC wants to drive away this lack of trust, it should eliminate its internal problems.<sup>665</sup> In addition, as provided by UNFSA, it will have to present itself of the reception of new entrants.<sup>666</sup> One wonders if these interests are consistent.

According to the results of the latest negotiations on the management of the North-East Atlantic pelagic fish stocks, the NEAFC and associated coastal States should urgently review the way they take decisions otherwise the RFMO risks a total failure in the management policy of a number of stocks of global importance, resulting in a serious crisis in the sustainable supply of the market.<sup>667</sup> The NEAFC runs the risk of becoming a defective RFMO that transfers its responsibilities to groups of coastal States that are unable to take the joint action necessary to manage these important straddling stocks brilliantly.<sup>668</sup> In recent years coastal States have been incapable of agreeing on quota allocation mechanisms for stable TACs established by ICES, the scientific organization responsible for advising governments on sustainable catch limits.<sup>669</sup>

Each State, on the other hand, sets a quota for itself, which means that the total annual catch is globally higher than the scientifically recommended TAC for each stock.<sup>670</sup> Problems of this kind related to a severe overexploitation of fish resources within the Banana Hole were occurred in two legal cases: the "mackerel war" and the Atlanto-Scandian herring case.<sup>671</sup> These disputes over the allocation of fish stocks have meant that the NEAFC coastal States will not meet the deadlines to reevaluate the sustainability of

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<sup>664</sup> Erik J. Molenaar, 'The Concept of "Real Interest" and Other Aspects of Co-operation through Regional Fisheries Management Mechanisms', in *The International Journal of Marine and Coastal Law*, Vol. 15, No.4, 2000, pp. 475-531, at p. 484.

<sup>665</sup> Ibid.

<sup>666</sup> Supra note 94, art. 8(3)

<sup>667</sup> 'Final Report – Northeast Atlantic Pelagic Fisheries – Management Challenges for Straddling Fish Stocks', in Marine Stewardship Council, June 2023, available at [https://www.msc.org/docs/default-source/default-document-library/nea\\_pelagics\\_2023-06-21.pdf](https://www.msc.org/docs/default-source/default-document-library/nea_pelagics_2023-06-21.pdf)

<sup>668</sup> Steven Adolf, "Why a harvest strategy matters for markets in the Northeast Atlantic's 'Mackerel War' ", in Harveststrategies.org, published on 30 October 2023.

<sup>669</sup> Supra note 652.

<sup>670</sup> Ibid.

<sup>671</sup> Supra note 605.

their management strategies.<sup>672</sup> In addition, with a TAC regularly exceeding scientific advice, traders and retailers have been gravely damaged with the suspension of MSC (Marine Stewardship Council) sustainability certifications, from 2019 for mackerel and from 2020 for NSSH and blue whiting.<sup>673</sup>

### 3.3 The mackerel war: an overview

Until 2012, the North-East mackerel was mainly regulated bilaterally and trilaterally between NEAFC coastal States.<sup>674</sup> This procedure came to an end in 2012 when there was a meeting between four coastal States (the Faroe Islands, EU, Norway and Iceland) and Russia which attended as an observer.<sup>675</sup> At the meeting, Norway and EU presented a proposal on the allocation of quotas between the four coastal States.<sup>676</sup> Thus, the European Union and Norway tacitly recognised Iceland as one of the relevant coastal States.<sup>677</sup>

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<sup>672</sup> Ethan Kapstein, Aurore Maureaud et al., ‘The Fish that Ate an Agreement: How migrating mackerel undermine international fisheries cooperation’, in Carnegie Endowment for International Peace, published on 18 July 2023.

<sup>673</sup> ‘MSC certificates suspended for all North East Atlantic mackerel fisheries’, in Marine Stewardship Council, released on 31 January 2019, available at <https://www.msc.org/media-centre/press-releases/press-release/msc-certificates-suspended-for-all-north-east-atlantic-mackerel-fisheries> . See also ‘What the loss of MSC certification for Atlanto Scandian herring and blue whiting means’, IFFO – The Marine Ingredients Organization, 2021, available at <https://www.iffo.com/what-loss-msc-certification-atlanto-scandian-herring-and-blue-whiting-means> .

The MSC certification is so important because it confirms that your fishery is well-managed and and is sustaining resources and livelihoods for future generations. Furthermore, The MSC Fisheries Standard is based on the United Nations Food and Agriculture Organisation’s (FAO) code of conduct for responsible fisheries. For more information, see <https://www.msc.org/for-business/fisheries/why-get-certified#:~:text=MSC%20certification%20confirms%20your%20fishery,and%20livelihoods%20for%20future%20generations>.

<sup>674</sup> The EU, Faroe Islands and Norway Yearly Trilateral Agreement on Mackerel (since 1999). See Meld.St. 26 (2010–2011) Fiskeriavtalane Noreg har inngått med andre land for 2011 og fisket etter avtalane I 2009 og 2010 [Norwegian Parliament White Paper (2010–2011) Norway and Third Country Agreements on Fisheries in 2011 and According to Agreements of 2009 and 2010] p. 38, available at <https://www.regjeringen.no/no/dokumenter/meld-st-26-20102011/id646454/>

<sup>675</sup> Kolbrún María Elfarsdóttir, ‘The Atlantic mackerel (Scomber scombrus) conflict in the Northeast Atlantic: The Icelandic perspective’, Master’s thesis in Fisheries and Aquaculture Science FSK-3960 May 2020, Norwegian College of Fisheries Science.

<sup>676</sup> Press Release from the Ministry of Fisheries and Agriculture of Iceland 12.12.2011.

<sup>677</sup> Agreed Record of Conclusions of Fisheries Consultations between The Faroe Islands, The European Community and Norway on the Management of Mackerel in the North-East Atlantic for 2009, 31 October 2008, London (Agreed Record), available at [https://d3b1dqw2kzexi.cloudfront.net/media/3604/mackerel\\_agreed\\_record\\_2009\\_signed.pdf](https://d3b1dqw2kzexi.cloudfront.net/media/3604/mackerel_agreed_record_2009_signed.pdf)

The North-East Atlantic mackerel is widely overexploited as inadequate TACs and allocation decisions exist.<sup>678</sup> The annual trilateral agreement between the EU, the Faroe Islands and Norway ended in 2009.<sup>679</sup> The top-down system of TAC and quota allocation has collapsed. A bottom-up approach has replaced it, whereby fishing nations unilaterally determine quotas.<sup>680</sup> It is well known that when coastal States and those catching on the high seas exploit shared and straddling fish stocks, the lack of coordination in harvesting between these countries creates an overfishing of fish resources and in the long term there is a depletion of the availability of the stock.<sup>681</sup> In theory, the States involved have several ways to solve this problem and in particular two modalities are feasible.

The first consists of fixing of quotas with the so-called top-down approach that distributes to the participating States. This approach is a well-organized allocation mode laid down in article 63 UNCLOS. It consists of a decision-making process divided into several stages.<sup>682</sup> First, the coastal States concerned estimate the TAC. They do so in compliance with the recommendations of the ICES.<sup>683</sup> Subsequently, the relevant coastal States shall decide on the amount of the TAC belonging to the EEZs and the entity of the TAC reserved for fishing on the high seas.<sup>684</sup> Then, the NEAFC will seek to ensure consistency between any recommendations applicable to a stock or a group of stocks both within an area under the jurisdiction of a contracting Party and outside it.<sup>685</sup>

This leaves it up to the NEAFC to decide whether to follow the recommendations of the ICES. The fourth stage is the allocation of the difference between the quotas reserved for the EEZ and the TAC for countries harvesting on the high seas.<sup>686</sup> The States fishing on the high seas are Russia and Iceland.<sup>687</sup> Once such allocations are made, the

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<sup>678</sup> Supra note 667

<sup>679</sup> Supra note 677

<sup>680</sup> Marta Moyano, Björn Illing et al., 'Caught in the middle: bottom-up and top-down processes impacting recruitment in a small pelagic fish', in *Reviews in Fish Biology and Fisheries* 33, 2023, pp. 55-84, at p. 59.

<sup>681</sup> G. Hardin, 'Tragedy of the Commons,' in *Science* 162, 1968, pp. 1243-1248.

<sup>682</sup> Supra note 66, art.63

<sup>683</sup> Wolfgang Nikolaus Probst, Alexander Kempf et al., 'Six steps to produce stock assessments for the Marine Strategy Framework Directive compliant with Descriptor 3', *ICES Journal of Marine Science*, Volume 78, Issue 4, August 2021, Pages 1229–1240, at p. 1233.

<sup>684</sup> M. Dahmani, 'Coastal State's Fisheries Management in the EEZ', in *The Fisheries Regime of the Exclusive Economic Zone*, 1987, pp. 34-135, at p. 46.

<sup>685</sup> Supra note 632, Art. 5(2).

<sup>686</sup> Ellen Hoefnagel, Birgit de Vos and Erik Buisman, 'Quota swapping, relative stability, and transparency', in *Marine Policy*, Volume 57, July 2015, Pages 111-119.

<sup>687</sup> Supra note 602.



EU and Norway shall define the apportionment of mackerel.<sup>688</sup> Every year they agree how much each State will take.<sup>689</sup> The percentage is not fixed and may vary from year to year. In the end, it will be possible to assess whether the Parties will be able to fish in foreign areas decided on an annual basis.<sup>690</sup> Thus, the NEAFC does not formally authorize coastal States agreements nor legitimize the results of these agreements.<sup>691</sup>

The other way would be in looking for a bottom-up adaptation. This implies a modest exploitation of the fish stocks in order to increase their availability in the long term and avoid overfishing of the same.<sup>692</sup> Article 56 lays the foundation for an adaptive and one-sided approach for each coastal State to assess the estimate of the quotas of the other coastal States.<sup>693</sup> This entails an informal agreement between the coastal States, the main objective of which is the preservation of fish resources.<sup>694</sup> Each party to the agreement shall adjust to the catch percentage of the other participants when determining its quotas.<sup>695</sup> So, old-time fishing nations cannot continue to harvest as if the distribution of fish had never altered.

### 3.3.1 The EU-Norwegian perspective

In order to understand the conflict, it is necessary to know the points supported by the Parties involved. On the one hand, the EU and Norway assert that Iceland and the Faroe Islands do not have the right to exploit such fish resources since their history of non-participation in fishing would not give them equal fishing rights.<sup>696</sup> The positions of Iceland and the Faroe Islands are conflicting.<sup>697</sup> While Norway and the EU have supported a reduction in quotas allocated to Iceland and the Faroe Islands, the latter have

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<sup>688</sup> Supra note 652.

<sup>689</sup> Ibid.

<sup>690</sup> Supra note 652

<sup>691</sup> Supra note 631

<sup>692</sup> Maja Schlüter, Emilie Lindkvist and Xavier Basurto, 'The interplay between top-down interventions and bottom-up self-organization shapes opportunities for transforming self-governance in small-scale fisheries', in *Marine Policy*, Volume 128, June 2021, 104485.

<sup>693</sup> Supra note 66, art.56

<sup>694</sup> P. Ørebech and F. Bosselman, 'The Role of Customary Law in Sustainable Development', Cambridge University Press, Cambridge, 2005.

<sup>695</sup> Supra note 655.

<sup>696</sup> B. Dahl Hotvedt, 'The Problem of Sharing a Common Stock: An Analysis of the Mackerel Conflict in the North East Atlantic', M.Sc. Thesis, University of Tromsø, 2010.

<sup>697</sup> Press Release from the Ministry of Fisheries and Agriculture of Iceland of 12.12.2011, <http://eng.sjavarutvegsraduneyti.is/news-and-articles/nr/10772>

increased their quotas creating an overfishing of the stock.<sup>698</sup> In response to the refusal of the Faroe Islands and Iceland to adhere to Norwegian and EU positions based on historical rights and relative stability, the EU and Norway have developed an alternative plan for future fisheries policies.<sup>699</sup>

They plan to exclude Iceland from the group of coastal States that harvest mackerel.<sup>700</sup> According to the standpoint of the EU and Norway, all the relevant coastal States have rights and duties of allocation.<sup>701</sup> The relevant coastal States are the Faroe Islands, Norway and the EU.<sup>702</sup> Since the 1970s, the EU has been dealing with coastal areas through international conventions covering its regional seas. More recently, the EU has begun to specifically address matters linked to the state of coast and the coast as a regional entity. The status of a relevant coastal State is a necessary condition for qualifying as a competent partner in decision-making.<sup>703</sup> This trilateral group sets the TAC and allocates quotas to coastal and high-sea fishing countries, i.e. Russia and Iceland. In this regard, there is the Norway – EU bilateral agreement for distribution between the Parties.<sup>704</sup> The original understanding of Norway and the EU is that historical rights matter.<sup>705</sup>

As we will observe in the next chapter, this position is identical to that taken by Norway with regard to fishing in the Svalbard fisheries protection zone (SFPZ).<sup>706</sup> Norway denies the right to catch to countries that are members of the Svalbard Treaty and have no fishing history.<sup>707</sup> According to Norway, the priorities are to maintain the historic fishing model and the legality to discriminate equally against all newcomers.<sup>708</sup> Prior to 2012, Norway and the EU claimed exclusive control rights to determine the TAC and allot

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<sup>698</sup> ICES WG Wide Report 2011 (Copenhagen 2011) p. 43, available at <https://archimer.ifremer.fr/doc/00053/16473/13977.pdf>

<sup>699</sup> Supra note 631, at 387.

<sup>700</sup> Supra note 696, at 43.

<sup>701</sup> The Norwegian Newspaper FiskeribladetFiskaren, 5 September 2011, p. 6.

<sup>702</sup> Supra note 652.

<sup>703</sup> Supra note 677, Annex I, para.1.

<sup>704</sup> Supra note 677

<sup>705</sup> Kozłowski Artur, 'The Legal Construct of Historic Title to Territory in International Law – An Overview', in Polish Yearbook of International Law, vol. 30 (2010), pp. 61-100, at p. 69.

<sup>706</sup> Rachel Tiller and Elizabeth Nyman, 'Having the cake and eating it too: To manage or own the Svalbard Fisheries Protection Zone', in Marine Policy, Volume 60, October 2015, Pages 141-148, at p. 143.

<sup>707</sup> Øystein Jensen, 'The Svalbard Treaty and Norwegian Sovereignty', in Arctic Review on Law and Politics, Vol. 11 (2020), pp. 82-107, at p. 91.

<sup>708</sup> St.meld. nr. 30 (2004–2005) Muligheter og utfordringer I nord paragraph 3.3, p. 23, available at <https://www.regjeringen.no/no/dokumenter/stmeld-nr-30-2004-2005-/id407537/>

quotas between coastal States and States fishing on the high seas.<sup>709</sup> Currently, Norway sustains the zonal attachment principle and moreover Norway together with the EU condemn Icelandic and Faroese fishing practices as irresponsible.<sup>710</sup>

### 3.3.2 The Icelandic and Faroese viewpoint

Iceland contrasts the historical rights position put forward by Norway and the EU.<sup>711</sup> Under the NEAFC provisions, the relevant coastal States enjoy special privileges for the management of fish stocks.<sup>712</sup> The concept of a relevant coastal State is closely linked to the real interest as set out in article 8(3) UNFSA.<sup>713</sup> Iceland and the Faroe Islands' main claim to the right to harvest mackerel stock stems from article 56 UNCLOS which recognises the right of the coastal State to exploit natural resources within its EEZ.<sup>714</sup>

In the EEZ, the coastal State enjoys sovereign rights for the purpose of exploring and exploiting the living and non-living natural resources of the waters above the seabed, the seabed and its subsoil.<sup>715</sup> The text thus adopted leaves no doubt that the rights conferred on the coastal State cover all the rights necessary and connected with the exploration and exploitation of natural resources.<sup>716</sup> The rights of the coastal State may be limited when they conflict with the rights and duties of other States.<sup>717</sup> These rights and obligations are not defined but are mentioned in article 58 and 59 UNCLOS.<sup>718</sup> Therefore, material limitations cannot be deduced in this context. Historical rights and relative stability have no influence on the case of the north-western distribution of

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<sup>709</sup> Supra note 674.

<sup>710</sup> The Minister of Foreign Affairs, Espen Barth Eide, speech to the Norwegian Parliament EU-Committee, the Storting, 18 October 2012.

<sup>711</sup> Helgi Gretarsson, 'Allocation of Demersal Harvest Rights in Iceland', in *Arctic Review on Law and Politics*, Vol. 1, No. 2 (2010), pp. 299-318, at p. 304.

<sup>712</sup> Supra note 632, art.4.

<sup>713</sup> Supra note 94, art. 8(3)

<sup>714</sup> Trond Bjørndal and Gordon R. Munro, 'A game theoretic perspective on the management of shared North Sea fishery resources: Pre and post Brexit', in *Marine Policy*, Volume 132, October 2021, 104669.

<sup>715</sup> Supra note 66, art. 56.

<sup>716</sup> S. Nandan, S. Rosenne & N. Grandy, (eds.), 'United Nations Convention on the Law of the Sea 1982', Vol. II, 541 (Martinus Nijhoff Publishers, Leiden, 1993).

<sup>717</sup> Tullio Treves, 'The legal nature of coastal States' rights in the maritime areas under UNCLOS', *International Symposium on the Law of the Sea, The rule of law in the seas of Asia*, Tokyo, Ministry of Foreign Affairs, 12 and 13 February 2015, available at <https://www.mofa.go.jp/files/000074504.pdf>

<sup>718</sup> Supra note 66, art. 58-59.

mackerel.<sup>719</sup> If the new coastal State allows newcomers to catch for the migratory mackerel stock in its EEZ, the new coastal State shall act in accordance with its interests and not in fulfilment of any duty.<sup>720</sup>

### 3.3.3 The legal tools available to interpret the conflict

Article 63(1) UNCLOS establishes the system for the determination of TACs and allocation of quotas for stocks within the EEZ of two or more coastal States. The only duty of the Parties is to try to reach an agreement.<sup>721</sup> Pursuant to the NEAFC Agreed Record of Conclusions of Fisheries Consultations among the Faroe Islands, the EU and Norway on the management of North-East Atlantic for 2009, it was decided that as the coastal States concerned, these three nations both determined the TAC for mackerel fishing in the waters of national competence and agreed that part of the quantity could be harvested outside the jurisdiction of the Parties.<sup>722</sup> Under this Agreed Record, the Faroe Islands' quota will derive from the coastal State.<sup>723</sup> The only admissible justification for these decisions is that the three Parties Norway, the EU and the Faroe Islands declare themselves exclusive recipients of mackerel quotas.<sup>724</sup>

The same interpretation is confirmed by a sentence contained in the Agreed Record: "The signatures of the Parties are provided in their capacity as the relevant coastal states".<sup>725</sup> By certificating the existence of mackerel in the waters of coastal States and setting the decision-making system, these countries hints that the stock belongs to them.<sup>726</sup> The language employed in the 2009 Agreement confirms the implication: "The Contracting Parties have agreed to transfer 2500 tons from their joint quota to the Russian Federation in 2009".<sup>727</sup> Perhaps the Parties have relied on the catadromous species

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<sup>719</sup> Esther Schuch, Silke Gabbert and Andries P. Richter, 'Institutional inertia in European fisheries – Insights from the Atlantic horse mackerel case', in *Marine Policy*, Volume 128, June 2021, 104464.

<sup>720</sup> Chuanliang Wang, Qian Zhao and Yen-Chiang Chang, 'On the legal status of marine fishery resources: From the perspectives of international fishery law', in *Heliyon*, Volume 9, Issue 4, April 2023.

<sup>721</sup> *Supra* note 66, art. 63(1).

<sup>722</sup> *Supra* note 703.

<sup>723</sup> *Ibid.* at para. 3.

<sup>724</sup> *Supra* note 677, at Annex IV, para. 1 and 4.

<sup>725</sup> *Ibid.*

<sup>726</sup> Bernt Arne Bertheussen, Bent Magne Dreyer et al., 'Performance differences between nations exploiting a common natural resource: The Icelandic–Norwegian mackerel case', in *Marine Policy*, Volume 122, December 2020, 104269.

<sup>727</sup> Recommendation by the North East Atlantic Fisheries Commission in accordance with article 5 of the Convention on Future Multilateral Cooperation in North-East Atlantic Fisheries at its annual meeting

provision set out in article 67(1) and the responsibility of the domicile State of the stock to align their rights and obligations with those framed in article 67(1).<sup>728</sup>

One wonders whether or not UNFSA contains explicit provisions governing membership requirements.<sup>729</sup> Article 11 provides for a list of factors that States that have been fishing for a long time should consider when deciding whether to admit new candidate States that have undertaken a new fishing activity.<sup>730</sup> Even if the agreement establishes these factors, old-time fishing countries still have the right to include or exclude applicants at their discretion.<sup>731</sup> This provision, when read in its context, in particular in the context of articles 8 and 10, raises the question of whether relevant coastal States and nations with real interests in fisheries can be linked.<sup>732</sup> No provision regulates who decide whether a newcomer has the necessary interest.<sup>733</sup> First of all, the interpretation is unclear because the difficulty lies precisely in article 8(3) which includes no definition of real interest.<sup>734</sup> Secondly, cooperation obligations are imposed on both sides. Both newly and long-established fisheries are practiced by nations.<sup>735</sup>

With regard to newly established fishing States, under article 8(3) States will implement their duty to cooperate by becoming members of that organization.<sup>736</sup> Long-time fishing nations must allow States with a real interest in harvesting to become members of the RFMO.<sup>737</sup> Long-time fishing nations cannot shirk their duties by imposing conditions that are impossible to meet.<sup>738</sup> The terms of participation in that organization or the agreement shall not preclude such States from accession or

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in November 2008 to adopt management measures for mackerel in the NEAFC Convention area in 2009, available at <http://www.neafc.org/rec/2009/01>

<sup>728</sup> Peter Ørebech, 'The "Lost Mackerel" of the North East Atlantic— The Flawed System of Trilateral and Bilateral Decision-making', in *The International Journal of Marine and Coastal Law*, Vol. 28, No.2, 2013, at p. 359.

<sup>729</sup> Supra note 599.

<sup>730</sup> Supra note 94, art, 11

<sup>731</sup> Daphne Guelker, 'Fishers and seafarers in international law – Really so different?', in *Marine Policy*, Volume 148, February 2023, 105473.

<sup>732</sup> Supra note 94, art.8 and 10.

<sup>733</sup> Bianca Haas, Camille Goodman et al., 'Fact or fiction? Unpacking the terminologies used in fisheries allocation discussions', in *Marine Policy*, Volume 152, June 2023, 105630.

<sup>734</sup> Supra note 631, at p. 397.

<sup>735</sup> Andrew M. Song and Adam Soliman, 'Situating human rights in the context of fishing rights – Contributions and contradictions', in *Marine Policy*, Volume 103, May 2019, pages 19-26.

<sup>736</sup> Supra note 94, art. 8(3).

<sup>737</sup> Erik J. Molenaar, 'The Concept of "Real Interest" and Other Aspects of Co-operation through Regional Fisheries Management Mechanisms', in *International Journal of Marine and Coastal Law*, Vol. 15, No. 4, 2000, at p. 498-499.

<sup>738</sup> Ibid.

participation; nor shall they be applied in a discriminatory manner against any State or group of States having a real interest in the fisheries concerned.<sup>739</sup>

However, since the original member States have determined the meaning of the conditions of access to a given RFMO, they inexorably control the requirements and procedures of entry.<sup>740</sup> They actually decide whether newcomers will be successful in becoming members. It is irrelevant whether the fishing country is a newcomer to the region or is a former fishing nation that has embarked on a new fishing activity here.<sup>741</sup> RFMO members must measure the participation interests of the fishermen and the fishing countries involved.<sup>742</sup> This comprehends fishing practices, the State's need for revenue from that particular fishing activity and the coastal State's need to harvest the stock.<sup>743</sup>

Since all the Parties involved in the mackerel war, namely both Iceland and the Faroe Islands are also Parties to the NEAFC and ICES, the old-time fishing nations fail to support their claim that newcomers should be excluded from the RFMO.<sup>744</sup> The only remaining available source that old fishing nations can rely on when trying to exclude newcomers is UNFSA and its responsibility for the fisheries management agreement. For example, Article 10 is pertinent in this regard.<sup>745</sup> At the same time, the Parties to this agreement have a duty to agree where appropriate on participation rights such as allowable catch allocations or fishing effort levels.<sup>746</sup>

However, this treaty also fails to provide substantive principles. According to the negotiating principle, each Party has a duty to seek a common solution to the problem of overexploitation.<sup>747</sup> In practice, treaty law requires Parties to determine participation rights by forming one or more bilateral, multilateral, de facto or RFMOs agreements.<sup>748</sup>

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<sup>739</sup> Supra note 735.

<sup>740</sup> Supra note 615.

<sup>741</sup> G. T. (Stan) Crothers and Lindie Nelson, 'High Seas Fisheries Governance: A Framework for the Future?', in *Marine Resource Economics*, Vol. 21, No. 4 (2006), pp. 341-353, at p. 346.

<sup>742</sup> Johanne Fischer, 'How transparent are RFMOs? Achievements and challenges', in *Marine Policy*, Volume 136, February 2022, 104106.

<sup>743</sup> Supra note 94, art. 11(b)(d)I

<sup>744</sup> Andreas Østhagen, Jessica Spijkers and Olav Anders Totland, 'Collapse of cooperation? The North-Atlantic mackerel dispute and lessons for international cooperation on transboundary fish stocks', in *Maritime Studies* 19, 2020, pp. 155-165, at p. 158.

<sup>745</sup> Supra note 94, art.10.

<sup>746</sup> Supra note 94, art. 10(b)

<sup>747</sup> P. Ørebech, 'Dividing the Oceans by the Equity Principle of "Half-Way-Solutions"? — From Geographical Base-Points to Political Pretention Lines', in *Yearbook of Polar Law*, 7 et seq, 2012.

<sup>748</sup> Weikang Wang and Guifang Xue, 'Revisiting Traditional Fishing Rights: Sustainable Fishing in the Historic and Legal Context', in *Sustainability* 2023, 15(16), 12448.

Contenders must negotiate and seek agreement to meet conservation needs and management issues.<sup>749</sup> The clear situation is that the EU and Norway are playing a game of balance at the expense of regional crop stability.<sup>750</sup>

Since the system provides for annual quotas, negotiation time is tight. Article 63 UNCLOS and article 8 UNFSA cannot be interpreted similarly to article 74.2 on the delimitation of the EEZ.<sup>751</sup> That provision requires the States involved to conclude negotiations within a reasonable time.<sup>752</sup> If they are unsuccessful, they can resort to a mediator.<sup>753</sup> The duty to cooperate is not identical to the duty to solve a specific problem. Nor is the duty to cooperate identical to the duty to bring a negotiation to a fortunate conclusion. It is equally burdensome for both old-time fishing Parties and newly established ones.<sup>754</sup>

Just because the Parties were not able to reach an agreement one year does not mean they could refuse to try it again the following year.<sup>755</sup> Treaty law lacks explicit principles. It only requires member States to agree on the fixing of the TACs and their assignment among the contracting Parties.<sup>756</sup> In addition, the Commission may consider measures to regulate the size of the fishing effort and its distribution between the Contracting Parties.<sup>757</sup> As the annual allocation of mackerel quotas make clear, the fixed principles are neither decided nor codified.<sup>758</sup> The NEAFC provides that the sharing of the joint share between the relevant coastal States must be decided between the Parties.<sup>759</sup>

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<sup>749</sup> Brooke Campbell and Quentin Hanich, 'Principles and practice for the equitable governance of transboundary natural resources: cross-cutting lessons for marine fisheries management', in *Maritime Studies* 14, 8 (2015).

<sup>750</sup> John J. Mearsheimer, 'The tragedy of great power politics', New York, NY: Norton, 2001.

<sup>751</sup> *Supra* note 66, art. 63 and UNFSA art. 8.

<sup>752</sup> *Supra* note 66, art. 74(2)

<sup>753</sup> Mansur Armin Bin Ali, 'The Concept of Mediation as Protection of Fishery Resources from IUU Fishing Practices in Indonesia', in *Journal of Advances in Education and Philosophy*, 2021.

<sup>754</sup> Julia Nakamura, 'International Fisheries Law: Past to Future', in *Ocean Governance: Knowledge systems, policy foundations and thematic analysis*, 2023, pp. 175-207, at p. 183.

<sup>755</sup> *Supra* note 66, art. 74(3)

<sup>756</sup> *Supra* note 632, art. 71.

<sup>757</sup> *Ibid.*, art. 7(f)

<sup>758</sup> The NEAFC 2009 Mackerel Decision; Recommendation by the North East Atlantic Fisheries Commission in accordance with article 5 of the Convention on Future Multilateral Cooperation in North East Atlantic Fisheries at its annual meeting in November 2008 to adopt management measures for mackerel in the NEAFC Convention area in 2009.

<sup>759</sup> *Ibid.*, at para. 8.

### 3.4 The Atlanto-Scandian herring arbitration

The Norwegian spring spawning herring (NSSH), better known as Atlanto-Scandian herring is the most abundant fish stock in the North Atlantic.<sup>760</sup> It is mainly distributed along the Norwegian, Icelandic and Faroese coast.<sup>761</sup> It is identified as a migratory pelagic stock that moves long distance during its life cycle in the Norwegian Sea.<sup>762</sup> The leading fishing activity of this stock is carried out along the west coast of Norway before and during the spawning season.<sup>763</sup> This stock has posed and continue to raise management issues which are ruled by the NEAFC.<sup>764</sup> Only NEAFC Coastal States, which are Norway, Russian Federation, Iceland, the Faroe Islands and the EU, are active in fishing for this stock in their EEZs.<sup>765</sup> In contrast, no DWF State is involved in the harvest of NSSH with the result that there is no fishery in the NEAFC Convention Area.<sup>766</sup>

By the end of the nineteenth century, the NSSH stock was in a rebuilding phase and was estimated at 14 million tons by 1950.<sup>767</sup> The stock collapsed between 1950 and 1975 and the decline was driven by two main causes: the environment which influences the recruitment of the negatively developed stock as well as the exploitation rate increased due to the development of new fishing techniques.<sup>768</sup> The biomass stock declined from 14 tons in 1950 to 6 tons in 1960 to only 50000 tons in 1970. By the 1970s the NSSH was threatened with extinction.<sup>769</sup>

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<sup>760</sup> J. Jakobsson, E. Jonsson and A. Guðmundsdóttir, 'The North Icelandic Herring Fishery and the Atlanto-Scandian Herring 1939-1969', International Council for the Exploration of the Sea, ICES CM 19961H:30.

<sup>761</sup> Jens Christian Holst, Olav Dragesund, Johannes Hamre, Ole Arve Misund, and Ole Johan Østvedt, 'Fifty years of herring migrations in the Norwegian Sea', ICES Marine Science Symposia, 215: 352-360. 2002.

<sup>762</sup> C. Kelly, F.A. Michelsen, J. Kolding, M.O. Alver, 'Tuning and Development of an Individual-Based Model of the Herring Spawning Migration', Frontiers in Marine Sciences, 13 January 2022, Sec. Marine Fisheries, Aquaculture and Living Resources, Volume 8 – 2021.

<sup>763</sup> Dragesund, O., Hamre, J., and Øyvind, U. (1980). Biology and population dynamics of the Norwegian spring-spawning herring. *Rapports et Procès-Verbaux des Réunions* 177, 43–71, at p. 51, available at [https://imr.brage.unit.no/imr-xmlui/bitstream/handle/11250/108448/RappPRConsIntExplorMer\\_177\\_1980.pdf?sequence=1](https://imr.brage.unit.no/imr-xmlui/bitstream/handle/11250/108448/RappPRConsIntExplorMer_177_1980.pdf?sequence=1)

<sup>764</sup> Supra note 595.

<sup>765</sup> Ibid.

<sup>766</sup> Supra note 605.

<sup>767</sup> Toresen, R., and Østvedt, O. J. 2000, 'Variation in abundance of Norwegian spring-spawning herring (*Clupea harengus*, Clupeidae) throughout the 20<sup>th</sup> century and the influence of climatic fluctuations', in *Fish and Fisheries*, 1(3): 231- 256, at p. 236.

<sup>768</sup> Ibid.

<sup>769</sup> Ibid.



From 1975 to 2000 the NSSH stock was rebuilt. Between 1975 and 1982 the stock was not able to produce a fine recruitment due to the low abundance of spawning-stock.<sup>770</sup> In 1983 a wealthy year class survived and when in that year the class was ready to spawn in the late 1980s, the stock was estimated to be above the critical minimum level of 2.5 million tonnes.<sup>771</sup> In 1991 and 1992 recruitment was surprising and during the 1990s the stock raised up to about 10 million tonnes. Among 1994 and 1999 the stock prosperity decreased.<sup>772</sup>

### 3.4.1 The NEAFC Recommendation

The migration pattern of the NSSH assumes relevance because being a straddling stock it may be subject to fishing by coastal States in their own EEZ and DWF vessels on the high seas which may be incentivized to harvest that stock before it moves elsewhere.<sup>773</sup> If cooperative management with a fair and equitable distribution of the TAC does not occur, the Faroe Islands, Iceland, Norway, Russia and the EU may result in overfishing that could endanger the stable recovery of the stock.<sup>774</sup>

NEAFC holds the power to adopt recommendations for the allocation of the TAC and fishery resources among coastal States.<sup>775</sup> No clear principles for TAC allocation are listed in the NEAFC Convention, and it appears that NEAFC is free to decide the allocation criteria.<sup>776</sup> The quotas apportioned to coastal States for straddling fish stocks such as the NSSH are devoid of practical meaning.<sup>777</sup> This stock can be caught in areas under the national jurisdiction of coastal States and the fishing quota allocated for areas

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<sup>770</sup> Ibid.

<sup>771</sup> ICES. 2000. Report of the Northern Pelagic and Blue Whiting Fisheries Working Group. ICES Headquarters, 26 April—4 May 2000. ICES CM 2000/ACFM:16, p. 302, available at <https://imr.brage.unit.no/imr-xmlui/handle/11250/105979?locale-attribute=en>

<sup>772</sup> Ibid.

<sup>773</sup> Bjørndal, T., A. S. Hole, W. M. Slinde and F. Asche (1998), 'Norwegian Spring-Spawning Herring – Some Biological and Economic Issues', SNF-Working paper No. 46/1998.

<sup>774</sup> T. Bjørndal, V. Kaitala, D.V. Gordon, M. Lindroos, 'International Management Strategies for a Straddling Fish Stock: A BioEconomic Simulation Model of the Norwegian Spring-Spawning Herring Fishery', Article in Environmental and Resource Economics, December 2004.

<sup>775</sup> Supra note 632, art. 7I and (f).

<sup>776</sup> Supra note 728.

<sup>777</sup> Tore Henriksen, Geir Hønneland, and Are Sydnes, 'The North-east Atlantic Fisheries Commission (Neafc)', in Law and Politics in Ocean Governance: The UN Fish Stocks Agreement and Regional Fisheries Management Regimes, Publications on Ocean Development, Volume: 52 (2006), pp.99-130, at p. 104.

under national jurisdiction can be harvested on the high seas.<sup>778</sup> Actual allocations are accomplished through agreements between coastal States.<sup>779</sup>

Moreover, NEAFC may also adopt recommendations for control and enforcement measures on the high seas in the Convention Area.<sup>780</sup> The Fisheries Commission has not been given explicit authority to deal with non-contracting Parties and their fishing activities on the high seas in the Convention Area; however, such authority may be considered implicit given NEAFC's general ability to regulate fishing on the high seas in the Convention Area.<sup>781</sup> NEAFC will need to perform this function to manage the fisheries of non-contracting Parties if it is necessary to achieve conservation and optimum utilization objectives for the stock in question.<sup>782</sup>

In 1998, NEAFC adopted a recommendation on a control and enforcement scheme towards vessels fishing in areas beyond the limits of national jurisdiction for fishing in the Convention Area.<sup>783</sup> This scheme establishes obligations for contracting parties on measures for monitoring fishing activities, inspections at sea, follow-up of violations and the inspection of non - contracting Parties vessels in port.<sup>784</sup> Contracting Parties are required to implement a vessel monitoring system (VMS) and all vessels fishing outside the EEZs need VMS from January 2020.<sup>785</sup> Contracting Parties are also required to notify the Secretariat of vessels authorized to fish in international waters and report their harvests.<sup>786</sup>

The main aims of NEAFC consist of providing a forum for consultation and exchange of information on the status of fisheries for fish stocks in the Northeast Atlantic and linked management strategies to secure the conservation and optimum utilization of

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<sup>778</sup> Supra note 602.

<sup>779</sup> Ibid.

<sup>780</sup> Supra note 632, art. 8(1).

<sup>781</sup> Supra note 632, art. 5(1).

<sup>782</sup> Michael Arbuckle, Bruce Atkinson and Valentina Germani, 'Performance Review Panel Report of the North East Atlantic Fisheries Commission', NEAFC, 6 November 2006.

<sup>783</sup> EC. Council Regulation No 2791/1999 of 16 December 1999: laying down certain control measures applicable in the area covered by the Convention on future multilateral cooperation in the north-east Atlantic fisheries; 1999.

<sup>784</sup> NEAFC. Scheme of Control and Enforcement; 2007, available at [http://www.neafc.org/measures/docs/scheme\\_2007.pdf](http://www.neafc.org/measures/docs/scheme_2007.pdf)

<sup>785</sup> Ibid.

<sup>786</sup> Ibid.

these resources in international waters.<sup>787</sup> The coastal States have established a management plan for the NSSH which together with input from NEAFC envisages two steps: firstly, the coastal States sharing the stock agree on a TAC for areas under national jurisdiction and its allocation. Subsequently, coastal States submit proposals to NEAFC for the adoption of a recommended TAC and its assignment for the high seas share of the stock.<sup>788</sup>

In the years between 1997 and 2002, coastal States agreed on the setting of the annual TAC and quotas for each of them.<sup>789</sup> The parties agreed to keep a Spawning Stock Biomass (SSB) level above the critical level of 2500000 tons and to limit their fisheries based on a TAC consistent with a fishing mortality rate of less than 0,125 for specific age groups determined by ICES for the year 2001 and subsequent years.<sup>790</sup> Management plans and agreements among coastal States on the TAC were interrupted between 2003 and 2006 owing to frictions between States on quota allocation.<sup>791</sup>

The main reason that led to the failure of the agreement was due to Norwegian demands for a higher TAC allocation. These claims were based on the principle of zonal attachment or the concept of “biomass by time” in the zones.<sup>792</sup> It emerged that NSSH spent more time in the Norwegian EEZ when the first agreement was reached and Norway’s higher quota claims were based on this principle.<sup>793</sup> This showed that the initial cooperation agreement was not constant and consistent over time.<sup>794</sup> Even though Norway’s demands were not satisfied, Norway decided to opt for a cooperative agreement.<sup>795</sup>

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<sup>787</sup> FAO Summary Information on the Role of International Fishery Organisations or Arrangements and Other Bodies Concerned with the Conservation and management of Living Aquatic Resources. FAO Fish. Circ. 985; 2003.

<sup>788</sup> Supra note 777.

<sup>789</sup> Supra note 605.

<sup>790</sup> ICES. Report of the Working Group on Northern Pelagic and Blue Whiting Fisheries (WGNPBW). ICES Advisory Committee on Fishery Management. ICES CM 2007/ACFM:29. Aug 27 –1 Sep; Vigo, Spain; 2007.

<sup>791</sup> Supra note 595.

<sup>792</sup> Nils-Arne Ekerhovd, ‘The Blue Whiting Coalition Game’, Working Paper No. 23/08, SNF-project No. 5230 Norwegian Component of the Ecosystem Studies of Sub-arctic Seas (NESSA), Institute for research in economics and business administration Bergen, September 2008.

<sup>793</sup> Supra note 605.

<sup>794</sup> Ibid.

<sup>795</sup> Ibid.

### 3.4.2 The diverging position between the Faroe Islands and the EU

In 2007, the NEAFC coastal States signed an agreement to manage the NSSH again. The States consented on a 2008 TAC of 1518 tons.<sup>796</sup> The quotas were allocated in this way: Norway 61%; Iceland 14,51%; Russia 12,82%; EU 6,51% and the Faroe Islands 5,16%.<sup>797</sup> These NSSH annual management plans give effect to the obligations of NEAFC parties to conserve straddling fish stocks in their waters under article 63 UNCLOS.<sup>798</sup> As part of the herring management plan, NEAFC member countries agree on a TAC for herring based on the recommendations of ICES, an intergovernmental organization created to provide scientific advice on the sustainable use of marine ecosystems.<sup>799</sup> The NEAFC Parties shall meet once a year to determine the allocation among themselves of the TAC for the following year.<sup>800</sup>

Nevertheless, in 2013 the Fisheries Minister of the Faroe Islands unilaterally established a catch far in excess of the quota allocated to them in the 2012 consultations, in which they did not take part.<sup>801</sup> As far as the EU is concerned, the Faroe Islands did not participate in the 2012 negotiations because it was not apportioned a large enough share of the TAC.<sup>802</sup> At no time, however, did the Faroe Islands submit a proposal to delineate their share.<sup>803</sup> The Faroe Islands stated that they were excluded from the decision-making process after requesting a more consistent share.<sup>804</sup>

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<sup>796</sup> Supra note 790.

<sup>797</sup> Agreed Record of Conclusions of Fisheries Consultations on the Management of the Norwegian Spring Spawning (Atlanto-Scandian) Herring Stock in the North-East Atlantic for 2007, Jan.18, 2007.

<sup>798</sup> Council Regulation (EC) No. 793/2013 of 20 August 2013 establishing measures in respect of the Faroe Islands to ensure the conservation of the Atlanto-Scandian herring stock (Implementing Regulation) Preamble 6, available at <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:223:0001:0007:EN:PDF>

<sup>799</sup> Supra note 646.

<sup>800</sup> M.J. Holden, 'The procedures followed and the problems met by the European Economic Community in implementing the Scientific Recommendations of the International Council for the Exploration of the Sea on Total Allowable Catches', Directorate General for Fisheries Commission of the European Communities Brussels.

<sup>801</sup> Implementing Regulation Preamble Recitals 9; EU-Measures on Atlanto-Scandian Herring: Request for Consultations by Denmark in respect of the Faroe Islands of 7 November 2013 (WT/DS469/1) (Request for Consultations) para. 9.

<sup>802</sup> Implementing Regulation Preamble Recitals 7-8; EU-Measures on Atlanto-Scandian Herring: Request for Consultations by Denmark in respect of the Faroe Islands of 7 November 2013 (WT/DS469/1) (Request for Consultations) para 8.

<sup>803</sup> Ibid.

<sup>804</sup> Devoid, F. (1963), 'The life history of the Atlanto-Scandian herring. Rapports et Procès-Verbaux des Réunions du Conseil International pour l'Exploration de la Mer', 154: pp. 98-108.

According to the Faroe Islands, they were entitled to a greater quota because of the higher occurrence of NSSH in its EEZ due to changed migration patterns.<sup>805</sup> However, the Faroe Islands action could have proved detrimental to the marine environment since by setting such a high unilateral quota for the NSSH, they could have caused the stock to collapse.<sup>806</sup> Council Regulation (EC) No. 1026/2012, most commonly known as ‘Shared Stocks Regulation’, covers aspects of this definition relevant to this case, in particular if a country does not cooperate in the management of a stock of common interests, fails to adopt concrete fisheries management measures or succeeds in taking them but does so in a way that when adopted with other States makes the stock unsustainable.<sup>807</sup>

In 2013 the EU prohibited imports of Atlanto-Scandian herring and North Atlantic mackerel (the latter stock is connected to the NSSH because it is virtually impossible to catch one type of fish stock without harvesting the other).<sup>808</sup> The EU has also restricted access to its ports including for transshipment goals for Faroese vessels and vessels authorized by the Faroe Islands to fish for and transport NSSH and mackerel.<sup>809</sup> The EU took these measures after identifying the Faroe Islands as a country that promotes unsustainable fishing, asserting that the Faroe Islands has not complied with the NSSH management and conservation plan established by the NEAFC contracting parties.<sup>810</sup>

The EU inflicted these limitations through the promulgation of Council Regulation No. 793/2013 and was permitted to do so by the Shared Stocks Regulation.<sup>811</sup> The latter allows the EU to impose such restrictions when third parties promote unsustainable fishing of shared stocks such as highly migratory and straddling stocks violating their duties of conservation and management with other States of shared stocks.<sup>812</sup>

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<sup>805</sup> Rosa M. Fernández Egea, ‘Climate Change and the Sustainability of Fishery Resources in the North Sea: The Trade Dispute between the European Union and the Faroe Islands’ (2014) 4, *Journal of the Spanish Institute for Strategic Studies*.

<sup>806</sup> Lucy Towers, ‘Faroe Islands Herring Fishing Ignoring Science, says EC’, *The Fish site – Aquaculture for all*, May 2013.

<sup>807</sup> Council Regulation 1026/2012, OJ 2012 L 316/34, article 3, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R1026>

<sup>808</sup> Implementing Regulation Preamble 23.

<sup>809</sup> *Ibid.*, art. 5(2).

<sup>810</sup> *Ibid.*, art. 4.

<sup>811</sup> Council Regulation (EC) No. 1026/2012 of 25 October 2012 on certain measures for the purpose of the conservation of fish stocks in relation to countries allowing non-sustainable fishing (Shared Stocks Regulation), *Official Journal of the European Union*, published on 14 November 2012.

<sup>812</sup> *Supra* note 66, art. 63-64.

In 2014, Faroese exports were shared almost uniformly between EU member countries and non-EU States.<sup>813</sup> 95% of these exports were represented by fisheries products.<sup>814</sup> In 2013, more than half of the Faroese catch was constituted by Atlanto-Scandian herring and mackerel and 70% of these fish stocks were exported to the EU in 2012.<sup>815</sup> It is clear that trade in NSSH and mackerel with the EU is important and the Faroe Islands is a country whose economy is overwhelmingly dependent on fish exports.<sup>816</sup> It is intuitable how the trade bans imposed by the EU have proved particularly harmful.<sup>817</sup>

This move by the EU has prompted the Faroe Islands to contest the Shared Stocks and Implementing Regulations both before the Dispute Settlement Understanding (DSU) of the World Trade Organization (WTO) and under article 287 UNCLOS mechanism, which allows disputes to be resolved before one of the four international forums.<sup>818</sup> In its request for consultations, the Faroe Islands argued that the EU Regulations were contrary to General Agreement on Tariffs and Trade (GATT) articles I, V and XI, which make explicit the most-favored nation principle, freedom of transit and prohibition of quantitative restrictions respectively.<sup>819</sup>

However, the case was resolved before it could reach the stage of the Panel's proceeding.<sup>820</sup> The Faroe Islands have decided to accept a lower quota for NSSH of 40000

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<sup>813</sup> Hagstova Føroya, 'Faroe Island in Figures 2015', available at [http://www.hagstova.fo/sites/default/files/Faroe\\_Islands\\_in\\_figures\\_2015.pdf](http://www.hagstova.fo/sites/default/files/Faroe_Islands_in_figures_2015.pdf)

<sup>814</sup> M. H. Rasmussen, 'Current Trends in the Faroese Economy (2014)', available at [http://www.nationalbanken.dk/en/publications/Documents/2014/09/Current%20Trends%20in%20the%20Faroese%20Economy\\_Mon3-2014.pdf](http://www.nationalbanken.dk/en/publications/Documents/2014/09/Current%20Trends%20in%20the%20Faroese%20Economy_Mon3-2014.pdf)

<sup>815</sup> Svein Magnason, 'Faroese Fish Needs New Markets', Nora Region Trends 26 July 2013, see <http://www.noraregiontrends.org/marineresources/marinenews/article/faroese-fish-needs-new-markets/193/neste/7/>

<sup>816</sup> Economy of the Faroe Islands, A Dynamic and Resilient Economy, Føroya landsstýri – The Government of the Faroe Islands, 2019, available at <https://www.faroeislands.fo/economy-business/economy/>

<sup>817</sup> Julia Fioretti, 'EU lifts ban on herring imports from Faroe Islands', Reuters, Editing by David Goodman, 18<sup>th</sup> August 2014.

<sup>818</sup> Understanding on Rules and Procedures Governing the Settlement of Disputes of 1994 (DSU), available at [https://www.wto.org/english/docs\\_e/legal\\_e/28-dsu.pdf](https://www.wto.org/english/docs_e/legal_e/28-dsu.pdf); The four possible international forums are: International Tribunal for the Law of the Sea (ITLOS), The International Court of Justice (ICJ), the Arbitral Tribunal constituted under Annex VII to UNCLOS and the Special Arbitral Tribunal constituted pursuant to Annex VIII to UNCLOS.

<sup>819</sup> DS469: European Union — Measures on Atlanto-Scandian Herring, World Trade Organization, see [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds469\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds469_e.htm)

<sup>820</sup> Judith Levine and Susan Kimani, 'Peace, Water and the Permanent Court of Arbitration: Supporting Dispute Settlement from the Rhine to the Corentyne', in *A bridge over troubled waters: dispute resolution in the law of international watercourses and the law of the sea*, edited by H el ene Ruiz Fabri, Erik Franckx, Marco Benatar and Tamar Meshel, Leiden; Boston: Brill Nijhoff, [2021].

tons against the 105230 tons of the previously unilaterally established quota.<sup>821</sup> The quota of 40000 tons was almost 30% higher than that allocated to it by the other parts of the NEAFC of 31000 tons.<sup>822</sup> In August 2014, the EU withdrew the implementing regulation.<sup>823</sup> Nevertheless, the settlement of the dispute leaves unsolved an important question concerning the relationship between port State measures, such as the EU Regulations and the WTO law.<sup>824</sup>

### 3.4.3 The Unsolved Issue of Cooperation under Article 63, UNCLOS

The Atlanto-Scandian Herring Arbitration between the Kingdom of Denmark in respect of the Faroe Islands and the European Union has been officially ended by the Arbitral Tribunal constituted under Annex VII to the UNCLOS.<sup>825</sup> The arbitration concerned essentially the interpretation and application of article 63(1) of the Convention with regard to the shared straddling fish stock of Atlanto-Scandian herring.<sup>826</sup> Behind the dispute there was a problem of cooperation between the EU and the Faroe Islands under the legal frameworks of UNCLOS and UNFSA.<sup>827</sup> UNCLOS requires Member States to cooperate in the conservation of living resources, including shared resources and on the high seas.<sup>828</sup> Article 63 paragraph 1 and 2 of UNCLOS affirms that States must seek to agree on conservation measures for shared fish stocks. ITLOS, in its Advisory Opinion

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<sup>821</sup> Supra note 817.

<sup>822</sup> Nele Matz-Lück, “The Faroe Islands’ Response to EU Trade Restrictions on Atlanto-Scandian Herring”, The blog of the Norwegian Centre for the Law of the Sea, (March 5, 2014).

<sup>823</sup> European Union (Common Fisheries Policy) (Faroe Islands) (Revocation) Regulations 2014, S.I. No. 419 of 2014, available at <https://faolex.fao.org/docs/pdf/ire138180.pdf>

<sup>824</sup> Rosa Maria Fernandez Egea, ‘Climate Change and the Sustainability of fishery resources in the North Sea: the trade dispute between the European Union and the Faroe Islands’, Journal of the Spanish Institute for Strategic Studies, No. 4/2014.

<sup>825</sup> The Atlanto Scandian Herring Arbitration between the Kingdom of Denmark in respect of the Faroe Islands and the European Union, PCA Case No. 2013-30, Press Release (September 24, 2014), available at [https://arbitrationlaw.com/sites/default/files/free\\_pdfs/2014-09-24\\_-\\_fi-eu\\_-\\_second\\_press\\_release\\_eng8a8b.pdf](https://arbitrationlaw.com/sites/default/files/free_pdfs/2014-09-24_-_fi-eu_-_second_press_release_eng8a8b.pdf)

<sup>826</sup> Ibid.

<sup>827</sup> Elena Ivanova, ‘The Competing Jurisdictions of the WTO and the UNCLOS Dispute Settlement I in the Context of Multifaceted Disputes’, Studies of the Max Planck Institute Luxembourg for International, European and Regulatory Procedural Law; volume 23, Nomos Verlagsgesellschaft, Baden-Baden, Germany 2021.

<sup>828</sup> Supra note 66, art. 63 and 118.

on IUU Fishing issued that article 63 paragraph 1 compels States to consult each other in a meaningful way to secure the conservation of shared stocks.<sup>829</sup>

These findings are similar to those adopted in US – Shrimp 21.5 and ITLOS has clarified that States should commit to it.<sup>830</sup> These results were confirmed and extended in UNFSA.<sup>831</sup> Other numerous international fisheries instruments also support cooperation and advice in the establishment of measures for the conservation of fish stocks.<sup>832</sup> According to the interpretation of the IUU Fishing Opinion, both UNCLOS and UNFSA impose an obligation on the parties to consult collectively to conserve fish stocks and provide a party with a right to consult in an RFMO.<sup>833</sup> This would strengthen the debate that there was an obligation for the parties to aim at a multilateral cooperation in the Faroese herring dispute given the straddling nature of the stock in question, as was the case with the migratory turtles in the US – Shrimp case.<sup>834</sup> This implies that there was a duty of cooperation in the conservation of such stock in the current case that a DSB body could have considered conforming with its employment of external sources to interpret the GATT in the US – Shrimp.<sup>835</sup>

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<sup>829</sup> ITLOS Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (Request for Advisory Opinion Submitted to the Tribunal) of 2 April 2015 (IUU Fishing Opinion) para 210, available at [https://www.itlos.org/fileadmin/itlos/documents/cases/case\\_no.21/advisory\\_opinion\\_published/2015\\_21-advop-E.pdf](https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/advisory_opinion_published/2015_21-advop-E.pdf)

<sup>830</sup> WT/DS58/AB/RW United States – Import Prohibition of Certain Shrimp and Shrimp Products (Recourse to article 21.5 of the DSB by Malaysia) AB-2001-4, Report of the Appellate Body, 22 October 2001, paras 123-124, see [https://www.worldtradelaw.net/document.php?id=reports/wtoab/us-shrimp\(ab\)\(21.5\).pdf&mode=download](https://www.worldtradelaw.net/document.php?id=reports/wtoab/us-shrimp(ab)(21.5).pdf&mode=download)

<sup>831</sup> Supra note 94, art. 5-6-8.

<sup>832</sup> See for instance FAO Fisheries Code arts 11.2.9 and 11.2.14; PSMA art 6; IPOA-IUU ss9.1 and 68; FAO Compliance Agreement art 5.

<sup>833</sup> Supra note 829, para. 205.

<sup>834</sup> Supra note 827.

<sup>835</sup> Nancy L. Perkins, ‘World Trade Organization: United States – Import Prohibition of Certain Shrimp and Shrimp Products’, *International Legal Materials*, Vol. 38, No. 1 (January 1999), pp. 118-175, at p. 132.



## CHAPTER IV

### 4.1 The Loophole and its fisheries regulation

The Barents Sea Loophole is a portion of the high seas located between the EEZs of Norway and the Russian Federation.<sup>836</sup> For a large part of the 90s, the fishing vessels belonging to numerous States, especially Iceland, harvested cod in this area of the high seas without having been assigned quotas by a competent RFMO.<sup>837</sup>

Norway responded strongly to the arrival of Icelandic fishing vessels, some of which were registered in third countries by flying flags of convenience.<sup>838</sup> While the Norwegian government spokesman urged Iceland to withdraw the vessels, the Icelandic authority replied that it was not within its power to prevent Icelandic vessels from fishing outside Iceland's jurisdiction.<sup>839</sup> On 14 August 1993, the Norwegian Minister of Fisheries reported that 14 Icelandic trawlers were harvesting in the Loophole and that 11 trawlers were about to arrive.<sup>840</sup>

Influential doctrine such as Robin Churchill and Geir Ulfstein has stated that the portion of the high seas in the Barents Sea called 'Loophole' is not important from a fish perspective because economically profitable fishing in this area is not feasible without access to the adjacent 200-mile zone.<sup>841</sup> Nevertheless, in 1991 French and Greenlandic trawlers began fishing in this area.<sup>842</sup> This led to negotiations between Norway and Greenland that seemed to solve the matter momentarily.<sup>843</sup> This episode shows that in the future the Loophole could have caused similar issues.<sup>844</sup> In fact, the Icelandic advance

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<sup>836</sup> Olav Schram Stokke, 'Barents Sea Fisheries – the IUU Struggle', in *Arctic Review on Law and Politics*, Vol. 1, No. 2 (2010), pp. 207-224, at p. 208.

<sup>837</sup> Olav Schram Stokke, 'Managing Fisheries in the Barents Sea Loophole: Interplay with the UN Fish Stocks Agreement', in *Ocean Development & International Law*, 32:241–262, 2001, at p. 241.

<sup>838</sup> Budislav Vukas and Davor Vidas, 'Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework', in *Governing High Seas Fisheries: the interplay of global and regional regimes*, pp. 53-90, at p. 58., 2001.

<sup>839</sup> Bjarni Már Magnússon, 'The Loophole dispute from an Icelandic perspective', Centre for Small State Studies Publication Series – University of Iceland, Working Paper 1 – 2010.

<sup>840</sup> Reuters News Agency dispatch from Oslo, August 19, 1993.

<sup>841</sup> Robin Churchill and Geir Ulfstein, 'Marine Management in Disputed Area: the case of the Barents Sea', 1992, p. 95.

<sup>842</sup> Thorir Gudmundsson, 'Cod war on the high seas: Norwegian – Icelandic dispute over "Loophole" fishing in the Barents Sea', *Nordic Journal of International Law* 64, pp. 557-573, at p. 558, 1995.

<sup>843</sup> Sjö Fredrik, 'The Loophole, The Power and the Sea: Small States in Asymmetric negotiations', *Lunds universitet/Statsvetenskapliga Institutionen*, 2006.

<sup>844</sup> *Ibid.*

was not the first but it was certainly the most threatening both for the number of ships, sometimes more than 30 at a time and for the proximity of Iceland to the high seas area.<sup>845</sup> Initially, the Icelandic government refrained from fishing operations as completely contrary to Iceland's stated policy in favour of the right of coastal States to manage adjacent international waters.<sup>846</sup>

However, subsequently with the increasing public support for fishermen and pleasantly seeing the gains from fishing activities in the interested high seas area, the Icelandic government in the intention of strengthening the national economy took a neutral attitude and began to criticize the so-called Norwegian intransigence in the field of catching in the Loophole.<sup>847</sup> On 24 August 1993, talks took place in Stockholm which further aggravated the situation because after a tense confrontation with the Norwegian embassy, the Icelandic delegation left saying that the Norwegian negotiators had no new idea on the table.<sup>848</sup> Norwegian Foreign Minister Holst confirmed that there was no any ground for an agreement between Iceland and Norway.<sup>849</sup>

In the spring of 1994, however, Russia started to take an interest in the dispute.<sup>850</sup> Under an agreement between Norway and Russia on the management of the Barents Sea, the two countries jointly decided on the TAC and divided it according to an agreed quota.<sup>851</sup> Pursuant to this agreement, the TAC amounted to 540000 tons in 1993, of which 228000 belonged to Russia, 248000 tons to Norway and 64000 were apportioned to the EU and other countries.<sup>852</sup> On 13 May 1994, Icelandic newspapers reported that Russian Prime Minister Chernomyrdin sent a letter to the Icelandic Prime Minister warning him

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<sup>845</sup> Mr Þórólfur Matthíasson, 'Right based fisheries management in Iceland and economic and financial crisis', Directorate General for Internal Policies – Policy Department B: Structural and cohesion policies – Fisheries, European Parliament, March 2012, p. 17

<sup>846</sup> Geir Hønneland, 'Compliance in the Barents Sea fisheries. How fishermen account for conformity with rules', in *Marine Policy* 24(1):11-19, January 2000, at p. 13.

<sup>847</sup> Jeppe Høst and Jens Christiansen, 'Nordic fisheries in transition – future challenges to management and recruitment', *Nordic Council of Ministers, TemaNord* 2018:545, at p. 41.

<sup>848</sup> *Supra* note 842, at p. 558.

<sup>849</sup> *Ibid.*

<sup>850</sup> Geir Hønneland, 'Enforcement Co-operation between Norway and Russia in the Barents Sea Fisheries', in *Ocean Development and International Law* 31(3), pp. 249-267, at p. 251, July 2000.

<sup>851</sup> Maria Hammer and Alf Håkon Hoel, 'The Development of Scientific Cooperation under the Norway–Russia Fisheries Regime in the Barents Sea', in *Arctic Review on Law and Politics*, vol. 3, 2/2012 pp. 244–274, at p. 250.

<sup>852</sup> Geir Hønneland, 'Norway and Russia: Bargaining Precautionary Fisheries Management in the Barents Sea', in *Arctic Review on Law and Politics*, vol. 5, 1/2014 pp. 75–99, at p. 77.

that Russia would have taken immediate action if Icelandic trawlers had not left the Loophole.<sup>853</sup>

#### 4.1.1 The cod war in the Loophole

Faced with new States interested in harvesting in the Barents Sea Loophole, Norway and Russia argued that both the principle of zonal attachment and historical fishing gave the impression that catching for the cod stock be reserved for the two of them.<sup>854</sup> In addition, the phasing out of non-coastal State fishing from the Loophole in the 1970s had been supported by the acceptance of EEZs in customary international law even though by the early 1990s no sustain had arrived from wider regulatory developments with respect to areas beyond 200 nm.<sup>855</sup> Iceland, long a supporter of a broad national jurisdiction with its actions in the Loophole seemed to preclude sustain for legal development.<sup>856</sup>

However, the issue of Loophole fishing came up at the UN Conference on Fish Stocks, which gave rise to the possibility of reviewing the rules governing the interaction between coastal States and nations that practice fishing in high seas.<sup>857</sup> In the 1990s, the measure available to Norway and Russia were predominantly diplomatic and economic.<sup>858</sup> Unlike the situation of the Peanut Hole in the Okhotsk Sea, there was no possibility that naval exercise could be employed to influence issues related to fishing.<sup>859</sup> Although coastal States soon agreed to increase diplomatic pressure on flag States and

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<sup>853</sup> Morgunbladid of Iceland, May 13 1994.

<sup>854</sup> B. Vukas and D. Vidas, 'Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework', in Stokke (ed.), *Governing High Seas Fisheries: The interplay of global and regional regimes*, Oxford University Press, 2001, pp. 53-90, at p. 62.

<sup>855</sup> T. L. McDorman, 'Stateless Fishing Vessels, International Law and the U.N. High Seas Fisheries Conference', in *Journal of Maritime Law and Commerce*, Vol. 25, No. 4, pp. 531-555, at p. 538, 1994.

<sup>856</sup> Robin R Churchill, 'The Barents Sea Loophole Agreement: A "Coastal State" Solution to a Straddling Stock Problem', in *The International Journal of Marine and Coastal Law*, Vol. 14, No. 4, pp. 467-490, at p. 474, 1999.

<sup>857</sup> D. H. Anderson, 'The Straddling Stocks Agreement of 1995: An Initial Assessment', in *The International and Comparative Law Quarterly*, Vol. 45, No. 2 (Apr., 1996), pp. 463-475, at p. 465.

<sup>858</sup> Julie Wilhelmsen and Kristian Lundby Gjerde, 'Norway and Russia in the Arctic: New Cold War Contamination?', in *Arctic Review on Law and Politics*, Vol. 9 (2018), pp. 382-407, at p. 387.

<sup>859</sup> In the Sea of Okhotsk Peanut Hole, Russian military exercises and weapons testing were conducted prior to negotiating with a group of distant water fishing nations respecting the terms for their abstention from high seas fisheries outside Russia's EEZ. See A. G. Oude Elferink, 'The Sea of Okhotsk Peanut Hole: De facto extension of coastal state control', in *Governing high-seas fisheries: the interplay of global and regional regimes*, pp. 179-205, at p. 183, 2001.

strengthen the presence of coastal States in the area in terms of controlling vessels, there was an unwillingness to use those ships for anything more drastic than witnessing unregulated fishing activity in the region.<sup>860</sup>

Instead, the most powerful means of deterring newcomers from unregulated fishing in the Loophole was precisely the allocation of fishing quota. The assignment of portions of the total quota to third Parties was provided for in the annual protocols drawn up by the Russian - Norwegian Commission and implemented in mutual access agreements with third Parties.<sup>861</sup> After bilateral negotiations with Norway in 1991-1992, Greenland and the European Community decided to limit fishing activities in the Loophole and to keep the total harvests in the Barents Sea within the overall quotas allocated under mutual access agreements.<sup>862</sup> In 1996, the Faroe Islands agreed to ban landings of fish caught without quotas in international waters.<sup>863</sup>

Coastal States had tried to avoid giving the idea that quotas in national waters would subsequently be apportioned to any State engaged in fishing in the Barents Sea.<sup>864</sup> As regards the agreement with Greenland, Norway insisted that there was no relationship between the ongoing Greenlandic fishing in the Loophole and the allocation of quotas; furthermore, the agreement itself remarked the mutual nature of that allocation.<sup>865</sup> However, few doubted that gaining Greenland's acceptance of a role as a coastal State

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<sup>860</sup> 'Protokoll fra den 22. Sesjon I den blandete norsk-russiske fiskerikommissjon', (1993),14-5, available from Ministry of Fisheries, Oslo.

<sup>861</sup> The agreements are reciprocal access agreements. Based on these agreements the Euro-pean Community, the Faroes, Greenland, and Iceland presently have fishing rights in specified national zones in the Barents Sea. In addition, and based on historical fishing, Poland has certain quotas in Norway's EEZ and in the Svalbard zone; and on similar grounds, Canada, Estonia, and Lithuania are granted access to the shrimp fishery in the Svalbard zone. See Report to the Storting, Norway, St.meld. 11 (1997-1998), Sec. 3. A broader discussion is found in St.meld. 49 (1994-1995).

<sup>862</sup> Avtale mellom Norge og Grønland/Danmark om gjensidige fiskeriforbindelser (1992), Overenskomster med fremmede makter (1994), 1500. In the EC case, high seas activities are not mentioned explicitly in the relevant bilateral agreements: Agreement on Fisheries between the European Economic Community and the Kingdom of Norway (1980), Official Journal of the European Communities L226/48 (1980) and Agreement in the Form of an Exchange of Letters between the European Community and the Kingdom of Norway Relating to the Agreement on Fisheries between the European Communities and the Kingdom of Norway (1992), Proposition to the Storting, Norway, St.prp. 102 (1991-1992).

<sup>863</sup> Norway, Ministry of Fisheries, 'Felles norsk-færøysk pressekommuniké om kvoteavtalen for 1996', Press Release, 23 February 1996.

<sup>864</sup> Natalia Ermolina, 'Implications of the Barents Sea Treaty for fisheries matters', in Small Master's Thesis Master of Laws (LLM) in Law of the Sea, UIT The Arctic University of Norway, Faculty of Law, Fall 2013, at p. 24.

<sup>865</sup> In 1991, after reaching agreement on the contents of the Framework agreement that was adopted the following year, negotiations between Norway and Greenland on an annual quota broke down, allegedly over Greenlandic linkage of Loophole engagement and quotas from Norway. Bjarne Myrstad of the Norwegian Ministry of Fisheries cited in *Fiskaren* (Bergen), 23 August 1991.

outside the EEZ had come at a price for Norway: Greenland was granted a share of cod in the Barents Sea for the first time.<sup>866</sup>

Nevertheless, the diplomatic strategy of coastal State status proved to be less effective towards Iceland. When Icelanders first appeared in the Loophole, Norway and Russia refused to negotiate Iceland's demands for a share of cod to be caught in the Barents Sea as Iceland had no historical fishing record in the Loophole.<sup>867</sup> The Icelandic trawlers, however, continued to harvest the same stock as the coastal States and therefore any measures of stock management was unsuccessful.<sup>868</sup> Formal negotiations began in 1995, partly because Icelanders refusing to give in to strong political pressure had acquired about 75% of the unregulated catch in the Loophole and partly because coastal States were adverse to extending international law regarding unilateral enforcement measures beyond 200 nm, an issue that was being debated at the UN at the time.<sup>869</sup>

The coastal States sought to establish an agreement that would confer Iceland a percentage of a separate quota of the Loophole; the amount of the total quota of the Loophole would correspond to the zonal attachment of the cod stock to the high seas area, estimated at 2%.<sup>870</sup> After years of negotiations, no agreement has been reached, despite various economic sanctions launched by coastal States to make unregulated Icelandic harvesting more expensive.<sup>871</sup>

In 1994, national legislation was introduced in Norway prohibiting the landing of catches on the high seas made without a quota: in practice, port calls were also discarded.<sup>872</sup> On one occasion, Iceland lodged a complaint with the European Free Trade Association (EFTA) Surveillance Authority that Norway's refusal to provide repair services to an Icelandic vessel engaged in Loophole fishing constituted a breach of the

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<sup>866</sup> Criticism from Norwegian industry on this account is cited in *Fiskeribladet* (Harstad), 5 August 1992, 4.

<sup>867</sup> Norway's Foreign Minister, Johan Jørgen Holst, cited in *Aftenposten*, 25 August 1993, after the collapse of informal talks on the matter.

<sup>868</sup> 'Sustaining Iceland's fisheries through tradeable quotas – Country study', OECD Environment Policy Paper No. 9, 2017, at p. 5.

<sup>869</sup> Olav Schram Stokke, 'The Loophole of the Barents Sea Fisheries Regime', in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, Oxford University Press, 2001, pp. 273-301, at p. 277.

<sup>870</sup> 'Case Study: Individual Transferable Quotas for Cod Fisheries, Iceland (on-going)', The Commonwealth Blue Charter, 21 October 2020.

<sup>871</sup> *Ibid.*

<sup>872</sup> Daily News of Iceland, 13 and 14 July 1995, the vessel *Már*, and 22 July 1996, the vessel *Klakkur*.

agreement on the European Economic Area.<sup>873</sup> The supervisory authority's response was cautious. It acknowledged the occurrence of such a violation but no further action was taken because the underlying conflict concerned a dispute between Norway and Iceland over Icelandic fishing rights in the Barents Sea.<sup>874</sup>

Another important measure taken to counter unregulated fishing activities on the high seas was the practice of blacklisting vessels engaged in activities in the Loophole that had accessed the Norwegian EEZ even if the vessel changed ownership.<sup>875</sup> In 1998 the blacklist was expanded to port calls and the result was to reduce the second-hand value of ships with previous violations of the rules of the Russian Norwegian Fisheries Commission.<sup>876</sup> Like the blacklisting of ships, sanctions relevant to a given sector cannot be challenged on the basis of international trade rules and during the peak years of Loophole fishing, a series of private boycotts were introduced aimed at strangling Norwegian supplies of provisions, fuels and services to Loophole ships as well as sanctioning domestic companies that had not joined such boycotts.<sup>877</sup>

The Russian Norwegian Fisheries Commission exerted great pressure by encouraging the Murmansk-based fishing industry to stop cod landings of Russian ships in Icelandic ports.<sup>878</sup> Due to the cod crisis in Icelandic waters, supply contracts with Russian companies were important for the Icelandic processing industry during the

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<sup>873</sup> The incident involved the vessel *Már*. The Agreement on the European Economic Area, 1992 (EEA Agreement) was adopted by the European Community and its member states and the members of the European Free Trade Association (EFTA), <https://www.efta.int/free-trade/free-trade-agreements>. See in particular Article 20 in conjunction with Protocol 9, and more generally, Article 36 of the Agreement.

<sup>874</sup> 'Freedom to Provide Services', EFTA Surveillance Authority: Annual Report 1998, <https://www.eftasurv.int/esa-at-a-glance/publications/annual-report/annual-report-1998>. Article 5 of Protocol 9 to the EEA Agreement provides for access to ports and associated facilities but an exemption is made for landings of fish from stocks the management of which is subject to severe disagreement among the parties.

<sup>875</sup> Supra note 836, at p. 212.

<sup>876</sup> 'Norwegian Black List', Directorate of Fisheries, updated to 16 February 2022, available at <https://www.fiskeridir.no/English/Fisheries/Norwegian-Black-List>

<sup>877</sup> Robert Hansen, leader of a regional County Fisherman Association, maintains that ship-yards accepting Loophole vessels would be blacklisted. *Nordlys*, 8 June 1994, 12. When it became known that the Faroese branch of the Norwegian oil company Statoil had supplied Loophole vessels, representatives of several County Fisherman Associations threatened to boycott the company. *Nordlys*, 17 June 1994, 15.

<sup>878</sup> *Fiskaren*, 6 May 1994, 5, notes that the Russian Fisheries Minister threatened to sever cooperative relations with Iceland and, in the 1 July 1994 issue, that the Russians, encouraged by the Russian Fisheries Committee, had broken industry-level negotiations on direct deliveries to Iceland. According to Icelandic newspapers, Russian authorities again in 1996 suggested to Russian fish companies that they should not sell fish to Iceland if Icelandic vessels reappear in the Loophole. *Daily News of Iceland*, 18 July 1996.

1990s.<sup>879</sup> However, public and private sanctions have not deterred unregulated fishing activities. The main reasons were two: the vessels in the Loophole were able to operate independently of the Russian and Norwegian fishing industries, and the Icelanders were determined to establish considerable fishing activity in the Loophole.<sup>880</sup>

In the long term, anyway, the dependence on Icelandic ports, which are about four days away, would greatly increase the overall costs of fishing in the Barents Sea.<sup>881</sup> This is particularly true for new trawlers, whose profitability tends to be very sensitive to the reduction in the number of annual fishing days.<sup>882</sup> To sum up, the Loophole matter emerged in the early 1990s because the current bilateral regime, focused on the Russian Norwegian Fisheries Commission but including mutual access agreements with non-coastal States was no longer perceived as legitimate by all major user States.<sup>883</sup>

The issue of the Loophole differs from the situation of the Donut Hole between the US and Russia because the proportion of the cod stock found in the Loophole is very restricted compared to that in the EEZ and the stock was in good condition during the period when unregulated fishing was practiced on a large scale.<sup>884</sup> In addition, although there was some activity by ships flying flags of convenience in the Loophole, the dispute was largely trilateral involving two coastal States and one newcomer. Overall, the bilateral regime played a minor role in dealing with unregulated harvesting in the region.<sup>885</sup> However, the regime helped to harmonise coastal States' measures on the issue, the most incisive of which was the regulation of access to national waters and ports.<sup>886</sup>

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<sup>879</sup> According to Icelandic imports statistics, Russian landings were somewhat reduced in 1994 compared to the two preceding years, but they still reached almost 11,000 tonnes. Figure reported in Fiskaren, 7 March 1995, 15.

<sup>880</sup> H.H. Gissurarson, 'The Politics of Enclosures with Special Reference to the Icelandic ITQ System', in *An introduction to rights-based management*, available at <https://www.fao.org/3/X8985E/x8985e03.htm>

<sup>881</sup> Olav Schram Stokke, 'Management of shared fish stocks in the Barents Sea', The Fridtjof Nansen Institute, available at <https://www.fao.org/3/Y4652e/y4652e0e.htm>

<sup>882</sup> Ibid.

<sup>883</sup> Stine Busch Rønning, 'Two countries sharing a renewable resource – the allocation of the renewable natural resources in the Norwegian-Russian fisheries management regime of the Barents Sea', University of Tromsø, Norway, 2002, at p. 31.

<sup>884</sup> D. A. Balton, 'The Bering Sea Dough-nut Hole Convention: Regional Solution, Global Implications', in *Governing high seas fisheries: the interplay of global and regional regimes*, pp. 142-172, at p. 143, 2001.

<sup>885</sup> *Supra* note 836, at p. 211.

<sup>886</sup> In annual protocols since the 1992 Commission meeting, Norway and Russia pledged to include Loophole activities in the scope of any quota agreements drawn up with non-coastal states. See 'Protokoll fra den 22. Sesjon I den blandete norsk-russiske fiskerikommissjon', 13.

#### 4.1.2 The normative regime for interpreting the cod war in the Loophole

From a normative point of view, UNCLOS establishes the fundamental principles governing the management of fish stocks that are within the EEZ of two or more coastal States or both within the EEZ and in an area beyond and adjacent to it.<sup>887</sup> According to article 63 and 118 UNCLOS, coastal States (in this case Norway and Russia) shall negotiate with States whose fishermen exploit the adjacent high seas areas (Iceland).<sup>888</sup> Competing interests, however, between the States that are mainly coastal fishing and those that rely more on deep-sea fishing have meant that, although there is a certain obligation to negotiate, there is no real indication of what the outcome should be.<sup>889</sup> This issue was accurately reported by a committee of the International Law Association at a conference in Cairo in 1992.

A report by Dr. Rainer Lagoni discusses the issue extensively.<sup>890</sup> On the question Lagoni notes that if the States concerned fail to agree on the conservation of cross-border stocks in the adjacent zone, the general regime for fishing on the high seas provided for by UNCLOS shall apply in the adjacent zone.<sup>891</sup> Consequently, the right of all States for their citizens to fish in the area is neither suspended nor terminated in this case.<sup>892</sup> Article 116, however, provides that this right is subject to letter b of article 116 UNCLOS that is to the “rights and duties as well as the interests of coastal States” provided for among other things by article 63 paragraph 2.<sup>893</sup> However, the precise meaning of this term and the scope of the rights and duties and interests of the coastal States mentioned in article 116 UNCLOS are in question.<sup>894</sup>

The matter then becomes how to resolve disputes when freedom of fishing on the high seas is limited only by vague references to the interests of the coastal State. One

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<sup>887</sup> William T. Abel, ‘Fishing for an International Norm to Govern Straddling Stocks: The Canada-Spain Dispute of 1995’, in *The University of Miami Inter-American Law Review*, Vol. 27, No. 3 (Spring – Summer, 1996), pp. 553-583, at p. 560.

<sup>888</sup> *Supra* note 66, art. 63 and 118.

<sup>889</sup> Shigeru Oda, ‘Fisheries under the United Nations Convention on the Law of the Sea’, in *The American Journal of International Law*, Vol. 77, No. 4 (Oct., 1983), pp. 739-755, at p. 745.

<sup>890</sup> Report of the International Committee on the EEZ: Principles applicable to living resources occurring both within and without the Exclusive Economic Zone or in zones of overlapping claims, by Dr. Rainer Lagoni, 1992.

<sup>891</sup> David Anderson, ‘The Straddling Stocks Agreement of 1995’, in *Modern Law of the Sea*, pp. 361-377, at p. 366, 2008.

<sup>892</sup> *Supra* note 890, at p. 14.

<sup>893</sup> *Supra* note 66, art. 116 (b).

<sup>894</sup> *Supra* note 892



option would be to enlarge the EEZ even further.<sup>895</sup> This is what Iceland did three times and was not declared illegal by the ICJ.<sup>896</sup> Anyway, Lagoni excludes the use of such tools, since the 200 nm of the EEZ has become a fundamental principle of UNCLOS.<sup>897</sup> Another possibility would consist of shifting the honor of the test so that the fishing State proves that its trawlers do not harm the fishing interests of the coastal State.<sup>898</sup> This will require an extensive and more liberal interpretation of UNCLOS and Lagoni doubts the success.<sup>899</sup> This approach can be challenged from two points of view. First of all, a suspension or termination of the right to harvest in such a situation could not be reconciled with UNCLOS and another duty to negotiate on the question of whether or not the interests of the coastal State are harmed would not lead further.<sup>900</sup> Secondly, demonstrating that the interests of the coastal State are not affected would be not feasible for fishing States because the effects would occur in the EEZ. To incur in the obligation to prove anything that is in the domain of other States would be contrary to the general principles of law.<sup>901</sup>

The third option would be to allow coastal States to extend their management regime to the high seas if they can reasonably demonstrate that this will improve the conservation of stocks in the EEZ.<sup>902</sup> If article 116 UNCLOS were to be too effective, it could require to be interpreted as authorising the coastal State to guarantee its superior right by prescribing conservation measures with which States engaged in fishing on the high seas undertake to comply.<sup>903</sup> What seems to be conveyed is that if a coastal State fails to reach an agreement with a flag State (a State employing deep-sea trawlers) whose

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<sup>895</sup> Francisco Orrego Vicuña, 'The International Law of High Seas Fisheries: From Freedom of Fishing to Sustainable Use', in *Governing High Seas Fisheries: the interplay of global and regional regimes*, pp. 22-52, at p. 31, 2001.

<sup>896</sup> Stefan B. Gunnlaugsson and Hordur Saevaldsson, 'The Icelandic fishing industry: Its development and financial performance under a uniform individual quota system', in *Marine Policy*, Volume 71, September 2016, pp. 73-81, at p. 75.

<sup>897</sup> *Supra* note 892, at p. 17.

<sup>898</sup> Valentin J. Schatz, 'Combating Illegal Fishing in the Exclusive Economic Zone – Flag State Obligations in the Context of the Primary Responsibility of the Coastal State', in *Goettingen Journal of International Law* 7 (2016) 2, pp. 383-414, at p. 393.

<sup>899</sup> *Supra* note 892, at p. 16.

<sup>900</sup> Nut Sillwatwinyoo, 'Zonal Versus Functional Approach in the New Law of the Sea', Master's thesis in Maritime Law, Faculty of Law – Lund University, Spring 2012, at p. 47.

<sup>901</sup> William T. Burke, 'Fishing in the Bering Sea Donut: Straddling Stocks and the New International Law of Fisheries', in *Ecology Law Quarterly*, Vol. 16, No. 1 (1989), pp. 285-310, at p. 294.

<sup>902</sup> Edward L Miles, 'Towards more effective management of high seas fisheries', in *Asian Yearbook of International Law*, Vol. 3, p. 111-127, at p. 119, 1993.

<sup>903</sup> *Supra* note 897.

vessels catch straddling fish stocks, it can simply claim the right to manage the stock, regardless of the views of the flag State.<sup>904</sup> His only means of enforcing the law would be to catch the offender and tow him to port or punish the owner of the flag State ship in some other way.<sup>905</sup> However, a coastal State acting in this way could be forced to make its case to the ICJ risking its management regime being invalidated by the ICJ.<sup>906</sup>

In the Barents Sea Loophole dispute, Norway made an attempt to threaten Iceland with a variant of this option. In the negotiations for accession to the EU, Norway gained a statement that the EU supported its high seas fisheries management efforts in the Barents Sea.<sup>907</sup> The Contracting Parties recognize the special interests of Norway as a coastal State in waters north of 62 degrees N and of all interested Parties shall be taken into account in the future management of the same waters in accordance with rules of the Common Fisheries Policy.<sup>908</sup> If this declaration is interpreted to mean that it does not only cover Norwegian waters (other parts of the declaration refer to the Barents Sea and all stocks in these waters without reference to the Norwegian EEZ) then the EU has given a strong impetus to a coastal State's request to regulate the waters adjacent to its EEZ.<sup>909</sup> The rejection of the accession agreement by Norwegian voters does not change the fact that the EU has through the agreements publicly confirmed the idea that coastal States have special interests in the adjacent areas of the high seas.<sup>910</sup>

It should be observed that under the EU Common Fisheries Policy, the TAC in the Loophole would have been set by the EU fisheries ministers attributing the other EU member States remarkable influence on how stocks in the disputed area are exploited.<sup>911</sup> However, with regard to the legal issue, Norway seems to have taken a step towards

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<sup>904</sup> Jessica K. Ferrell, 'Controlling flags of convenience: one measure to stop overfishing of collapsing fish stocks', in *Environmental Law*, Vol. 35, No. 2 (Spring 2005), pp. 323-390, at p. 366.

<sup>905</sup> Arron N. Honniball, 'The Exclusive Jurisdiction of Flag States: A Limitation on Pro-active Port States?', in *The International Journal of Marine and Coastal Law* 31 (2016), pp. 499-530, at p. 502.

<sup>906</sup> Alexander Lott, 'Use of Force against Sovereign Immune Vessels', in *Hybrid Threats and the Law of the Sea*, 2022, pp. 93-116, at p. 95.

<sup>907</sup> Bettina Rudloff, 'The EU as fishing actor in the Arctic: stocktaking of institutional involvement and existing conflicts', Working Paper – Research Division EU External Relations, July 2010, p. 21.

<sup>908</sup> Official Journal of the European Communities C241 Volume 37, 29 August 1994, Chapter III, Joint Declarations, Item 10.

<sup>909</sup> Peter Gullestad, Svein Sundby and Olav Sigurd Kjesbu, 'Management of transboundary and straddling fish stocks in the Northeast Atlantic in view of climate-induced shifts in spatial distribution', in *Fish and Fisheries*, Volume 21, Issue 5, September 2020, pp. 1008-1026, at p. 1015.

<sup>910</sup> Dolliver Nelson, 'The Development of the Legal Regime of High Seas Fisheries', in *International Law and Sustainable Development: Past achievements and future challenges*, 1999, pp. 112-134, at p. 115.

<sup>911</sup> Shuo Li, 'Incorporation of Fisheries Policy into Regional Blocs? — Lessons from the EU's Common Fisheries Policy', in *Fishes*, 2022, 7(3), 102, at p. 6.

acquiring the right to manage the entire Barents Sea (jointly with Russia, the other coastal State in the area).<sup>912</sup> This thesis was reinforced when the EU agreed to mention irregular fishing in the agreed minutes of a negotiating session in Brussels. The minutes were not published but the Norwegian negotiators showed the result as a strengthening of their position in the Loophole dispute.<sup>913</sup> There is also an agreement that Norway and the EU shall cooperate on how to prevent irregular fishing of Loophole stocks and Norway and the EU also agree to work to prevent the landing of such catches in EU ports.<sup>914</sup> Thus, the EU has pledged to intensify the possible regulation of Norwegian management in the Loophole by closing European markets to vessels that did not comply with Norwegian rules.<sup>915</sup>

It is an incontrovertible rule that allows freedom of fishing on the high seas outside the national jurisdiction. This rule is confirmed by article 87 and 116 UNCLOS.<sup>916</sup> While taking this freedom into account, it must be considered that the measures are taken by the fishing country or in cooperation with other States that may be necessary to protect the living resources of the ocean. The Icelandic authorities therefore have a legal duty to ensure that Icelandic vessels do not recklessly catch fish in the Loophole and comply with the same fishery protection rules as they apply when harvesting in Icelandic waters.<sup>917</sup>

Apart from the Loophole case, there are examples where coastal States have experienced their management regimes for straddling fish stocks recognized. The Northwest Atlantic Fisheries Convention gives Canada special consideration in the Flemish Cap zone, off the Canadian EEZ.<sup>918</sup> Moreover, South Korea has concluded a fisheries agreement with New Zealand where it agrees to conform to New Zealand's EEZ

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<sup>912</sup> Supra note 850, at p. 257.

<sup>913</sup> Supra note 842, at p. 566.

<sup>914</sup> Norwegian press statement quoting last-minute agreements reached in the early hours of 16 March, 1994, on Norwegian accession to the European Union.

<sup>915</sup> Christian Neubacher, Jesse Silva, and Pierre-Jean Thil, 'Norwegian Exceptionalism: How the European Union can use Norway to further European Integration', in *European Horizons*, The University of Chicago, 2018, available at <https://voices.uchicago.edu/euchicago/norwegian-exceptionalism-how-the-european-union-can-use-norway-to-further-european-integration/>

<sup>916</sup> Supra note 66, art. 87 and 116.

<sup>917</sup> The Icelandic Directorate of Fisheries – Responsibilities and main tasks, available at [https://assets.ctfassets.net/8k0h54kbe6bj/6Ldx8kbEJSkqrzSgFSczms/82e79973fd525595bd68bdebffa-ca398/The\\_Directorate\\_of\\_Fisheries\\_-\\_Brochure\\_in\\_English.pdf](https://assets.ctfassets.net/8k0h54kbe6bj/6Ldx8kbEJSkqrzSgFSczms/82e79973fd525595bd68bdebffa-ca398/The_Directorate_of_Fisheries_-_Brochure_in_English.pdf)

<sup>918</sup> Mariano Koen-Alonso, Pierre Pepin et al., 'The Northwest Atlantic Fisheries Organization Roadmap for the development and implementation of an Ecosystem Approach to Fisheries: structure, state of development, and challenges', in *Marine Policy*, Volume 100, February 2019, pp. 342-352, at p. 347.

regulations in a given high seas area.<sup>919</sup> But the fact that all attempts by coastal States to introduce stronger references to the rights of coastal States in UNCLOS were rejected opposes any interpretation in favour of those rights.<sup>920</sup> The only explicit duty that a flag State has on the high seas is to have due regard to the interests of the coastal State but this can hardly force it to submit to the management decisions of the coastal State.<sup>921</sup>

There is a duty to negotiate in good faith, but if such negotiations are unsuccessful, UNCLOS seems to suggest only that the flag State should behave reasonably and without recklessness, with regard to the survival of the stock in question.<sup>922</sup> Dr. Lagoni in his report to the Cairo Conference, stands by the idea that UNCLOS has so far created only limited customary international law regarding the issue of straddling stocks. He argues that there is no indication in the practice so far adopted by States regarding the exercise or recognition of a right or jurisdiction of the coastal State to resort to unilateral measures the adjacent area, if negotiations on straddling stocks remain vain.<sup>923</sup> UNCLOS provides very little guidance on how States should split available fish resources.

#### 4.2 The Trilateral Barents Sea Loophole Agreement

In 1999, four years later all States involved in the Loophole fishing dispute had signed UNFSA, a regional agreement was concluded: the so-called Barents Sea Loophole Agreement.<sup>924</sup> The terms of the agreement are similar to those previously concluded bilaterally between Norway, Greenland and the Faroe Islands. In exchange for cod quotas in the EEZs of the Barents Sea coastal States, Iceland must refrain from fishing for cod or from pursuing new fishing rights for the same stock outside the coastal areas. Iceland must also open its national waters to vessels from Norway and Russia.<sup>925</sup> Other provisions

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<sup>919</sup> *Supra* note 897.

<sup>920</sup> *Supra* note 905, at p. 511.

<sup>921</sup> Louis B. Sohn, 'Freedom of the High Seas', in *Cases and Materials on the Law of the Sea*, Second Edition, 2014, pp. 46-110, at p. 52.

<sup>922</sup> 'General Provisions', *United Nations Convention on the Law of the Sea: A Commentary*, ed. Alexander Proelss. München: Nomos Verlagsgesellschaft, 2017, pp. 1937-1967, at p. 1941, Bloomsbury Collections.

<sup>923</sup> *Supra* note 890, at p. 21.

<sup>924</sup> Agreement between the Government of Iceland, the Government of Norway and the Government of the Russian Federation concerning Certain Aspects of Co-operation in the Area of Fisheries, with Protocols; reproduced in *International Journal of Marine and Coastal Law*, Vol.14 (1999), 484.

<sup>925</sup> *Ibid.*, Article 4 in conjunction with Articles 2 and 3. An important implication of this is that Iceland may not require fishing rights in the Svalbard zone, which it has in the past.

of the Agreement are intended to discourage its nationals from employing vessels flying flags of convenience in the Barents Sea, to prohibit the landing of catches made without quota and pursuant to other obligations under international law, to deny access to the port to vessels carrying out such activities.<sup>926</sup>

The agreement resulted in Icelandic ships being removed from the blacklist of ships banned from the Norwegian EEZ.<sup>927</sup> The sharp decline in Loophole fishing in the years before the signing of the agreement provides for a stable Icelandic quota of just under 2% of the TAC.<sup>928</sup> The fishery industry in both Iceland and the coastal States have been very critical of this trilateral agreement.<sup>929</sup> The president of the Federation of Icelandic vessel owners argued that the quota was merely too restricted, while the chairman of the Norwegian Fishermen's Association stated that he was almost astonished by the results obtained by the Icelanders in the negotiations.<sup>930</sup>

#### **4.2.1 Regulatory tools**

UNFSA plays a significant role in this matter as its provisions considerably buttresses the duty of States fishing on the high seas in defining conservation and management measures for straddling fish stocks. At a broader level, the framework of this obligation is enshrined in UNCLOS.<sup>931</sup> UNFSA just reinforces this obligation by establishing that where a regional management regime has the consequence to regulate the harvesting of straddling fish stocks, only States that adhere to the acknowledged conservation and management regime or measures may undertake fishing activities.<sup>932</sup> However, the application of the provisions to the situation in the Loophole proved to be the subject of the dispute.

While the coastal States argue that the Joint Norwegian – Russian Fisheries Commission (JNRFC) with its quota apportionment role is the suitable mechanism to ensure this cooperation, Iceland considered that other countries different from coastal

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<sup>926</sup> *Ibid.*, Articles 6 and 7.

<sup>927</sup> Olav Schram Stokke, 'The Loophole of the Barents Sea Fisheries Regime', in *Governing High Seas Fisheries: the interplay of global and regional regimes*, 2001, pp. 273-301, at p. 282.

<sup>928</sup> Daily News of Iceland, 22 October 1998.

<sup>929</sup> Kristján Ragnarsson in Daily News of Iceland, 14 April 1999.

<sup>930</sup> Oddmund Bye in Aftenposten, 14 April 1999.

<sup>931</sup> *Supra* note 66, art. 63 and 116-120.

<sup>932</sup> *Supra* note 94, art. 8(4).

States have the right to be included in the decision-making process regarding the amount and the allocation of the catches in the Loophole.<sup>933</sup> UNFSA provides that the terms for participation in a regional management scheme should not preclude States with a real interest in the fisheries in question.<sup>934</sup> The resulting openness to new participants symbolised one of the victories achieved by distant water fishing countries during the Fish Stocks Conference.<sup>935</sup>

It would be a mere simplification to assert, as many authors do, that it follows from the UNFSA stipulation that, after cod became abundant in the Loophole, the JNRFC was no longer the competent body for the management of this stock and that regulatory decisions should be transferred to the NEAFC.<sup>936</sup> First of all, it was overriding for the Norwegian delegation at the Conference that UNFSA indicated that cooperation should be pursued either directly or through appropriate regional or sub-regional fisheries management organisations or agreements.<sup>937</sup> The bilateral Loophole regime, with its JNRFC and a set of external agreements with other user States in the Loophole, is clearly such an agreement.<sup>938</sup> Together, these components of the management system provide a decision-making mechanism (the Bilateral Fisheries Commission) that produces comprehensive regulatory measures that cover the entire migratory route of the stock, including the high seas and are recognized by third Parties through confirmed annual agreements.<sup>939</sup>

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<sup>933</sup> Supra note 837, at p. 251.

<sup>934</sup> Supra note 94, art. 8(3). Moreover, Article 8(1) obliges states, pending establishment of such an arrangement, to act in good faith and with due regard to the rights and interests of other States.

<sup>935</sup> The term “openness” refers to participation in decision making and not to access to the resources. The degree of openness required by the Fish Stocks Agreement, defined by what constitutes a “real interest,” is debatable. See A. Tahindro, ‘Conservation and Management of Transboundary Fish Stocks: Comments in Light of the Adoption of the 1995 Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks’, in *Ocean Development and International Law*, Vol. 28 (1997), 1, at p. 20.

<sup>936</sup> P. Örebech, K. Sigurjonsson, and T. L. McDorman, ‘The 1995 United Nations Straddling and Highly Migratory Fish Stocks Agreement: Management, Enforcement and Dispute Settlement’, in *International Journal of Marine and Coastal Law*, Vol. 13 (1998), 119, at p. 124.

<sup>937</sup> Supra note 94, art. 8(1).

<sup>938</sup> R. R. Churchill finds the claim that the Barents regime is an arrangement debatable. See R. R. Churchill, ‘The Barents Sea Loophole Agreement—A ‘Coastal State’ Solution to a Straddling Stock Problem’, in *International Journal of Marine and Coastal Law*, Vol. 14 (1999), 467, at note 26.

<sup>939</sup> After the adoption of the Agreement, Norway’s Minister of Fisheries went further than the view submitted here by holding that the Norwegian-Russian Fisheries Commission itself is an arrangement as defined by Article 1 of the Fish Stocks Agreement. See J. H. T. Olsen, ‘Fiske på det åpne hav’, in *Fiskeribladet*, 21 September 1995, 6.

Subsequently, an assessment of the relative appropriateness of this agreement and of a wider decision-making system would require special attention to the question of which regime would provide the most effective means to achieve the broader objectives of UNFSA.<sup>940</sup> In practical terms, this question can be answered by investigating the strength of the current bilateral regime and the NEAFC one in fulfilling the three management tasks: science, regulation and compliance control. The centrality of ICES in both regimes suggests that the level of scientific problem solving would be more or less similar.<sup>941</sup> The regulatory tasks would be naturally more complicated if placed within the framework of the NEAFC, due to the participation of a larger number of States and the fact that binding recommendations would require a two-thirds majority.<sup>942</sup> The performance of the NEAFC in overcoming these difficulties in the case of redfish management, the only straddling fish stock managed mostly by the organization is not encouraging.<sup>943</sup>

Only in 1996 did the Commission approve quantitative restrictions for this species, despite the pressure on harvesting markedly higher than that recommended by ICES in the previous five years. Moreover, when the NEAFC finally reached an agreement on quantitative restrictions, the TAC was set at a higher level than at any previous annual catch.<sup>944</sup> In addition, States that do not approve the recommendations may submit an objection and thus avoid being bound by it.<sup>945</sup> On the other hand, expanding participation in decision-making would be a way to welcome newcomers in a less confrontational and problematic way than what happened in the case of the Loophole during 1990s.

In terms of enforcement on the high seas, the NEAFC has recently set forth a Scheme of Control and Enforcement that reflects the relevant provisions of UNFSA, as well as a programme to promote compliance by non-members.<sup>946</sup> Port State measures, in particular the ban on landings of fish caught without fixing quotas, were used within the

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<sup>940</sup> Lidvard Grønnevet, 'The joint Russian–Norwegian governance of the Barents Sea LME fisheries', in *Environmental Development*, Volume 17, Supplement 1, January 2016, pp. 296-309, at p. 301.

<sup>941</sup> Andreas Østhagen, 'High North, Low Politics—Maritime Cooperation with Russia in the Arctic', in *Arctic Review on Law and Politics*, Vol. 7, No. 1 (2016), pp. 83-100, at p. 92.

<sup>942</sup> NEAFC Convention, Articles 5 and 12, in conjunction with Article 2.

<sup>943</sup> *Supra* note 940, at p. 303.

<sup>944</sup> ICES Cooperative Research Report, 221, Part 1, (1997), 50-1.

<sup>945</sup> NEAFC Convention, Article 12(2).

<sup>946</sup> R. R. Churchill, 'Managing Straddling Fish Stocks in the North-East Atlantic: A Multiplicity of Instruments and Regime Linkages—But How Effective a Management?', in *Governing High Seas Fisheries: the interplay of global and regional regimes*, pp. 234–272, at p. 235, Oxford University Press, 2001.

framework of the bilateral Barents Sea regime, as well as the blacklisting of fishing vessels with a past of unregulated fishing.<sup>947</sup> The main approach was to direct ships of non-coastal States to national waters where the full range of coastal State measures, including inspection, detention and legal proceedings is allowed.<sup>948</sup> Although the latter approach is quite well established, it only works as long as access to national zones is more convenient for the exploitation of resources on the high seas.<sup>949</sup>

To sum up, there is nothing from which it can be inferred that the NEAFC would have been able to deal more readily with the management of cod on the high seas in the Loophole than the agreement focused on the JNRFC.<sup>950</sup> Regulation would probably have been complicated by a larger number of participants, many of whom do not engage in the Barents Sea cod fishing.<sup>951</sup> Although the NEAFC implementation programme provides for inspection and detention on the high seas, these provisions were not in force before fishing in the Loophole was held back by the decrease in fish availability and the inclusion of Iceland in the Barents Sea regime.<sup>952</sup>

Two factors will determine the success of this finding: firstly, the share of catchable stocks on the high seas and secondly the number of States unprepared to accept the primacy of coastal States inherent in the bilateral regime.<sup>953</sup> Currently, both of these circumstances are favourable to the current condition. Overall, UNFSA's regulatory influence on the operational side of the Barents Sea fishing regime has been to augment pressure on all user States to strive to find cooperative solutions in conservation and management.<sup>954</sup> Over time, Iceland's amount of catches in the region made it increasingly difficult for coastal States to argue that Iceland did not have a legitimate place at the

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<sup>947</sup> Olav Schram Stokke, 'Trade Measures and the Combat of IUU Fishing: Institutional Interplay and Effective Governance in the Northeast Atlantic', in *Marine policy: the International Journal for economics planning and politics of ocean exploitation*, Vol. 33, No. 2, p. 339-349, 2009.

<sup>948</sup> Cedric Ryngaert and Henrik Ringbom, 'Introduction: Port State Jurisdiction: Challenges and Potential', in *The International Journal of Marine and Coastal Law*, September 2016.

<sup>949</sup> *Ibid.*

<sup>950</sup> *Supra* note 856, at p. 479-480.

<sup>951</sup> Geir Hønneland, 'Co-Management and Communities in the Barents Sea Fisheries', in *Human Organization*, Vol. 58, No. 4 (Winter 1999), pp. 397-404.

<sup>952</sup> Rosemary Rayfuse, 'Non-Flag State Enforcement in High Seas Fisheries', in *Publications on Ocean Development*, Volume 46, 2004, at p. 212.

<sup>953</sup> *Supra* note 837, at p. 252.

<sup>954</sup> Gordon R. Munro, 'Internationally Shared Fish Stocks, the High Seas, and Property Rights in Fisheries', in *Marine Resource Economics*, Vol. 22, No. 4 (2007), pp. 425-443, at p. 434.



negotiation table on the management of the Loophole.<sup>955</sup> At the same time, the operational requirements laid down by UNFSA are broad enough to embrace the bilateral agreement of the current Barents Sea fishing regime, provided that the regime offers openness to States with a real interest in regional fishing.<sup>956</sup>

#### 4.2.2 Management framework

The ordinary regulatory task of fisheries management schemes is twofold: the measures must ensure the long-term conservation of stocks and allocate the benefits from the resource in an agreed manner.<sup>957</sup> As regards the first characteristic, an important element of UNFSA is that of compatibility between conservation and management measures adopted for areas under national jurisdiction and for high seas areas adjacent to those areas.<sup>958</sup> In the case of the Barents Sea, it was decisive for the coastal States that compatibility was defined so as not to derogate from their sovereign rights in national waters.<sup>959</sup>

Three provisions are particularly central in this case: the obligation to cooperate with other user States in the management of straddling fish stocks concerns only the high seas area; States must ensure that measures on the high seas do not compromise the effectiveness of conservation and management within the EEZ, while there is no corresponding obligation for measures in the EEZ. In addition, the mandatory dispute resolution procedures provided for in the Convention do not apply to coastal States' measures taken within the EEZ.<sup>960</sup> Another important element of UNFSA is the detailed elaboration of the precautionary approach, namely that preventive measures must be

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<sup>955</sup> Frank Alcock, 'Bargaining, Uncertainty, and Property Rights in Fisheries', in *World Politics*, Vol. 54, No. 4 (Jul., 2002), pp. 437-461, at p. 452.

<sup>956</sup> Jennifer Jeffers, 'Climate Change and the Arctic: Adapting to Changes in Fisheries Stocks and Governance Regimes', in *Ecology Law Quarterly*, Vol. 37, No. 3 (2010), pp. 917-977, at p. 970.

<sup>957</sup> Megan Bailey, Gakushi Ishimura et al., 'Moving beyond catch in allocation approaches for internationally shared fish stocks', in *Marine Policy*, Volume 40, July 2013, pp. 124-136, at p. 128.

<sup>958</sup> *Supra* note 94, art. 7.

<sup>959</sup> *Supra* note 94, art. 7(1) in conjunction with article 61 UNCLOS. On the significance of this matter for Norway's acceptance of the Fish Stocks Agreement, see Recommendation of a Standing Committee of the Storting, Norway, Innst. 29 (1995-1996), Annex I.

<sup>960</sup> See respectively UNFSA 7(1)(a), 7(2) and 32. Furthermore, see A. E. Boyle, 'Problems of Compulsory Jurisdiction and the Settlement of Disputes Relating to Straddling Fish Stocks', in *The International Journal of Marine and Coastal Law*, Vol. 14, No. 1, 1999, pp. 1-25, at p. 7.

taken when there are threats of serious and irreversible damage, even in the absence of full scientific certainty.<sup>961</sup>

In the past, scientific uncertainty has often been employed as a reason for postponing or not taking conservation measures.<sup>962</sup> Although the Russian-Norwegian agreements that represent the core of the Barents Sea regime make no explicit mention of a precautionary approach, the concept had made its way into regional management practice well before the conclusion of UNFSA.<sup>963</sup> For much of the 1990s, the JNRFC has tended to opt for quota levels close to the lower limit of the ranges recommended by the ICES.<sup>964</sup> Iceland was careful to point out that its own fishing behaviour in the region was responsible for this. When the ICES advisory body recommended drastic reductions in the Barents Sea cod quotas in 1997, Iceland's Minister of Fisheries stated that Iceland would consider a reduction in harvesting in the area and that Iceland had always been ready to accept the general conditions of the fish stocks under consideration.<sup>965</sup> This does not mean that the elaboration of the precautionary approach in UNFSA had no impact on regional management practices.<sup>966</sup>

In response to the agreement, ICES set up a study group on the precautionary approach to fisheries management and in 1997 a report was published setting out the implications of this approach for the technical and advisory work of ICES.<sup>967</sup> The subsequent year, this procedure was implemented in the cod recommendation offering a greater safety margin than in previous years.<sup>968</sup> Despite this trend, the state of health of the cod stock has worsened in recent years.<sup>969</sup> The precautionary approach is part of a broader set of responsible fishing principles that includes science-based decisions,

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<sup>961</sup> *Supra* note 94, art. 6 and Annex II.

<sup>962</sup> ICES Cooperative Research Report, Vol. 229, Part 1 (1999), pp. 27–32.

<sup>963</sup> Geir Hønneland, 'Norway and Russia: Bargaining Precautionary Fisheries Management in the Barents Sea', in *Arctic Review on Law and Politics*, vol. 5, 1/2014 pp. 75–99, at p. 86.

<sup>964</sup> O. S. Stokke, L. G. Anderson, and N. Mirovitskaya, 'The Barents Sea Fisheries', in O. R. Young (ed.), *The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms* (Cambridge, MA: MIT Press, 1999), pp. 91–154, at p. 98.

<sup>965</sup> *Daily News of Iceland*, 5 November 1997.

<sup>966</sup> Mervin Ogawa and Joseph Anthony L. Reyes, 'Assessment of Regional Fisheries Management Organizations Efforts toward the Precautionary Approach and Science-Based Stock Management and Compliance Measures', in *Sustainability* 2021, 13(15), 8128.

<sup>967</sup> G. L. Lugten, 'A Review of Measures Taken by Regional Marine Fishery Bodies to Address Contemporary Fishery Issues', *FAO Fisheries Circular*, 940 (1998), 85.

<sup>968</sup> ICES Cooperative Research Report, 229, Part 1 (1999), 27.

<sup>969</sup> In 2000, the agreed-upon cod quota was 390,000 metric tonnes, down from 850,000 tonnes in 1997; *St. meld. 11* (1997–1998), Sec. 1 and *St. meld. 44* (1999–2000), Sec. 1.

biodiversity protection and ecosystem awareness.<sup>970</sup> Like compatibility and precaution, these general principles are applicable not only on the high seas but also within national zones.<sup>971</sup>

### 4.2.3 Quota allocation system

On the other hand, the issue of quota allocation tends to be a very controversial aspect of fisheries management and the Loophole dispute is no exception in this regard. While in 1995 the coastal States bowed to the Icelandic quota principle, the three Parties (Iceland, Russia and Norway) had to face four years of intermittent negotiations before an agreement could be reached on the appropriate proportion of the quota.<sup>972</sup> Among the main assets owned by coastal States was access to their EEZs, and as catches in the Loophole decreased, the value of those assets grew.<sup>973</sup> The most relevant part of UNFSA in this context is article 11, which sets out the criteria to be taken into account when States determine the scope of participation rights for newcomers to a fishery.<sup>974</sup>

Probably, there is a fairly good correspondence between some of these criteria and the coastal State thesis that the stock is already fully exploited and belongs to States that have historical claims to the area, manage the stock throughout its migration area and govern the principal part of the migration area of the stock.<sup>975</sup> UNFSA remarks the status of straddling fish stocks and the existing level of fishing effort, as well as the respective interests, fishing patterns and fishing practices of new and existing members or participants.<sup>976</sup>

Furthermore, article 7 UNFSA obliges States to negotiate measures on the high seas that are compatible with those of coastal States to take into account not only the biological

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<sup>970</sup> Supra note 94, art. 5.

<sup>971</sup> Ibid., art. 3.

<sup>972</sup> Matthias Kokorsch and Karl Benediktsson, 'Prosper or perish? The development of Icelandic fishing villages after the privatisation of fishing rights', in *Maritime Studies* (2018) 17, pp. 69-83, at p. 75.

<sup>973</sup> Supra note 955, at p. 459.

<sup>974</sup> Bianca Haas, Kamal Azmi and Quentin Hanich, 'The unintended consequences of exemptions in conservation and management measures for fisheries management', in *Ocean & Coastal Management*, Volume 237, April 2023,

<sup>975</sup> The latter zonal attachment criterion has been used explicitly in the trilateral agreement between Iceland, Norway, and Greenland regarding sharing of the joint capelin stock in the Norwegian Sea and between Norway and the European Community regarding the North Sea Herring. S. Engesæter, 'Scientific Input to International Fishery Agreements', *International Challenges*, Vol. 13 (1993), 85.

<sup>976</sup> Supra note 94, art. 11(a)(b).

unity and other biological characteristics of stocks, including the extent to which stocks are present and are fished in areas subject to national jurisdiction, but also their dependence on the stock in question.<sup>977</sup> On the other hand, the criterion underlining the needs of coastal fishing communities that depend primarily on the stock catching could play a pivotal role in the Loophole dispute.<sup>978</sup> Article 11(e) requiring negotiators to take into account the needs of coastal States whose economies depend to a large extent on the exploitation of living marine resources is the final version of a proposal that would have favoured Iceland in the Loophole controversy had it not been modified by the inclusion of the word “coastal”.<sup>979</sup> By providing a list of six criteria without explicitly prioritizing between them, article 11 is too vague to provide more than general guidance in allocation discussions, so UNFSA has had little impact on Loophole cod distributive negotiations.<sup>980</sup>

#### 4.2.4 Fisheries compliance control

Another central duty of regional fisheries management is to ensure compliance with conservation measures in the Barents Sea. In this context, the development of port State measures and the rules for inspection and detention on the high seas by the non-flag State are relevant.<sup>981</sup> UNFSA’s port State measures were strongly supported by Norway. These include the right to inspect ships that are voluntarily in port, and if violations are detected, to prohibit disembarkation and transshipment.<sup>982</sup> In 1994, Norway had banned the landing of unregulated Loophole harvests, a measure that highlights an interesting type of interaction between international resource management regimes and those that target liberal trade practices among States.<sup>983</sup> It has been argued that Port State provisions foreseen by UNFSA could conflict with the General Agreement on Tariffs and Trade rules

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<sup>977</sup> Ibid., art. 7(2)I and 2(d).

<sup>978</sup> Ibid., art. 11(d).

<sup>979</sup> Ibid., art. 11I.

<sup>980</sup> Ibid.

<sup>981</sup> Food and Agriculture Organization, Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993), Article V(2); reprinted in International Legal Materials, Vol.33 (1994), 368.

<sup>982</sup> Supra note 94, art. 23.

<sup>983</sup> Freedom to Provide Services, ‘EFTA Surveillance Authority: Annual Report 1998, <http://www.efta.int/structure/SURV/efsa-srv.cfm>. Article 5 of Protocol 9 to the EEA Agreement provides for access to ports and associated facilities but an exemption is made for landings of fish from stocks the management of which is subject to severe disagreement among the parties.

and in the context of the Barents Sea, the regional regime based on the Agreement on the European Economic Area (EEA) could also be pertinent.<sup>984</sup>

Both globally and regionally, trade agreements generally require restrictive measures to be applied in a non-discriminatory manner.<sup>985</sup> As long as this condition is met, UNFSA appears to provide regulatory confirmation to measures taken by the Port State in the region since UNFSA Parties have explicitly accepted landing bans whenever port State inspections have determined that catches have been taken in a way that undermines the effectiveness of subregional, regional or global conservation and management measures on the high seas.<sup>986</sup> In terms of inspection and detention, UNFSA significantly modifies the traditional regime of compliance on the high seas under international law, focused on enforcement by the flag State.<sup>987</sup> The Agreement reinforces the responsibility of the flag State to monitor and enforce conservation and measures.<sup>988</sup> In addition, the agreement provides for procedures for the involvement of non-flag States in enforcement activities.

The regional enforcement system provided for in the Agreement includes mutual inspection rights on the high seas and, in cases where the flag State cannot or does not want to act, in the event of serious violations, the right to bring the vessel to port is envisaged.<sup>989</sup> So far, these provisions have not been incorporated into the agreements Norway and Russia have entered into with non-coastal user States to manage Loophole fishing.<sup>990</sup> On the other hand, other user States are largely obliged to catch within the EEZs. This solution could become unstable if the share of fishable stock on the high seas were to increase importantly, as was the case in the early 1990s.<sup>991</sup> A continuation of large-

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<sup>984</sup> General Agreement on Tariffs and Trade (1947), 55 as updated by the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Agreements, reprinted in *International Legal Materials*, Vol. 33 (1994), 1125.

<sup>985</sup> Shintaro Hamanaka, Aiken Tafgar, and Dorothea Lazaro, 'Trade Facilitation Measures Under Free Trade Agreements: Are They Discriminatory Against Non-Members?', ADB Working Paper Series on Regional Economic Integration – No. 55, July 2010, p. 5.

<sup>986</sup> *Supra* note 94, art. 23(2).

<sup>987</sup> *Ibid.*, art. 20.

<sup>988</sup> M. Hayashi, "Enforcement by Non-Flag States on the High Seas Under the 1995 Agreement on Straddling and Highly Migratory Fish Stocks," *Georgetown International Environmental Law Review*, Vol. 9 (1996), 1, at pp. 15-26.

<sup>989</sup> *Supra* note 94, art. 20-22.

<sup>990</sup> *Supra* note 988.

<sup>991</sup> B. Vukas and D. Vidas, 'Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework', in *Governing high seas fisheries; the interplay of global and regional regimes*, 2001, at p. 53.

scale unregulated fishing in the Loophole would require elaboration of procedures for catch and inspection on the high seas under the bilateral regime or implementation of the existing NEAFC Scheme of Control and Enforcement. This last alternative would convey that the NEAFC would also be more involved in the regulatory process and both options would rely on UNFSA's implementing provisions to a large extent.<sup>992</sup>

To conclude, if the bilateral regime were to be challenged again by overfishing on the high seas, UNFSA would provide a broader and more powerful set of compliance mechanisms than has been available so far. Regional measures of Port States, such as the prohibition of landings of catches made in violation of international regulations, are validated by the agreement and the legal and politic ground for the development of an invasive control system involving the action of non-flag States is much stronger than it was in the past before the adoption of the agreement.<sup>993</sup>

### **4.3 A matter of interpretation? The Svalbard Fisheries Protection Zone and the divergent interpretations of the 1920 Spitsbergen Treaty**

Another long-running issue in the Barents Sea is represented by the disputed scope of the Svalbard treaty and the Norwegian sovereignty over that territory.<sup>994</sup> The Svalbard archipelago holds a crucial position in the Arctic region for the innumerable fish resources that attract many States. In 1920, the Treaty of Svalbard was signed and it granted sovereignty to Norway.<sup>995</sup> As Svalbard waters proliferate with fish resources, in 1977 Norway issued the Ordinance on the Protected Fishing Area of Svalbard to establish a 200 nautical mile non-discriminatory fisheries protection zone in Svalbard and to assume responsibility for managing fisheries activities in the SFPZ.<sup>996</sup> Meanwhile a major legal dispute arose: the snow crab case that involved Norway, Latvia and the EU.

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<sup>992</sup> While the scope of the NEAFC Scheme of Control and Enforcement is 'all fishing vessels' engaged in harvesting of 'all fishery resources of the Convention area' except sea mammals, sedentary species, and highly migratory species (Scheme, Articles 1–2 in conjunction with NEAFC Convention, Article 1(2)), NEAFC inspectors are authorized to board and inspect vessels only to the extent that this is deemed 'necessary to verify compliance with the measures established by NEAFC'.

<sup>993</sup> Supra note 836, at p. 215-221.

<sup>994</sup> Øystein Jensen, 'The Svalbard Treaty and Norwegian sovereignty', in *Arctic Review on Law and Politics*, Vol. 11, 2020, pp. 82-107.

<sup>995</sup> The Svalbard Treaty. Available online: [http://library.arcticportal.org/1909/1/The\\_Svalbard\\_Treaty\\_9ssFy.pdf](http://library.arcticportal.org/1909/1/The_Svalbard_Treaty_9ssFy.pdf)

<sup>996</sup> Tore Henriksen, Norwegian by-catch regulations alleged to violate the Svalbard Treaty, *The NCLOS Blog*, 18-03-2014.

In January 2017, the Latvian flagged fishing vessel fishing for snow crab in the waters around the Svalbard was arrested by the Norwegian Coast Guard for "illegal fishing" because it lacked a permit issued by the Norwegian government. The dispute in the snow crab case focused on access to fishing grounds around Svalbard and interpretation of the Svalbard Treaty. Although the EU is not part of the Svalbard Treaty, it has been involved in the case because it has a legal obligation to protect the legitimate fishing rights of its Member States, including Latvia since EU has exclusive external competence in fisheries matters.<sup>997</sup>

The ambiguity of the legal provisions of the Svalbard Treaty and the divergent interests of the parties have led to wide frictions and deep conflicts.<sup>998</sup> There are several arguments regarding the application of the Svalbard Treaty in an area outside the territorial waters of Svalbard. Around this issue, there are basically two strong arguments: on the one hand the position of Norway that states the Svalbard Treaty applies only regarding to the territorial waters of Svalbard and the EEZ regime allows Norway to establish a 200 nautical mile economic zone outside the territorial waters of Svalbard.<sup>999</sup> On the other hand the divergent position of all the countries signatory to the Treaty of Svalbard asserts that each treaty member State should be granted equal fishing rights in the Svalbard Fishing Protection Zone.

#### 4.3.1 Norway's claims

The snow crab case was brought before the Norwegian Finnmark District Court because the North Star Ltd shipping company and the captain argued that under the Svalbard Treaty they had the right to fish for the snow Crab.<sup>1000</sup> However, the Court agreed with Norway that snow Crab is a sedentary species and under Article 77 UNCLOS<sup>1001</sup> only Norway had the right to fish it because the Svalbard Treaty does not

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<sup>997</sup> Tore Henriksen, 'Snow Crab in the Barents Sea: Managing a Non-native Species in Disputed Waters', in Arctic Review on Law and Politics, December 2020, available at <https://arcticreview.no/index.php/arctic/article/view/2545/4829>

<sup>998</sup> Wolf, S. Svalbard's Maritime Zones, Their Status under International Law and Current and Future Disputes Scenarios; German Institute for International and Security Affairs: Berlin, Germany, 2013.

<sup>999</sup> Pedersen, T.; Henriksen, T. Svalbard's maritime zones: The end of legal uncertainty? Int. J. Mar. Coast. Law 2009, 24, 141–161.

<sup>1000</sup> *SIA North Star Ltd v. Norway*, note **Errore. Il segnalibro non è definito.** at paragraph 8.

<sup>1001</sup> Supra note 66, art. 77(4).

apply beyond the territorial sea of Svalbard.<sup>1002</sup> After the appeal the case ended up being discussed by the Supreme Court which rejected the appeal stating again that Norway did not violate the Svalbard Treaty.<sup>1003</sup> Furthermore it argued that it was impossible to fish without a valid licence and stated that Senator's arrest (the SIA North Star's vessel) was not discriminatory as all vessels including Norwegian ones would have been arrested for snow crab fishing in the absence of a permit from Norwegian fishery authorities and the shipping company did not have that permission.<sup>1004</sup>

Therefore, the principle of equal rights in the Treaty of Svalbard has not been violated since everyone including Norwegian citizens and businesses can be punished for catching Arctic crabs in the area without a permit from the Norwegian fisheries authorities.<sup>1005</sup> Moreover, as regards snow crab fishing, the 2014 Snow Crab Regulation only applies to the continental shelf, so if the Arctic crab were a non-sedentary species belonging to the water column, it would not fall within the scope of the Regulation.<sup>1006</sup> The Supreme Court ruled that the snow crab is a sedentary species within the meaning of the article 77 (4) of UNCLOS because the it is biologically incapable of moving except in constant physical contact with the seabed or subsoil. It cannot jump or swim and it needs her legs to stay in contact with the seabed to crawl forward.<sup>1007</sup>

The EU accused Norway to violate all obligations of Articles 2 and 3 of the Svalbard Treaty refusing to recognise the fishing licences granted to North Star vessels by Latvia,<sup>1008</sup> rejecting applications by applicants for the quotas reserved by Norway for its nationals,<sup>1009</sup> fining North Star and its ships and condemning North Star and one of its captains, Mr Uzakov.<sup>1010</sup> However Norway justified these violations by stating that Articles 2 and 3 of the Svalbard Treaty do not cover maritime areas beyond the territorial sea.<sup>1011</sup> The argument of Norway is that the terms of Articles 2 and 3 must be interpreted

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<sup>1002</sup> *SIA North Star Ltd v. Norway*, note **Errore. Il segnalibro non è definito.** at paragraph 10.

<sup>1003</sup> *Ibid*, paragraph 2.

<sup>1004</sup> *Ibid*, para. 83.

<sup>1005</sup> See Article 2 of the Svalbard Treaty on:

[http://library.arcticportal.org/1909/1/The\\_Svalbard\\_Treaty\\_9ssFy.pdf](http://library.arcticportal.org/1909/1/The_Svalbard_Treaty_9ssFy.pdf)

<sup>1006</sup> *SIA North Star Ltd v. Norway*, note **Errore. Il segnalibro non è definito.** at paragraph 23.

<sup>1007</sup> *Ibid*, paragraph 53.

<sup>1008</sup> Conférence de la Paix, Commission du Spitsberg, Travaux Préparatoires, Procès-Verbal de la Commission, No.5, Recueil des actes de la 136<sup>th</sup> 136<sup>er</sup>ence, Partie VII, Préparation et Signature des Traités et Conventions, Paris, 1924, CL-006, paragraph 372-374, 392-406.

<sup>1009</sup> *Ibid*, paragraph. 411-421.

<sup>1010</sup> *Ibid*, paragraph 392-406.

<sup>1011</sup> Note Verbale of Norway to the European Union on snowcrabs, 8 February 2021, C-0176.



in such a way as to cover only the territorial sea. To understand the position taken by Norway we must analyse the Note Verbale addressed to the European Union on 9 January 2017.<sup>1012</sup>

According to Norway, Svalbard does not give rise to its own continental shelf since "the area of the continental shelf of Norway extends from the Norwegian mainland and continues around and beyond Svalbard". Norway, being a coastal State, exerts sovereign rights over the continental shelf in order to exploit resources, including sedentary species and since under UNCLOS the snow crab is a sedentary species, the harvesting of Arctic crab on the Norwegian continental shelf cannot be carried out without the express consent of Norway as a coastal State.<sup>1013</sup> Furthermore, Norway considers that Articles 2 and 3 of the Treaty are not applicable to the collection of sedentary species on the continental shelf because there is no legal ground in the treaty of 1920 to state that any of its provisions granting rights to nationals of the Contracting Parties shall apply on the continental shelf of the archipelago beyond its territorial waters.<sup>1014</sup>

In conclusion, regarding the fisheries quota system, in the snow crab case, the EU unilaterally establishes quotas and continues to issue licences for Arctic crab fishing around the Svalbard Region.<sup>1015</sup> Norway considers that the EU approach has no legal basis and violates the law of the sea and international fisheries legislation because according to Norway only coastal states can legally set fishing quotas in areas under their jurisdiction.<sup>1016</sup> Moreover, with the third UN Conference on the Law of the Sea (1973–1982) the 200 nautical mile EEZs were set up and twenty coastal states had already claimed exclusivity on fishing beyond 12 miles.<sup>1017</sup> Countries that had previously established exclusive fishing zones required prior agreement with flag States or, even before the Convention on the Law of the Sea, had to apply for a sailing permit from other

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<sup>1012</sup> Note verbale from Norway to the European Union, 9 January 2017, C-112.

<sup>1013</sup> Note verbale from Norway to the European Union, 9 January 2017, C-112.

<sup>1014</sup> Ibid.

<sup>1015</sup> NRK. Økt Spenning Rundt Svalbard. Available online: <https://www.nrk.no/ytring/okt-spenning-rundt-svalbard-1.15549765>

<sup>1016</sup> Bjørndal, T.; Foss, T.; Munro, G.R.; Schou, M. Brexit and consequences for quota sharing in the Barents Sea cod fishery. *Mar. Policy* 2021, 131, 104622.

<sup>1017</sup> Memorial on the Merits of the Dispute Submitted by the Government of the United Kingdom of Great Britain and Northern Ireland. Available online: <https://www.icj-cij.org/public/files/case-related/55/9413.pdf>

vessels. The establishment of the EEZ regime after UNCLOS confers sovereign rights over the management of marine natural resources on coastal States.<sup>1018</sup>

With the expansion of the fisheries management rights of coastal States, we can observe a reduction of "freedom to fish", which requires an adaptation of the traditional fishing model. Although Svalbard is entitled to an EEZ under UNCLOS, Norway has not established such an EEZ but a non-discriminatory 200-nautical-mile fisheries protection zone around the Svalbard archipelago.<sup>1019</sup> Norway underlined that the non-discriminatory fishing regime of Svalbard is intended to protect living marine resources and the difference between the Norwegian Continental EEZ and the SFPZ concerns the "exercise of administrative power" and is based on "considerations of practicality and effectiveness".<sup>1020</sup> Thus, by virtue of its status as a coastal State, Norway considers itself competent to manage fisheries in the Svalbard area by imposing a multitude of legal provisions on the fisheries protection zone containing reporting obligations, closed areas and TACs.<sup>1021</sup> In addition, Norway claims that it is not bound by any internal reallocation of annual quotas for the EU's fishing stocks between its member states.<sup>1022</sup>

#### 4.3.2 The diverging positions of all other States ratifying the Svalbard Treaty

About snow crab fishing, the Snow Crab Regulation violated the non-discrimination clause of the Svalbard Treaty and consequently other States could not be penalized to fish the snow crab. Taking into account the EU's note verbal of 1 November 2016 the defendants asserted that the Snow Crab Regulation is in opposition to the principle of equal rights of the Svalbard Treaty because only Norwegian vessels could obtain permission for snow crab harvesting so that the defendants argued that this was discrimination on grounds of nationality.<sup>1023</sup> A very original response was recorded in the

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<sup>1018</sup> Ibid.

<sup>1019</sup> Churchill, R.; Ulfstein, G. *The Disputed Maritime Zones Around Svalbard*. In *Changes in the Arctic Environment and the Law of the Sea*; Nordquist, M.H., Mooreand, J.N., Heidar, T.H., Eds.; Brill Nijhoff: Leiden, The Netherlands, 2010; pp. 551–594, at p. 567.

<sup>1020</sup> Steenkamp, R.C. Svalbard's "snow crab row" as a challenge to the Common Fisheries Policy of the European Union. *Int. J. Mar. Coast. Law* 2019, 35, pp. 106–132, at p. 118.

<sup>1021</sup> Chen Y. and Wang Y.; *The North Sea and Svalbard Fisheries Management regimes in the context of Brexit: Divergences and Implications*, page 14; *Fishes* 2022, 7, 351.

<sup>1022</sup> Ibidem.

<sup>1023</sup> *SIA North Star Ltd v. Norway*, note **Errore. Il segnalibro non è definito.** at paragraph 24.

ICSID case *Peteris Pildegovics and SIA North Star v. Kingdom of Norway*<sup>1024</sup> where the claimants, in addition to not respecting the rights of equal access and treatment provided by the Treaty of Svalbard in the 200-nautical mile zone of Svalbard,<sup>1025</sup> have accused Norway of acting in bad faith<sup>1026</sup> since before July 2015 Norway did not consider the snow Crab as a sedentary species and has opportunistically changed its position to exclude the EU fishing vessels from the SFPZ.<sup>1027</sup> The applicants submitted that Norway has considered the snow crab a non-sedentary species at least since the 1958 Geneva Convention on the Continental shelf.<sup>1028</sup>

During the 1958 proceedings that led to the drafting of the Convention on the Continental Shelf, Norway and other States<sup>1029</sup> proposed to withdraw the definition of 'natural resources' related to the continental shelf stating that " crustacea and fish swimming would not have been included ".<sup>1030</sup> The amendment was approved.<sup>1031</sup> Evidence that Norway agreed that snow crabs could not be considered as a sedentary species occurred in 2013 when NEAFC members began issuing licenses for Arctic crab fishing in the Loophole( an area between mainland Norway, Svalbard and Russia which falls beyond their respective EEZ) and Norway did not object at all. Since Norway has not objected on the grounds that the snow Crab was on its continental shelf and therefore under its sovereignty, it infers that Norway did not regard snow crab as a sedentary species.<sup>1032</sup> Only in 2015 Norway reclassified the snow crab as a sedentary species by counteracting the fishing vessels fishing in the Loophole.<sup>1033</sup> According to the applicants, this sudden change in the status of the snow crab and this radical change in State practice, in addition to interrupting an already established fishery in the Loophole, would be an arbitrary and purely political move.<sup>1034</sup>

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<sup>1024</sup> Request For Arbitration, ICSID CASE NO. ARB/20/ Peteris Pildegovics and SIA North Star v. The kingdom of Norway. 18 March 2020.

<sup>1025</sup> See Claimants' Memorial, ICSID CASE NO. ARB/20/11 Peteris Pildegovics and SIA North Star v. The kingdom of Norway. 11 March 2021, paras. 630-697.

<sup>1026</sup> Ibid, paragraph 568.

<sup>1027</sup> Ibid, paragraph 37.

<sup>1028</sup> Ibid, para. 92-93.

<sup>1029</sup> Australia, Ceylon, the Federation of Malaya, India and the United Kingdom.

<sup>1030</sup> United Nations Conference on the Law of the Sea, Summary Records of the 21<sup>st</sup> to 25<sup>th</sup> Meetings of the Fourth Committee, note **Errore. Il segnalibro non è definito.** at p. 55. Para. 3.

<sup>1031</sup> Ibid, p. 70, para. 29

<sup>1032</sup> Claimants' Memorial, ICSID CASE NO. ARB/20/11 Peteris Pildegovics and SIA North Star v. The kingdom of Norway, 11 March 2021, note **Errore. Il segnalibro non è definito.** at para. 94.

<sup>1033</sup> Ibid, para. 599.

<sup>1034</sup> Ibid, para. 600.

In summary, the change of status to the snow crab has outlined a conduct in bad faith of Norway that abusing its rights has forced the EU fishing vessels to abandon the fishing of the snow crab.<sup>1035</sup> Norway considers that Article 2 and 3 of the Svalbard Treaty cannot apply to the harvesting of sedentary species on the continental shelf as the snow crab. This is because there is no basis in the Treaty for claiming that any of its provisions granting rights to nationals of the contracting parties apply to the continental shelf of the archipelago beyond its territorial waters.<sup>1036</sup> The argument of Norway is based only on the recent classification of snow crab as a sedentary species. The applicants claim that Norway's statements are wrong because they deprive them of the rights deriving from Article 2 and 3 of the Svalbard treaty: a right of equal access to Svalbard "waters, fjords and ports of the territories specified in Article 1" for the purpose of carrying out "maritime, industrial, mining and commercial operations on a footing of absolute equality and a right of equal access to "ships and nationals of all the High Contracting Parties" over fishing and hunting resources in the territories specified in Article 1 as well as their "territorial waters" on a non-discriminatory basis.<sup>1037</sup>

According to the claimants, even accepting the Norwegian qualification of the snow crab as a sedentary species, the Svalbard Treaty will always be applied for the collection of snow crab in the continental shelf. This is due to the fact that from the international law's perspective, it is not mandatory for a State to expressly claim a continental shelf because the territory of a state automatically generates a continental shelf. In the case of Svalbard, Norway submitted comments to CLCS on the continental shelf extending over 200 miles off the archipelago and the Svalbard baselines were considered vital to determinate the external limits of the Norwegian continental shelf.<sup>1038</sup> In addition, on 20 February 2006, Norway has signed an agreement with Denmark to demarcate the border of the continental shelf between Svalbard and Greenland<sup>1039</sup> and in 2010 Russia and Norway concluded a treaty which allowed them to delimit the continental platforms of

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<sup>1035</sup> Ibid, para. 602.

<sup>1036</sup> Note verbale from Norway to the European Union, 9 January 2017, C-112.

<sup>1037</sup> Article 2 and 3 of Svalbard Treaty, 9 February 1920.

<sup>1038</sup> Continental Shelf Submission of Norway in respect of areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea, Executive Summary, 2006, C-122.

<sup>1039</sup> Agreement between the Government of Norway on the one hand, and the Government of Denmark together with the Home Rule Government of Greenland on the other, concerning the Delimitation of the Continental Shelf and the Fisheries Zones in the Area between Greenland and Svalbard, 20 February 2006, CL-7, Article 1.

Svalbard and the Russian islands of Novaya Zemlya and Franz Josef Land in the Barents Sea.<sup>1040</sup>

Hence, the same practice followed by Norway contradicts its own presumption that Svalbard does not generate a continental shelf. Besides, it is easy to explain the failure to mention the continental shelf of the archipelago in the Svalbard treaty because in 1920, when the treaty was signed, the concept of the continental shelf was unknown to international law. However, considering the object and purpose of the treaty and the evolution of international law, there are no difficulties to interpret the rights mentioned in Article 2 and 3 of the Treaty as extending to the 200-mile zone and continental shelf around Svalbard. In short, just as subsequent developments in international law have allowed Norway to enjoy maritime rights on the continental shelf and to the 200-mile zone thanks to its sovereignty over Svalbard, similarly the equal rights of the other parties to the Treaty must be extended and guaranteed.<sup>1041</sup>

To conclude, the interpretation of the terms "territorial waters" used in Article 2 and 3 of the Svalbard Treaty was controversial because Norway for territorial waters meant only the territorial sea. However, in 1920 this term had a much wider scope than the territorial sea and the ICJ observed that the phrase "territorial waters" did not refer only to inland waters or territorial sea and that in 1917 the term "territorial waters" was not habitually used to mean the same as the modern term "territorial sea".<sup>1042</sup> The extent and nature of these waters are not specified in the treaty but if Norway's jurisdiction off Svalbard archipelago increases as a result of developments in international law so does the scope of application of the other Parties' rights under the Treaty.

### 4.3.3 Conclusion

Unfortunately, this dispute has not been settled yet. As regards the possible building of an EEZ around Svalbard there are no certainties because while Norway has territorial jurisdiction to create an EEZ around Svalbard, the Svalbard Treaty would deny the

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<sup>1040</sup> R. Churchill and G. Ulfstein, "The Disputed Maritime Zones around Svalbard," in M. H. Nordquist, T. H. Heidar and J. N. Moore (eds), *CHANGES IN THE ARCTIC ENVIRONMENT AND THE LAW OF THE SEA*, Martinus Nijhoff, 2010, CL-26, p. 561-562.

<sup>1041</sup> See for instance, Note Verbale from Spain to the Secretary General of the United Nations, 2 March 2007, C-78.

<sup>1042</sup> ICJ, *Land, Island and Maritime Frontier Dispute (El Salvador v. Honduras; Nicaragua intervening)*, Judgment on the Merits, 11 September 1992, CL-0238, para. 392.

exclusive aspect of an EEZ. Given that the negotiations between Norway and the EU have not been concluded, it may be possible to bring the dispute before an international court in the event of inconclusive results. Indeed, it is precisely UNCLOS that obliges the parties to settle their disputes in accordance with the procedures laid down in Sections 1 and 2 of Part XV on “any dispute concerning the interpretation and application of this Convention”.<sup>1043</sup> As international jurisprudence suggests, one must first determine what the real problem is in the case and this question must be fairly assessed. With regard to the Svalbard dispute, it is not easy to provide a solution. A court might consider that the dispute concerns the law applicable to the continental shelf adjacent to Svalbard, that is Article 77 of the UNCLOS or the Svalbard Treaty, and conclude that the dispute actually concerns the application of the Convention.

In support of this view, the award in *Philippines v. China* states that the interaction of the Convention with another instrument or body of law unequivocally delineates a dispute concerning the interpretation and application of the Convention.<sup>1044</sup> However, the same judicial body might be more inclined to adopt a more restrictive reading and assert that the real problem is not the application of Article 77 UNCLOS but rather the application of a *lex specialis* such as the Svalbard treaty that derogates from the general law of UNCLOS, which applies in the absence of a special agreement. The Svalbard treaty does not provide for a dispute settlement mechanism, the resolution mechanisms provided for in the UNCLOS are not applicable because the issue concerns the interpretation and application of the Svalbard Treaty and not the UNCLOS, International arbitration would be subject to a prior agreement with Norway which is very unlikely and the EU has no standing to bring proceedings before the ICJ.<sup>1045</sup>

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<sup>1043</sup> *The Republic of Philippines v. The People's Republic of China*, PCA Case n° 2013-19, award on jurisdiction and admissibility, Oct. 29, 2015, 150. *See also The Republic of Mauritius v. The United Kingdom of Great Britain and Northern Ireland*, award, Mar. 18, 2015, 220.

<sup>1044</sup> *The Republic of Philippines v. The People's Republic of China*, *id.*, 168.

<sup>1045</sup> Position of the European Commission concerning a call to act from the Republic of Latvia pursuant to Article 265 TFEU”, Brussels, Mar. 12, 2018, C(2018) 1418 final (Annex, para. 55-58), available at <https://www.politico.eu/wp-content/uploads/2018/06/SPOLITICO-18061416103-1.pdf>.

## CHAPTER V

### 5.1 Central Arctic Ocean fisheries and the international agreement to prevent unregulated high seas fishing

The signing of the Agreement to prevent unregulated fishing on the high seas in the Arctic Ocean (hereafter the CAOFA) on October 3, 2018 by representatives of the five Arctic coastal States along with representatives of four other States (China, Iceland, Japan and Korea) and the European Union produced an important legislative result.<sup>1046</sup> For the first time Canada, Denmark in respect of Greenland, Norway, Russia and the USA (the five Arctic States) have joined a group of non-Arctic States in entering into a legally binding agreement on the regulation of a specific issue of the Arctic.<sup>1047</sup>

This agreement recognizes that no commercial fishing on the high seas portion of the Arctic Ocean is occurring at this time.<sup>1048</sup> Nevertheless, taking into account the climate changes that are taking place in the affected region, the agreement prohibits the beginning of an unregulated fishing in the Arctic Ocean, provides for a joint program of scientific research and monitoring to assess the possibilities for the development of commercially important fish stocks in the future, requires periodic meetings of the Parties to determine whether to take steps towards the creation of one or more fisheries management organizations in the event that commercial fishing becomes an attractive

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<sup>1046</sup> ‘Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean’, signed by the the five Arctic Ocean coastal States (Canada, Denmark (acting on behalf of Greenland and the Faroe Islands), Norway, Russia, and the United States – the “A5”) together with China, the European Union (EU), Iceland, Japan, and South Korea (which together with the A5 form the so-called ‘A5+5’) on 3 October 2018 in Ilulissat, Greenland and entered into force June 2021; Valentin Schatz and Alexander Proelss, ‘The 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean: a Primer’, in *The International Journal of Marine and Coastal Law*, October 2018, at p. 2.

<sup>1047</sup> Nong Hong, ‘Non-Arctic States’ Role in the High North: Participating in Arctic Governance through Cooperation’, in *Marine Biodiversity of Areas beyond National Jurisdiction*, 2021, pp. 309-330, at p. 310.

<sup>1048</sup> M. Hoppman, ‘Exploring the Arctic Ocean: The Agreement that protects an unknown ecosystem’, in Arctic Council, 28 October 2020, available at <https://arctic-council.org/news/exploring-the-arctic-ocean-the-agreement-that-protects-an-unknown-ecosystem/#:~:text=The%20result%20was%20the%20International,Korea%20and%20the%20European%20Union>.

prospect.<sup>1049</sup> Furthermore, an important feature of the agreement is the use of the precautionary approach.<sup>1050</sup>

The largest portion of the high seas in the Arctic is the Central Arctic Ocean (CAO), an area of about 2.8 million square kilometers that is totally enclosed by the EEZs of the five Arctic coastal States.<sup>1051</sup> The CAO is unique in this context not only because it is a sizeable area and still covered in ice for much of the year but also because there has been no significant commercial activity in this polar area for centuries.<sup>1052</sup> The term CAO has a clear meaning in international law. Nonetheless, the size of such a part of the sea depends on legal factors subject to change over time.<sup>1053</sup>

For instance, when Norway drew straight baselines around the Svalbard Islands in 2001 and no Arctic State protested, an international agreement was tacitly reached and a certain *opinion juris* was consolidated: the 200 nm fishing protection zone around the archipelago was moved northward and the boundaries of the CAO were legitimately changed.<sup>1054</sup> Such changes may happen in the future.<sup>1055</sup> The United States, for example, could follow the practice of Norway by drawing straight baselines along the northern coast of Alaska.<sup>1056</sup>

From the international treaties standpoint, UNCLOS focuses on the conservation of the biological resources of the high seas. Article 116 UNCLOS provides that all States have the right for their nationals to harvest on the high seas provided that their obligations

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<sup>1049</sup> A. Vylegzhanin, I. Dudinka, International legal grounds for drawing Denmark, Norway and Canada straight baselines in the Arctic, *Moscow J. Int. Law* 1 (2017), pp. 28–40 (in Russian with English summary).

<sup>1050</sup> Virginijus Sinkevičius, ‘Arctic: Agreement to prevent unregulated fishing enters into force’, in Directorate-General for Maritime Affairs and Fisheries, 25 June 2021.

<sup>1051</sup> Andrey Todorov, ‘The UN High Seas Treaty in the Arctic Context’, in Belfer Center for Science and International Affairs, Harvard Kennedy School, 21 March 2023.

<sup>1052</sup> Cayla Calderwood and Frances Ann Ulmer, ‘The Central Arctic Ocean fisheries moratorium: A rare example of the precautionary principle in fisheries management’, in *Polar Record: a Journal of Arctic and Antarctic Research*, 16 January 2023.

<sup>1053</sup> ‘Changes in the Arctic: Background and Issues for Congress’, in Congressional Research Service – Report prepared for for members and committees of congress, updated to January 18, 2014, at p. 17.

<sup>1054</sup> Robin Churchill and Geir Ulfstein, ‘The disputed maritime zones around Svalbard’, in *Changes in the Arctic environment and the law of the sea*, 2001, pp. 551-593, at p. 560

<sup>1055</sup> Norway in its national law uses the term “Svalbard Archipelago,” though the 1920 Treaty Relating to Spitsbergen, which grants Norway sovereignty over this archipelago, uses the term the “Archipelago Spitsbergen.” Norway cannot change the language of the Paris Treaty of 1920, since the French and English texts but not the Norwegian text are authentic (Article 10 of the Paris Treaty 1920). But Norway has not provoked any protests on behalf of the Parties for gradually substituting the national term “Svalbard” for the treaty term “Spitsbergen.”

<sup>1056</sup> Today, the United States is the only Arctic coastal state that has not drawn straight baselines along its Arctic coasts.



derive from the treaties and in compliance with the rights, duties and interests of coastal States.<sup>1057</sup> Therefore, fishing on the high seas is only legitimate when there is an appropriate regulation.<sup>1058</sup>

As early in 1974, the ICJ observed that one of the advances in international maritime law resulting from the intensification of fisheries is that the previous *laissez-faire* treatment about fish stocks on the high seas has been replaced by the recognition of the duty to give due regard to the rights of other States and to conservation needs for the benefit of all States involved in a certain fisheries.<sup>1059</sup> Caution should be exercised in applying the general rules on freedom of fishing in specific cases such as the question of the CAO.<sup>1060</sup> Yet at a time when many of the world's fish stocks are running low, it is clear that States have an obligation to ban or restrict unregulated fishing on high seas areas including the CAO.<sup>1061</sup>

## 5.2 The grounds for cooperation in the Central Arctic Ocean

On August 20, 2009, the U.S. government announced a moratorium on fishing in the waters of the Beaufort Sea north of Alaska.<sup>1062</sup> U.S. senators from Alaska wrote a letter on May 20, 2011 to the Secretary of State of Alaska supporting this initiative and proposing to extend it through the negotiation of an international agreement consistent with existing international law and policy. The senators also stated they were adamant that securing such a deal should be a top priority for the U.S. in implementing its Arctic policy.<sup>1063</sup>

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<sup>1057</sup> *Supra* note 66, art. 116.

<sup>1058</sup> E.L. Miles, W.T. Burke, 'Pressures on the United Nations convention on the law of the sea of 1982 arising from new fisheries conflicts: the problem of straddling stocks', pp. 217-238, in T.A. Clingan, A.L. Kolodkin (Eds.), *The Moscow Symposium on the Law of the Sea*. Moscow, 1991.

<sup>1059</sup> Fisheries Jurisdiction (United Kingdom v. Iceland), Merits, Judgment. ICJ Reports. 1974, 31 (para. 72 of the Judgment).

<sup>1060</sup> Min Pan and Henry P. Huntington, 'A precautionary approach to fisheries in the Central Arctic Ocean: Policy, science, and China', in *Marine Policy*, Volume 63, January 2016, pp. 153-157.

<sup>1061</sup> 'The potential of the International Tribunal for the Law of the Sea in the management and conservation of marine living resources', in Presentation given by the President of the International Tribunal for the Law of the Sea to the Meeting of the Friends of the Tribunal at the Permanent Mission of Germany to the United Nations in New York, 21 June 2007.

<sup>1062</sup> Mia Bennett, 'Moratorium on fishing north of Alaska', in *Foreign Policy Association*, 22 August 2009.

<sup>1063</sup> Allison Winter, 'U.S. Bans Commercial Fishing in Warming Arctic', in *Scientific American*, 21 August 2009.

The waters north of the Russian and U.S. EEZs are suffering a remarkable diminution of multi-year sea ice.<sup>1064</sup> Much of this area is fishable, the waters are accessible for several months each year and research is conducted by non-coastal States.<sup>1065</sup> Exploratory fisheries may not be too unlikely.<sup>1066</sup> Assuming that the time had come to secure an international agreement to prevent commercial fishing in such international waters, in 2012 two thousand scientists from different countries signed an open letter urging governments to deter a potential ecological catastrophe in the CAO by applying the precautionary principle and developing legal rules related specifically to fishing in the CAO.<sup>1067</sup>

The precautionary principle calls on countries to take preventive measures whenever an action can cause damage even to ecosystems when there is no conclusive evidence of a causal relationship between the action and its alleged effects.<sup>1068</sup> The legal obligations incorporated in the precautionary principle specify that the States concerned should not employ the lack of scientific certainty as a reason to postpone measures to prevent environmental degradation.<sup>1069</sup> The practical implementation of this principle to the CAO has been the focus of numerous diplomatic and scientific interventions.<sup>1070</sup> These meetings conveyed that it is actually not feasible at the moment to engage in global research on the marine ecosystems of the Arctic Ocean to gather concrete data on the state of fish stocks in the remote areas of the high seas surrounding the north pole.<sup>1071</sup>

Soft-law sources of international environmental law such as UN General Assembly resolutions provide further support for the prevention of biological degradation.<sup>1072</sup> In

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<sup>1064</sup> T.I. Van Pelt, H.P. Huntington et al., 'The missing middle: Central Arctic Ocean gaps in fishery research and science coordination', *Marine Policy*, Volume 85, November 2017, pp. 79-86, at p. 80.

<sup>1065</sup> Alex Shahbazi, 'Sustaining tomorrow's Central Arctic Ocean today using best practices to guide the Central Arctic Ocean Fisheries Agreement's Implementation', in WWF, November 2022, at p. 3.

<sup>1066</sup> *Ibid.*, at p. 22.

<sup>1067</sup> 'Preventing unregulated commercial fishing in the Central Arctic Ocean (CAO) – A compilation of reports from meetings of experts in Shanghai (China), Incheon (Korea) & Sapporo (Japan)', in Ocean Conservancy, March 2017, at p. 1.

<sup>1068</sup> P. Birnie and A. Boyle, 'International Law and the Environment', Oxford University Press, Oxford, 1992.

<sup>1069</sup> N. Mirovitskaya, W. Ascher (Eds.), *Guide to Sustainable Development and Environmental Policy*, Duke University Press, Durham, 2001.

<sup>1070</sup> International Seminar, 'Opportunities for Cooperation in Environmental Protection, Conservation and Rational Management of Biological Resources in the Arctic Ocean', Russian International Affairs Council, Working Paper N.1, 2013. Moscow. Ed. I.S. Ivanov.

<sup>1071</sup> Pauline Snoeijs-Leijonmalm, Hauke Flores et al., 'Unexpected fish and squid in the central Arctic deep scattering layer', in *Science Advances*, Vol. 8, No. 7, 18 February 2022.

<sup>1072</sup> Arif Ahmed and Md. Jahid Mustofa, 'Role of soft law in environmental protection: an overview', in *Global Journal of Politics and Law Research*, Vol.4, No.2, pp.1-18, March 2016.

1982, the UN General Assembly expressed its awareness of the importance for the international community to work together to safeguard the balance and quality of nature.<sup>1073</sup> The World Charter of Nature adopted by the UN General Assembly in Resolution 37/7 provides that it is necessary to fully recognize the urgency of maintaining the stability and quality of nature and the conservation of natural resources.<sup>1074</sup> Furthermore, it specifies that the principles set out in the Charter will also be reflected in the law and practice of each State as well as at the international level.<sup>1075</sup>

UNFSA is of particular relevance to the treatment of deep-sea fishing in the Central Arctic Ocean.<sup>1076</sup> This agreement sets out that States apply the precautionary approach broadly as a duty rather than an optional measure. Article 6 UNFSA provides that countries must be more cautious when information is uncertain, unreliable or inadequate. The absence of adequate scientific information shall not constitute grounds for postponing or failing to adopt conservation and management measures.<sup>1077</sup> On the basis of UNCLOS, UNFSA consolidates that general legal regime for the preservation of marine biological resources occurring in EEZs and adjacent areas of the high seas.<sup>1078</sup>

To this purpose, the agreement provides for the creation of general obligations for third countries aimed at preserving marine biological resources, in particular by making the specific conservation measures adopted by the Parties to the regional agreements legally binding for any State that does not participate in them but intends to fish the stocks regulated by those regional agreements; establishment of internationally coordinated rules on the application of national measures relating to the preservation of natural resources; determination of the concrete legal significance of the precautionary approach applied to specific marine areas and an emphasis on the preservation of marine ecosystems.<sup>1079</sup>

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<sup>1073</sup> M.R. Molito, 'International Environmental Law: Primary Materials', in Kluwer Law and Taxation Publishers, Dordrecht, 1991, at p. 8.

<sup>1074</sup> Ibid., at p. 9.

<sup>1075</sup> Ibid., at p. 11.

<sup>1076</sup> As provided in the Ilulissat Declaration adopted by the Arctic coastal States on 28 May 2008, "an extensive international legal framework applies to the Arctic Ocean."

<sup>1077</sup> Supra note 94, art.6.

<sup>1078</sup> Yannick J. Roucou, 'The Inclusion of Fisheries in a New Internationally Legally Binding Instrument for the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction', United Nations-Nippon Foundation of Japan Fellowship, December 2017, at p. 47.

<sup>1079</sup> Supra note 94, 147rt. 9-13.

UNFSA therefore encourages States to develop cooperation on the basis of regional agreements on marine biological resources.<sup>1080</sup> Following these developments, an authorized representative of the U.S. and the head of the Federal Fisheries Agency of Russia signed a joint statement on bilateral strengthening in the fisheries sector.<sup>1081</sup> Harvesting in the CAO was one of the objectives of that declaration. The main idea of this document is that unregulated fishing in the CAO should not be allowed to compromise conservation and management measures taken by Arctic coastal States and applicable to their EEZs.<sup>1082</sup> A cautionary precedent in this area concerns the experience of the high seas of the Bering Sea (the Donut Hole that we will deal with in the next chapter).<sup>1083</sup> Russia and the USA took the lead in the creation of a multilateral agreement in 1994 aimed at stopping the depletion of biological resources in this area.<sup>1084</sup> In the years before the agreement, about 35% of the total Bering Sea pollock catch came from the Donut Hole, an area comprising less than 8% of the Bering Sea.<sup>1085</sup>

However, since the Parties ratified the 1994 Convention on the Conservation and Management of the Pollock Resources in the Central Bering Sea, fish stocks have been severely depleted.<sup>1086</sup> Following the bilateral initiative of the USA and Russia regarding the CAO, the four States with the most productive high-seas fishing capacity of the world's oceans and a declared interest in Arctic waters (China, South Korea, Japan and Iceland) together with the EU have stated that they accept the precautionary principle as an approach to preserve the marine biological resources of the CAO.<sup>1087</sup>

The fact that the USA is not a Party to UNCLOS has not been an obstacle to the creation of a legal regime for the CAO, since all Arctic States including the USA accept

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<sup>1080</sup> Gjerde, K. and Wright, G., 'Towards Ecosystem-based Management of the Global Ocean: Strengthening Regional Cooperation through a New Agreement for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction', Strong High Seas Project, 2019, at p. 12-13.

<sup>1081</sup> 'Joint Statement by the Presidents of the United States of America and the Russian Federation on Enhanced Bilateral Engagement', in The White House – Office of the Press Secretary, 17 June 2013, available at <https://obamawhitehouse.archives.gov/the-press-office/2013/06/17/joint-statement-presidents-united-states-america-and-russian-federatio-1>

<sup>1082</sup> Ibid.

<sup>1083</sup> A.N. Vylegzhanin and V.k. Zilanov, 'International Law Basics of Management of Marine Living Resources: Theory and Documents', 2000 (in Russian with English Content). Moscow, at pp. 9-33.

<sup>1084</sup> Ibid., at pp. 224-232.

<sup>1085</sup> Ibid.

<sup>1086</sup> David A. Balton, 'The Bering Sea Doughnut Hole Convention: Regional Solution, Global Implications', in *Governing High Seas Fisheries: the interplay of global and regional regimes*, May 2001, pp. 142-177, at p. 144.

<sup>1087</sup> Yen-Chiang Chang and Mehran Idris Khan, 'May China Fish in the Arctic Ocean?', in *Sustainability* 2021, 13(21), 11875.

UNCLOS provisions relating to marine waters and marine biological resources as customary international law.<sup>1088</sup> In the high seas areas, coastal States and other affected States generally solve conservation matters using one of several legal models: a bilateral treaty between a coastal State and another interested State or a multilateral treaty through the engagement of coastal States (such as the experience of Russia and the US in the Barents Sea).<sup>1089</sup> These models reveal some of the general elements of the legal resolution of conflicting interests of coastal States and distant-water fishing States.

Catching for fish stocks in an area not subject to regulation is generally considered contrary to the current international law. A first moratorium on fishing in such an area is rated a rational measure.<sup>1090</sup> There is a tendency in current maritime policy and the law of the sea to merge ecosystem-based management and precautionary approach.<sup>1091</sup> A decisive moment came on 16 July 2015, when the five Arctic coastal States cooperated in drawing up a declaration on the prevention of unregulated high seas fishing in the CAO: the Oslo Declaration.<sup>1092</sup> Basing their initiative on the Ilulissat Declaration of 2008, the five Arctic countries proceeded to formulate provisional measures to prevent unregulated fishing on the high seas part of the CAO.<sup>1093</sup>

Noteworthy in this context is the fact that the declaration has not taken the shape of a legally binding instrument and that its provisions apply only to Arctic coastal States and those operating under their jurisdiction.<sup>1094</sup> Nevertheless, other States strongly opposed such an initiative. In particular, Iceland, a member of the Arctic Council that aspires to the Arctic coastal State status has expressed firm contrast to this governance model.<sup>1095</sup>

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<sup>1088</sup> Evan T. Bloom and Jeremy Greenwood, 'Securing U.S. Territorial Rights in the Arctic: new actions to protect America's continental shelf', Brookings, July 2022.

<sup>1089</sup> Maya Gold, 'Negotiating the International Agreement to Prevent Unregulated Fishing in the High Seas of the Central Arctic Ocean', in Fisheries and Oceans Canada Arctic Biodiversity Congress, October 10, 2018.

<sup>1090</sup> 'International Law Enforcement Cooperation in the Fisheries Sector: a guide for law enforcement practitioners', Interpol, February 2018, at p. 78.

<sup>1091</sup> N. Boillet, 'L'aménagement du territoire dans le context de la politique maritime integree' A. Pderone, Paris, 2015, pp. 83-134, at p. 87.

<sup>1092</sup> 'Declaration concerning the prevention of unregulated high seas fishing in the Central Arctic Ocean', signed on 16 July 2015, available at [https://www.wto.org/english/tratop\\_e/rulesneg\\_e/fish\\_e/2015\\_oslo\\_declaration.pdf](https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/2015_oslo_declaration.pdf)

<sup>1093</sup> Grace Elizabeth Shephard, Kari Dalen et al., 'Assessing the added value of the recent declaration on unregulated fishing for sustainable governance of the central Arctic Ocean', in Marine Policy, Volume 66, April 2016, pp. 50-57, at p. 53.

<sup>1094</sup> Seamus Ryder, 'The Declaration concerning the prevention of unregulated high seas fishing in the Central Arctic Ocean', in The University of Calgary Faculty of Law Blog, July 31, 2015.

<sup>1095</sup> Erik J. Molenaar, 'The Oslo Declaration on High Seas Fishing in the Central Arctic Ocean – Briefing Note', in Arctic Yearbook, 2015, pp. 427-431.

### 5.3 The Oslo Declaration

Currently, the legal status of the Oslo Declaration contains a number of legally non-binding commitments, which fall under the so-called soft law while expressing a preference but not an obligation for the States concerned to act or refrain from acting in a specific way.<sup>1096</sup> The legal nature of the Oslo Declaration is not only remarked by the title of “declaration” but also by the use in the declaration itself of terms such as “acknowledge”, “recall” and so on.<sup>1097</sup> At the previous meeting in Nuuk in 2014, the political agreement was to achieve the opportunity to develop appropriate interim measures to discourage unregulated fisheries in the CAO in the future.<sup>1098</sup>

Firstly, it is important to highlight the spatial focus of the declaration and the provisional measures contained in it: such measures apply only to the high-seas part of the CAO.<sup>1099</sup> Secondly, despite the strong intention of the five Arctic coastal States to apply such provisional measures, it should be remembered that they are not legally binding.<sup>1100</sup> However, if the Parties have a convinced determination to reach a legally binding agreement in the future, provisional measures that amount to a moratorium on fishing on the high seas part of the CAO, will be legally enforceable between the Parties.<sup>1101</sup> According to the Oslo Declaration, such measures will only be implemented in accordance with one or more regional or subregional fisheries management organizations or fisheries management agreements which have acknowledged international standards at their basis.<sup>1102</sup>

The current international legal framework and national regulation for Arctic fisheries encompasses the following gaps: scientific and ecosystem-based fisheries management cannot be guaranteed due to lack of data; regulation of Arctic coastal States

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<sup>1096</sup> Supra note 1094

<sup>1097</sup> Patricia Birnie, Alan Boyle et al., ‘International Law and the Environment (3<sup>rd</sup> Edition)’, Oxford University Press, 2009, at p. 35.

<sup>1098</sup> Arctic Fisheries Nuuk Chairmans and ToR for 3<sup>rd</sup> Meeting. Chairman’s Statement, Meeting on Arctic Fisheries. (2014, February 24-26). Nuuk, Greenland, available at [https://www.afsc.noaa.gov/Arctic\\_fish\\_stocks\\_third\\_meeting/Arctic%20Fisheries%20Nuuk%20Chairmans%20and%20ToR%20for%203rd%20Meeting.pdf](https://www.afsc.noaa.gov/Arctic_fish_stocks_third_meeting/Arctic%20Fisheries%20Nuuk%20Chairmans%20and%20ToR%20for%203rd%20Meeting.pdf)

<sup>1099</sup> Joseph F.C. DiMento, Melissa L. Kelly and Kaitlin O’Donnell, ‘Arctic Sustainability Law: Almost Sufficient’, in North Carolina Journal of International Law, Volume 47, Number 2, Article 4, 2022, pp. 246-330, at p. 308.

<sup>1100</sup> Supra note 1095

<sup>1101</sup> Supra note 1094

<sup>1102</sup> Supra note 1093, at p. 55.

and other States may not be adequate; gaps in the forums and instruments of Arctic coastal States and the lack of widespread coverage on the high seas of RFMOs.<sup>1103</sup> The Oslo Declaration in the form of a multilateral agreement can be seen as the first attempt to close the gap on the instruments used by the five Arctic coastal States and the other five States previously mentioned.<sup>1104</sup>

Progress has been made with the Oslo Declaration such as the decision to implement provisional measures on commercial fishing, but differences still remain between the declaration and international fisheries law.<sup>1105</sup> One possible link between international standards and provisional measures is to give greater emphasis to standards concerning new and exploratory fisheries, which pays particular attention to certain UNFSA provisions.<sup>1106</sup> New and exploratory fisheries have not been defined neither by UNCLOS nor by UNFSA.<sup>1107</sup> Such an omission in international fisheries law could represent an awareness of the possibility of commercial fishing in the polar regions.<sup>1108</sup> However, there is a definition of new and exploratory fisheries in the Convention on the Conservation on the Antarctic Marine Living Resources (CCAMLR).<sup>1109</sup>

New fisheries, for the purposes of conservation measures, is the fishing of a stock by a particular fishing method in a subarea for which information on distribution, abundance, demography, potential yield and stock identity resulting from in-depth

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<sup>1103</sup> Molenaar, Erik J. (2014). Status and Reform of International Arctic Fisheries Law. In Tedsen, Elizabeth. (Eds.), *Arctic Marine Governance: Opportunities for Transatlantic Cooperation* (pp.117-118). New York: Springer.

<sup>1104</sup> Rosemary Rayfuse, 'Taming the Wild North?: High Seas Fisheries in the Warming Arctic', in *Frontiers in international environmental law : oceans and climate challenges : essays in honour of David Freestone* Leiden; Boston: Brill Nijhoff, 2021, pp. 263-280, at p. 267.

<sup>1105</sup> Margherita Valentina Romani, 'Environmental Governance in a Changing Arctic: how a new governance regime for the protection of biodiversity beyond national jurisdiction can help tackle future challenges', *Luiss Guido Carli University – Department of Law – Final Thesis in International Law*, A.Y. 2019-2020, at pp. 32-35.

<sup>1106</sup> Molenaar, E.J. (2016). *International Regulation of Central Arctic Ocean Fisheries*. In Myron Nordquist. (Eds). *Challenges of the Changing Arctic. Continental Shelf, Navigation, and Fisheries*, Brill Academic Publishers.

<sup>1107</sup> Glen Wright, Julien Rochette et al., 'High seas fisheries: what role for a new international instrument?', *IDDR Study N. 03/16*, August 2016.

<sup>1108</sup> Richard Caddell, 'Precautionary Management and the Development of Future Fishing Opportunities: The International Regulation of New and Exploratory Fisheries', in *The International Journal of Marine and Coastal Law* 33 (2018), pp. 199-260, at p. 202.

<sup>1109</sup> CCAMLR: the Convention on the Conservation of Antarctic Marine Living Resources, also Commission on the Conservation of Antarctic Marine Living Resources, and CCAMLR, is part of the Antarctic Treaty System. The Convention was opened for signature on 1 August 1980 and entered into force on 7 April 1982 by the Commission for the Conservation of Antarctic Marine Living Resources, headquartered in Tasmania, Australia, available at <https://www.ccamlr.org/en/organisation/about-ccamlr>

surveys or exploratory fishing has not been submitted to the Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR).<sup>1110</sup> Moreover, by the term “new fishing” we refer to situations where no data on catches of fish stocks have ever been submitted to the Commission or the catch data of the two previous fishing seasons have not been brought to the attention of the Commission.<sup>1111</sup>

Instead, exploratory fishing means a fishery that was previously classified as a new fishery or continues to be classified as such until sufficient information is available to assess the distribution, demography and abundance of the species under study, leading to an estimate of the potential yield of the fishery; examine the potential impacts of fishing on dependant fish stocks; allow the scientific committee to formulate and advise the Commission on appropriate catch levels, effort levels and fishing gear, where appropriate.<sup>1112</sup>

Data and impact on fisheries are two main factors in determining conservation measures for new and exploratory fisheries.<sup>1113</sup> Under article 6 UNFSA, for new and exploratory fisheries, the member States of the Agreement have a responsibility to take prudent management and conservation measures as soon as possible.<sup>1114</sup> However, there is still a long way to go before the Declaration’s current interim measures can be defined as conservation and management measures under international fisheries law.<sup>1115</sup>

This is basically due to two reasons. Firstly, data and information on new and exploratory fisheries are insufficient in the marine Arctic.<sup>1116</sup> Then, as a precondition for the implementation of the provisional measures, an assessment of the impact of fishing on the long-term sustainability of stocks is still unrealistic because it is not clear which

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<sup>1110</sup> The Commission at the Thirty-fifth Meeting. 2016, October 17-28. Schedule of Conservation Measures in Force 2016/17, available at <https://www.ccamlr.org/en/document/publications/schedule-conservation-measures-force-2016/17>

<sup>1111</sup> Ibid.

<sup>1112</sup> Ibid.

<sup>1113</sup> Andrew J. Kenny, Neil Campbell et al., ‘Delivering sustainable fisheries through adoption of a risk-based framework as part of an ecosystem approach to fisheries management’, in *Marine Policy*, Volume 93, July 2018, pp. 232-240, at p. 233.

<sup>1114</sup> *Supra* note 94, art. 6(6).

<sup>1115</sup> Erik J. Molenaar, ‘International Regulation of Central Arctic Ocean Fisheries’, in *Challenges of the Changing Arctic*, 2016, pp. 429-463, at p. 437.

<sup>1116</sup> *Supra* note 1113



species could move into the waters of the CAO, in what numbers and when this will occur.<sup>1117</sup>

According to article 118 UNCLOS, States whose citizens exploit the same living resources or different living resources in the same area of the high seas must cooperate to conserve these resources.<sup>1118</sup> With respect to straddling and highly migratory fish stocks on the high seas, this obligation is enlarged by the special obligation of the relevant coastal States and the States fishing for these stocks in adjacent high seas areas to collaborate in the protection of those species.<sup>1119</sup>

According to UNFSA, there are two ways of cooperating, either through joining a RFMO or agreeing to apply the fisheries management measures taken by a competent RFMO. However, the latter method is not an alternative for most countries interested in distant-water fishing.<sup>1120</sup> Under international fisheries rules, the obligation to cooperate between coastal States and States that engage in new and exploratory fisheries apply to the high seas portions of the CAO.<sup>1121</sup> As a consequence, the right for those States to have a real interest in participating in cooperation through membership becomes highly relevant.<sup>1122</sup>

The Oslo Declaration addresses the interests of other States not only by recognizing their role in preventing unregulated high seas fishing in the CAO, but also encourages cooperation in an all-encompassing process to develop measures consistent with this declaration that would include commitments from all States concerned.<sup>1123</sup> The Declaration pinpoints a close link between these countries that have the interests and the broader process (namely the membership) but the criteria for determining the interests of newcomers is subject to further interpretation.<sup>1124</sup> At this stage, the interpretation of some

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<sup>1117</sup> Andrew Serdy, 'The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean: An Overview', in *Ocean Yearbook Online*, Vol. 33, No. 1, 2019, at pp. 409-410.

<sup>1118</sup> *Supra* note 66, art. 118.

<sup>1119</sup> *Supra* note 66, art. 63(2) and 64(1).

<sup>1120</sup> T. Henriksen, G. Hønneland, A. Sydnes, 'Law and Politics in Ocean Governance: the UN Fish Stocks Agreement and Regional Fisheries Management Regimes', Leiden: Martinus Nijhoff Publishers, 2006, at pp.18-19.

<sup>1121</sup> *Supra* note 1052

<sup>1122</sup> Jon Rahbek-Clemmensen and Gry Thomasen, 'How has Arctic coastal state cooperation affected the Arctic Council?', in *Marine Policy*, Volume 122, December 2020, 104239.

<sup>1123</sup> *Supra* note 1095

<sup>1124</sup> Klaus Dodds, 'Real interest'? Understanding the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean', Authored Accepted Manuscript for *Global Policy* online published 16<sup>th</sup> July, 2019, at p. 22.

UNFSA provisions could help. For instance, article 8(3) UNFSA asserts that States having a real interest in the fisheries in question may join an RFMO.<sup>1125</sup>

There are two approaches in order to interpret such an article: a restrictive or broad reading around the term “real interest”. Regarding the first approach, some suggest that the employment of the term “real” in article 8(3) UNFSA already indicated that States must demonstrate factual and concrete interests.<sup>1126</sup> It follows that the intention to add this requirement must be to restrict access to membership, otherwise it would not be necessary.<sup>1127</sup> But other authors argue that the interests in the fisheries under consideration do not necessarily preclude those States from becoming members.<sup>1128</sup> As far as the second approach is concerned, a broad reading of “real interest” is to include States with interests in fishing: including the coastal States, the States harvesting the stocks on the high seas and the States that intend to catch those stocks.<sup>1129</sup>

However, the broad reading of article 8(3) UNFSA leaves no room for the discretion of the RFMO member States and this carries a danger of abuse since as Freestone and Makuch claims, the wording of the paragraph is mature for litigation.<sup>1130</sup> As it was demonstrated in the negotiation process of the declaration, the five Arctic coastal States have convinced five members (EU, China, Iceland, Japan and South Korea) and will continue to persuade other countries to refrain from unregulated fishing in the CAO.<sup>1131</sup> Therefore, a broad reading of States with interests in fisheries and belonging to potential RFMOs in the case of the CAO seems to fit the object and scope of the Declaration.

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<sup>1125</sup> *Supra* note 94, art. 8(3).

<sup>1126</sup> Bianca Haas, Camille Goodman et al., ‘Fact or fiction? Unpacking the terminologies used in fisheries allocation discussions’, in *Marine Policy*, Volume 152, June 2023, 105630.

<sup>1127</sup> Nandan, S.N., ‘Current Fisheries Governance. Conference on the Governance of High Seas Fisheries and the United Nation Fish Agreement: Moving from Words to Action. Canada’, 2005.

<sup>1128</sup> Molenaar, E.J., ‘The Concept of Real Interest and Other Aspects of Cooperation Through Regional Fisheries Management Organizations’, in *International Journal of Marine and Coastal Law*, 18 (4), 2000, at p. 486.

<sup>1129</sup> Freestone David and Makuch Zen, ‘The New International Law of Fisheries: the 1995 UN Straddling & Stocks Convention’, in *Yearbook of International Environmental Law*, 7 (1), 1997, at pp. 29-30.

<sup>1130</sup> Hayashi, M., ‘The Straddling and Highly Migratory Fish Stocks Agreement’, in Hey, Ellen. (Ed). *Developments in International Fisheries law*, The Hague: Kluwer Law International, 1999, pp. 55-84, at p. 64.

<sup>1131</sup> Jon Rahbek-Clemmensen and Gry Thomasen, ‘Learning from the Ilulissat Initiative: State Power, Institutional Legitimacy, and Governance in the Arctic Ocean 2007–18’, University of Copenhagen – Centre for Military Studies, February 2018, at p. 23-24.

## 5.4 The 2018 Agreement to prevent unregulated high seas fishing in the Central Arctic Ocean

The Oslo Declaration set the scene for the conclusion of the CAOFA. Participants in these negotiations included both the coastal States of the Arctic Ocean and States with an interest in engaging in future fisheries in the CAO.<sup>1132</sup>

Article 8 of the CAOFA deals with non-Parties to the Agreement and provides that the Parties should stimulate non-contracting States to take measures that are in line with the provisions of this Agreement.<sup>1133</sup> The text of the Agreement signed on 3 October 2018 contains provisions aimed not only at prohibiting unregulated fishing in the CAO but also at establishing a research programme to assess the potential and future scenario for commercial fishing in the area, authorise exploratory fishing by the signatories to the Agreement and request the meeting of the Parties to evaluate at least every two years new information regarding the grounds for commercial fishing.<sup>1134</sup>

The CAOFA sets forth a reasonable basis to the Arctic States' initial activity of developing a broader marine governance system that privileges the preservation and protection of Arctic marine and environmental resources, including issues of search and rescue, emergency response and oil spill prevention.<sup>1135</sup> The Preamble of the Agreement recognizes the responsibilities and special interests of the coastal States of the CAO in connection with the sustainable management and conservation of fish stocks.<sup>1136</sup> Since the 2018 CAOFA refers to the Oslo Declaration, there is no doubt that the term "coastal States of the Arctic Ocean" makes reference to Canada, Denmark in respect of Greenland,

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<sup>1132</sup> Alexander N. Vylegzhanin, Oran R. Young and Paul Arthur Berkman, 'The Central Arctic Ocean Fisheries Agreement as an element in the evolving Arctic Ocean governance complex', in *Marine Policy* 118 (2020) 104001, at p. 7.

<sup>1133</sup> International Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean, signed on 3 October 2018 and entered into force on 25 June 2021, available at <https://www.mofa.go.jp/files/000449233.pdf>, art. 8.

<sup>1134</sup> Valentin Schatz, Alexander Proelss and Liu Nengy, 'The 2018 agreement to prevent unregulated high seas fisheries in the Central Arctic Ocean: A critical analysis', in *International Journal of Marine and Coastal Law* 34, (2), 2019, pp. 195-244, at p. 197.

<sup>1135</sup> Efthymios Papastavridis, 'Fisheries Enforcement on the High Seas of the Arctic Ocean: Gaps, Solutions and the Potential Contribution of the European Union and Its Member States', in *The International Journal of Marine and Coastal Law*, Vol.33, No.2, 2018, pp. 324-360, at p. 338.

<sup>1136</sup> Valentin Schatz, 'The Incorporation of Indigenous and Local Knowledge into Central Arctic Ocean Fisheries Management', in *Arctic Review on Law and Politics*, Vol. 10 (2019), at pp. 130-134.

Norway, Russia and the USA. While there is room to debate whether or not Iceland can be identified as an Arctic coastal State.<sup>1137</sup>

Pursuant to article 1 of the CAOFA, the term “Agreement Area” means the single high-seas part of the CAO that is surrounded by waters within which Canada, Norway, Russia, the USA and Denmark in respect of Greenland exercise jurisdiction over fisheries.<sup>1138</sup> This is the same wording employed in the Oslo Declaration.<sup>1139</sup> The Agreement does not apply to other high seas areas in the Arctic Ocean such as the Donut Hole in the Bering Sea or the Loophole in the Barents Sea.<sup>1140</sup> The objective of preventing unregulated fishing on the high seas is ensured through the application of precautionary measures as part of a long-term strategy to safeguard the health of marine ecosystems and ensure their conservation and sustainable use of fish stocks in Arctic waters.<sup>1141</sup>

The 2018 CAOFA does not exclude the possibility of future agreements between the Parties, including those providing for regulated fishing in the Agreement Area when sufficient data on the state of stocks are available to make informed decisions.<sup>1142</sup> However, unregulated fishing in the CAO is legally prevented by joint mechanisms governed by the Parties.<sup>1143</sup> Provisional conservation and management measures are mentioned in article 3 of the Agreement beginning with the obligation of each Party to fulfil one of two alternative preconditions before authorising vessels flying the flag of a State to engage in commercial fishing in the Agreement Area: 1) regional or subregional fisheries management organisations or agreements shall be established for that area and those organizations shall adopt the relevant conservation and management measures or

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<sup>1137</sup> Erik J. Molenaar, ‘An introduction to the Central Arctic Ocean Fisheries Agreement’, Seminar Breaking new ground in the melting north: a fisheries agreement for the central Arctic Ocean, DG MARE, Brussels, 13 Feb 2018, available at [https://www.uu.nl/sites/default/files/molenaar\\_presentation\\_caof\\_agreement\\_2018\\_02\\_13.pdf](https://www.uu.nl/sites/default/files/molenaar_presentation_caof_agreement_2018_02_13.pdf)

<sup>1138</sup> Supra note 1133, art. 1.

<sup>1139</sup> Supra note 1132, at p. 8.

<sup>1140</sup> Supra note 1138.

<sup>1141</sup> Supra note 1135.

<sup>1142</sup> Roderick Harte, ‘An Introduction to the Central Arctic Ocean Fisheries Agreement’, University of Lapland, available at [https://lauda.ulapland.fi/bitstream/handle/10024/65612/Harte\\_Roderick.pdf?sequence=1&isAllowed=y](https://lauda.ulapland.fi/bitstream/handle/10024/65612/Harte_Roderick.pdf?sequence=1&isAllowed=y)

<sup>1143</sup> Molenaar E J, ‘Participation in the Central Arctic Ocean Fisheries Agreement’ in A Shibata and Ohers (Eds.), *Emerging Legal Orders in the Arctic: The Role of Non-Arctic Actors* (Routledge 2019), pp. 132-170, at p.141.

2) the Parties themselves shall establish temporary conservation and management measures.<sup>1144</sup>

The CAOFA creates an obligation for both Coastal States and other Parties to cooperate to ensure the compatibility of management measures of fish stocks in areas both within and outside national jurisdiction in the Arctic Ocean in order to ensure the protection and management of such species in their entirety.<sup>1145</sup> A similar wording despite the reference to a specific ocean is found in article 7 UNFSA.<sup>1146</sup> Article 4 of the CAOFA providing for a scientific research and monitoring programme shall be interpreted jointly not only with Part XIII of UNCLOS on marine scientific research but also with the legally binding international Agreement on strengthening international scientific cooperation in the Arctic based on relevant scientific information derived from the Joint Scientific Research and Monitoring Programme, from national scientific programmes and other relevant sources.<sup>1147</sup>

Furthermore, taking into account relevant fisheries management observations, the Parties shall consider whether to enter into negotiations for the establishment of one or more additional regional or subregional fisheries management organizations or fisheries management arrangements in the Agreement Area and to establish additional or different provisional conservation and management measures for stocks in the Agreement Area.<sup>1148</sup>

In addition, article 5 of the CAOFA obliges the Parties to set forth conservation and management standards for exploratory fisheries in the Agreement Area within three years after the entry into force of the Agreement.<sup>1149</sup> As specified in article 13, the Agreement is considered by the Parties as a long-term instrument of their environmental policy in the Arctic.<sup>1150</sup> It will remain effective for an initial period of 16 years from its entry into force. Thereafter, the CAOFA will remain valid for a subsequent period of 5 years, unless one

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<sup>1144</sup> Supra note 1133, art.3.

<sup>1145</sup> Nicole Covey, 'Legitimization of the Arctic Coastal States (A5) through the Central Arctic Ocean (CAO) Fisheries Agreement', in Policy Primer – North American and Arctic Defence and Security Network, October 28, 2021, at p.5.

<sup>1146</sup> Supra note 94, art.7.

<sup>1147</sup> P.A. Berkman, A.N. Vylegzhanin, O.R. Young, 'Application and interpretation of the agreement on enhancing international Arctic scientific cooperation', *Moscow J. Int. Law* 3 (2017), at pp. 6–17.

<sup>1148</sup> Ekaterina Uryupova, 'Why do we need a shared Pan-Arctic Fisheries Governance Complex?', in the Arctic Institute – Center for Circumpolar Security Studies, 27 April 2021, available at <https://www.thearcticinstitute.org/need-shared-pan-arctic-fisheries-governance-complex/>

<sup>1149</sup> Supra note 1133, art.5.

<sup>1150</sup> Supra note 1133, art.13.

of the Parties objects to the extension at the last meeting of the Parties or six months before the expiration of the respective period.<sup>1151</sup>

In accordance with article 11 of the CAOFA, the Agreement will become operative 30 days after the date of receipt by the depositary of all instruments of ratification, acceptance, approval or accession to the Agreement of the signatory countries.<sup>1152</sup> If any of the ten Parties does not provide the relevant information to the depositary, the Agreement will not enter into force.<sup>1153</sup> Once the Agreement becomes binding, article 10 allows the Parties to invite other States that have a real interest to join the Agreement.<sup>1154</sup> A number of Parties including Canada have ratified the Agreement or expressed their consent to be bound by it in other forms. In April 2020, eight of the ten signatories, including the EU have taken the necessary measures. Being the CAOFA valid since 2021, it is binding not only for nine signatories countries but also for 27 member States of the EU.<sup>1155</sup>

As observed in the EU Council decision of 4 March 2019, about the conclusion by the EU of the CAOFA, the EU has the authority to take part to the agreement due to the fact that it has exclusive competence within the Common Fisheries Policy to adopt measures for the conservation of marine biological resources and to enter into agreements with third countries and international organizations to that effect.<sup>1156</sup>

According to article 18 letter a of the 1969 Vienna Convention on the Law of Treaties, a State is obliged to refrain from acts that would nullify the object and purpose of a treaty when it has signed the treaty subject to ratification, acceptance or approval until it has made clear its intention not to become a Party to the treaty.<sup>1157</sup> It is considered

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<sup>1151</sup> McDonald Mirabile, 'The Central Arctic Ocean Fisheries Agreement – What it is, is not and might be', WWF Global Arctic Programme, November 21, 2023, available at <https://www.arcticwwf.org/newsroom/features/the-central-arctic-ocean-fisheries-agreement-what-it-is-is-not-and-might-be/>

<sup>1152</sup> Supra note 1133, art.11.

<sup>1153</sup> Nengye Liu, 'China and the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean', in *The Diplomat*, June 10, 2021.

<sup>1154</sup> Supra note 1133, art.10.

<sup>1155</sup> Supra note 1132, at p. 8.

<sup>1156</sup> Council Decision (EU) 2019/407 of 4 March 2019 on the conclusion, on behalf of the European Union, of the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean, Official Journal of the European Union. 15.3.2019. p. L73/1, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2019:073:TOC>

<sup>1157</sup> Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations, Done at Vienna on 21 March 1986, art. 18 lett. a., available at [https://legal.un.org/ilc/texts/instruments/english/conventions/1\\_2\\_1986.pdf](https://legal.un.org/ilc/texts/instruments/english/conventions/1_2_1986.pdf)

unlikely that commercially significant fish stocks will appear in the CAO in the near future.<sup>1158</sup>

Moreover, since it would be complicated for fishing vessels from non-coastal States to operate in the CAO without the support of at least one of the coastal States, the question of the governance of fishing activities in the CAO in this case may fade into the background.<sup>1159</sup> If the development of relevant stocks made further measures desirable, coastal States could return to the 2015 Oslo Declaration on fishing in the CAO and proceed to the activation of procedures for scientific research and monitoring under the terms of this agreement.<sup>1160</sup> In case that no non-Arctic State contrasts such an initiative, the result would be a regime established by coastal States, perhaps with the informal consent of the non-Arctic signatories that have ratified the CAOFA.<sup>1161</sup>

## 5.5 Future scenarios for the governance in the Central Arctic Ocean

As the CAOFA is operative, the matter of stimulating the Parties to accomplish all their obligations under the Agreement in good faith and effectively monitor the actions of their citizens remains.<sup>1162</sup> Each Arctic coastal State reserves the right to regulate or even prohibit fishing in the Arctic Ocean within the 200 mile EEZ as well as the right to provide other States with access to any surplus of allowable catches in those zones under article 62 UNCLOS.<sup>1163</sup> The Arctic coastal States have confirmed their commitment to cooperate between each other and with relevant non-Arctic States for the purpose of conserving the resources of the CAO fisheries and preventing unregulated fishing in the CAO.<sup>1164</sup>

The acceptance of several non-Arctic States and the EU as Parties with equal status in the CAOFA is already an important political and legal step. A commitment to legal and political stability and careful administration lies at the heart of the emerging international

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<sup>1158</sup> Njord Wegge, 'The emerging politics of the Arctic Ocean. Future management of the living marine resources', in *Marine Policy* 51, January 2015, at pp. 331-338.

<sup>1159</sup> *Supra* note 1105, at p. 53.

<sup>1160</sup> *Supra* note 1105, at p. 52.

<sup>1161</sup> Evan T. Bloom, 'The rising importance of non-Arctic States in the Arctic', in *The Wilson Quarterly*, 2022.

<sup>1162</sup> *Supra* note 1135, at p. 341.

<sup>1163</sup> William T. Abel, 'Fishing for an International Norm to Govern Straddling Stocks: The Canada-Spain Dispute of 1995', *The University of Miami Inter-American Law Review*, Vol. 27, No. 3, 1996, pp. 553-583, at p. 564.

<sup>1164</sup> *Supra* note 1047, at p. 321.

response to the changing environment status taking place in the Arctic Ocean.<sup>1165</sup> The prevailing opinion among experts is that the Arctic Ocean can and should be insulated from recent geopolitical conflicts occurring elsewhere.<sup>1166</sup> Shared interests between Arctic and non-Arctic States, including the protection of biodiversity in the Arctic seas should prevail.<sup>1167</sup>

The application of the precautionary approach to govern the growing activity of the CAO reflects this thought. Given the circumstances, one of the options to take into account now is the preparation of additional measures applicable to the CAO and potentially to other parts of the Arctic Ocean.<sup>1168</sup> Universal conventions, including those managed by the International Maritime Organization, the CBD and UNCLOS provide ideas for stricter ecological regulation on a regional basis by coastal States and other relevant countries.<sup>1169</sup> In this context, experience and agency regarding efforts to create marine protected areas in portions of the high seas around Antarctica can provide important instances for the future of the CAO.<sup>1170</sup> Eventually, the entire CAO or significant parts of it could be included in a special regime of preservation and protection of the marine environment.<sup>1171</sup>

Arctic States could still play a leading role in this regard. Finally, in case that transpolar routes become a viable possibility for commercial maritime transport, further regulatory measures could be considered. In this area, the Polar Code is already applicable.<sup>1172</sup> But there are a number of concerns involving issues not covered by the code in its current form, which would be particularly important in conjunction with

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<sup>1165</sup> Paul Arthur Berkman, Alexander L. Vylegzhanin (Eds.), 'Environmental Security in the Arctic Ocean', in Springer, Dordrecht, 2013, at pp. 19-25.

<sup>1166</sup> P.A. Berkman, A.N. Vylegzhanin, A. Pope, L. Kullerud, O.R. Young, 'The Arctic Science Agreement propels science diplomacy', in *Science* 358 (2017), at pp. 596–598.

<sup>1167</sup> Timo Koivurova, Stefan Kirchner and Pirjo Kleemola-Juntunen, 'The Arctic Ocean: Are We Ready to Govern a New Ocean?', in *Global Challenges and the Law of the Sea*, May 2020, pp. 59-80, at p. 68.

<sup>1168</sup> Henry P. Huntington and Min Pan, 'A precautionary approach to fisheries in the Central Arctic Ocean: Policy, science, and China', in *Marine Policy* 63, January 2016, at pp. 153-157.

<sup>1169</sup> Daniela Addis, 'The protection and preservation of the marine environment', at pp. 15-16, available at <https://www.vliz.be/imisdocs/publications/288227.pdf>

<sup>1170</sup> Cassandra M. Brooks, Evan Bloom et al., 'The Ross Sea, Antarctica: A highly protected MPA in international waters', in *Marine Policy*, Volume 134, December 2021, 104795, at p. 1.

<sup>1171</sup> Rui Jiang and Ping Guo, 'Sustainable Management of Marine Protected Areas in the High Seas: From Regional Treaties to a Global New Agreement on Biodiversity in Areas beyond National Jurisdiction', in *Sustainability* 2023, 15(15), 11575.

<sup>1172</sup> Henry P. Huntington, Julia Olsen et al., 'Effects of Arctic commercial shipping on environments and communities: context, governance, priorities', in *Transportation Research Part D: Transport and Environment*, Volume 118, May 2023, 103731, at p. 2.



transpolar maritime transport.<sup>1173</sup> A long-term option would be to abandon the complex governance of the Arctic Ocean, including the agreement, into broader agreements designed to conserve marine biological diversity and ensure the sustainable use of marine resources.<sup>1174</sup>

Such an initiative could proceed in connection with the ongoing effort under the auspices of the UN to develop a legally binding global international tool for the sustainable use of marine biodiversity in areas outside national jurisdiction.<sup>1175</sup> A useful step in this direction would be the launch of a suitable intergovernmental scientific organization, an international Arctic Council for the Exploration of the Sea, with a mandate to provide the appropriate knowledge for informed and coordinated decision-making regarding the entire range of human activities affecting the Arctic Ocean.<sup>1176</sup>

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<sup>1173</sup> Zhihua Zhang, Donald Huisingsh and Malin Song, 'Exploitation of trans-Arctic maritime transportation', in *Journal of Cleaner Production* 212, March 2019, pp. 960-973, at p. 968.

<sup>1174</sup> Oran R. Young and Jong-Deog Kim, 'Next steps in Arctic Ocean Governance Meeting the challenge of coordinating a dynamic regime complex', in *Marine Policy*, Volume 133, November 2021, 104726, at p. 3.

<sup>1175</sup> Kahlil Hassanali and Robin Mahon, 'Encouraging proactive governance of marine biological diversity of areas beyond national jurisdiction through Strategic Environmental Assessment (SEA)', in *Marine Policy*, Volume 136, February 2022, 104932, at p. 2.

<sup>1176</sup> E.J. Molenaar, 'Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea', in *The International Journal of Marine and Coastal Law* 27(3), January 2012, pp. 553-595, at p. 561.

## CHAPTER VI

### 6.1 The Donut Hole and its fisheries governance

The Donut Hole is a roughly 55,000 square nautical mile section of the high seas in the Aleutian Basin in the Central Bering Sea, entirely surrounded and defined by the seaward limits of the Russian and U.S. EEZs.<sup>1177</sup> It lies north of the Aleutian Archipelago between the 55°N and 60°N parallels and straddles the 180° meridian about halfway between the Kamchatka peninsula and Alaska.<sup>1178</sup> It is located almost wholly on the North American side of the US-Russia Convention line of 1867. Besides, the Donut Hole comprises about 8% of the Bering Sea.<sup>1179</sup>

Walleye pollock, better known as the Alaskan pollock, is the target of North America's most copious and profitable fisheries, making up about 40% of the total U.S. fishing landings, with a gross value exceeding one billion dollars annually.<sup>1180</sup> It represents the largest food fishing activity in the world. Pollock in the Eastern Bering Sea is considered one of the best managed stocks due to the stability observed in commercial landings.<sup>1181</sup> However, despite intensive efforts to ensure balance by fisheries managers, fisheries are subject to continuous ebbs and flows, as target populations go through periods of high and low abundance.<sup>1182</sup>

#### 6.1.1 The premise of one of the most shattering fishery collapse

Recently, there has been some concern about the health of the main pollock stock that lives on the eastern shelf of the Bering Sea.<sup>1183</sup> Beyond the shelf, the little-known rise

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<sup>1177</sup> William V. Dunlap, 'A pollock-fishing agreement for the Central Bering Sea', in *Boundary and Security Bulletin*, Vol. 2, No. 2, 1994, pp. 49-57, at p. 49.

<sup>1178</sup> *Ibid.*

<sup>1179</sup> Alexander Lewis, 'Regionalism and the Law of the Sea: The Case of Semi-enclosed Seas', in *Ocean Development and International Law* 2(2), 1974, pp. 151-186, at p. 168.

<sup>1180</sup> Hjálmar Vilhjálmsson and Alf Hákon Hoel, 'Fisheries and Aquaculture', in *Arctic Climate Impact Assessment*, 2005, pp. 691-780, at p. 747.

<sup>1181</sup> Morrison P. C. J., M. Torres, and R. G. Felthoven, 'Fishing revenue, productivity and product choice in the Alaskan pollock fishery', in *Environmental and Resource Economics* 44, 2009, pp. 457-474, at p. 461.

<sup>1182</sup> Daniel D. Hoggarth, Savitri Abeyasekera et al., 'Stock assessment for fishery management: a framework guide to the stock assessment tools of the Fisheries Management Science Programme', *FAO Fisheries Technical Paper* 487, 2006, at p. 41.

<sup>1183</sup> 'A tale of two fisheries', in *The Economist*, 10 September 2009, available at

and decline of pollock harvesting in the Aleutian Basin (the deep waters between the continental shelves of Russia and the USA) of the Central Bering Sea during the 1980s ranks among the most striking fishing collapses that have occurred in the modern history of fishing in the northern hemisphere along with the collapse of the NSSH in the 1970s.<sup>1184</sup> One can define as a collapse of a fishing activity when there is a drop in catches to 10% of the previous maximum level.<sup>1185</sup>

Alaskan pollock often rules the coastal ecosystems of the North Pacific Ocean.<sup>1186</sup> Pollock is generally thought of as a semi-demersal inhabitant of the continental shelf, which extends across the Subarctic Pacific Ocean, where it has existed for about 3 million years.<sup>1187</sup> Given how much was known about this fish species, it came as a surprise in the 1970s when a large population was found in the deep waters above the Aleutian Basin and as a result the pollock fishery developed rapidly.<sup>1188</sup> Most of the fishing in the Aleutian Basin took place in the Donut Hole, where pollock were caught in the 1980s exclusively by non-US vessels, especially from countries such as Japan, the former Soviet Union, but also China, Poland and South Korea.<sup>1189</sup>

Pollock in the Donut Hole was believed to be part of a more sizeable population in the Aleutian Basin, a transnational population that seasonally migrates across international borders.<sup>1190</sup> The highest officially declared catch in the Aleutian Basin, including U.S. and international waters of the Donut Hole but excluding Russian territorial waters was 1.7 million tons in 1987. By far the more substantial harvest area was the Donut Hole.<sup>1191</sup> In 1992, the TAC plummeted to 10000 tons and the estimated

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[http://www.economist.com/node/14401157?story\\_id=E1\\_TQODTTVS&CFID=170225468&CFTO\\_KEN=52527530](http://www.economist.com/node/14401157?story_id=E1_TQODTTVS&CFID=170225468&CFTO_KEN=52527530)

<sup>1184</sup> Richard G. Bakkala, 'Structure and Historical Changes in the Groundfish Complex of the Eastern Bering Sea', NOAA Technical Report NMFS 114, July 1993, at p. 65.

<sup>1185</sup> Mullon, C., P. Fré, and P. Cury, 'The dynamics of collapse in world fisheries', in *Fish and Fisheries* 6, 2005, pp. 111–120, at p. 114.

<sup>1186</sup> 'Alaska Pollock', in NOAA Fisheries, available at <https://www.fisheries.noaa.gov/species/alaska-pollock>

<sup>1187</sup> Yong-Yub Kim, Yu-Kyeong Kang et al., 'Potential Impact of Late 1980s Regime Shift on the Collapse of Walleye Pollock Catch in the Western East/Japan Sea', in *Frontiers in Marine Science*, Sec. Physical Oceanography, Volume 9, 2022, at pp. 1-2.

<sup>1188</sup> *Ibid.*, at p.2.

<sup>1189</sup> 'Case Study: Walleye Pollock and the North Pacific "Donut Hole"', in *The Footprint of Distant Water Fleets on World Fisheries*, WWF, Endangered Seas Campaign, 1998, at p. 42.

<sup>1190</sup> James N. Ianelli, S. J. Barbeaux et al., 'Assessment of walleye pollock in the Bogoslof Island Region', Alaska Fisheries Science Center, December 2022, at p. 2.

<sup>1191</sup> Kevin M. Bailey, 'An Empty Donut Hole: the Great Collapse of a North American Fishery', in *Ecology and Society* 16(2): 28, 2011, at p. 3.

biomass dropped in 1988 to less than 50% of the peak abundance (while catches augmented). In any case, a collapse had occurred.<sup>1192</sup> Official catch records indicate that fishing in the Aleutian Basin began in 1984, but it is clear from U.S. observer records that fishing has been considerable since at least 1981.<sup>1193</sup> The fishing in the Donut Hole intensified only after the Americanization of catches within the territorial waters of the USA, pushing foreign fishing into the international zone of the Aleutian Basin.<sup>1194</sup>

In 1980, about 50% of the crab fishing industry belonged to Norwegian emigrants.<sup>1195</sup> With conspicuous declines in Bering Sea crab stocks in the early 1980s, a large portion of the Norwegian-American fleet was converted to trawlers, strengthening a new alliance in which U.S. vessels caught fish and delivered it to foreign processors at sea. U.S. fishermen had priority over the TAC in the Fishery Conservation Zone of up to 200 nm as a consequence of the 1976 Fishery Conservation and Management Act (FCMA).<sup>1196</sup> Norwegian investors financed a colossal reconstruction of U.S. vessels into trawlers, industrial trawlers and processors with much of the work carried out in Norway and funded by Norwegian interests.<sup>1197</sup> There were also U.S. subsidies to rebuild and modernize the fleet.<sup>1198</sup>

The Japanese adopted a different strategy to ensure access to U.S. pollock resources: they invested in shoreside processing plants and some processing ships.<sup>1199</sup> In 1989, Japan controlled 85% of the interest in shoreside processing plants.<sup>1200</sup> Access to a limited resource has led to a political fight between inshore and offshore processors for

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<sup>1192</sup> Keith R. Criddle, 'Adaptation and maladaptation: factors that influence the resilience of four Alaskan fisheries governed by durable entitlements', in *ICES Journal of Marine Science* 69(7), 2012, pp. 1168–1179, at p. 1174.

<sup>1193</sup> William T. Burke, 'Fishing in the Bering Sea Donut: Straddling Stocks and the New International Law of Fisheries', in *Ecology Law Quarterly*, Vol. 16, No. 1 (1989), pp. 285-310, at p. 294.

<sup>1194</sup> R. Hornnes, 'Norwegian investments in the U.S. factory trawler fleet, 1980–2000', in Thesis – University of Bergen, Bergen, Norway, 2006, at p. 53.

<sup>1195</sup> *Ibid.*, at p. 37.

<sup>1196</sup> Øyvind Malmin, 'Norwegian-Americans in the King Crab Fishery – Exploring and Explaining the Norwegian-American participation in the King Crab Fishery in Alaska from 1920-1983', Master Thesis in History – University of Bergen, Spring 2008, at p. 59.

<sup>1197</sup> R. Hannesson, 'Buy-back programs for fishing vessels in Norway', Working Paper No. 13/04, Centre for Fisheries Economics – Discussion paper No. 3/2004, Institute for Research in Economics and Business Administration Bergen, March 2004.

<sup>1198</sup> M. Weber, 'From abundance to scarcity', in Island Press, Washington, D.C., USA, 2001.

<sup>1199</sup> Laurie A. Frost, 'The Joint Venture Controversy: A Short-Term Solution for a Long -Term Fisheries Policy', in *Theses and Major Papers*. Paper 82, 1983, at p. 26.

<sup>1200</sup> L. Helm, 'Catch as catch can...Seattle's factory trawlers run into an Alaskan storm', in *Seattle Post Intelligencer*, October 23, 1989, B3.

rights to pollock catch quotas, resulting in various allocation schemes.<sup>1201</sup> Protectionist bills were initiated, including the Antireflagging Act in 1988, different inshore and offshore processor allocation schemes, and finally the American Fisheries Act of 1998.<sup>1202</sup>

With the foreign fleet progressively being expelled from U.S. territorial waters by the ability of the U.S. fleet to catch all of the TAC, the Donut Hole fishery in international waters escalated.<sup>1203</sup> In 1985, the reported catches from the Donut Hole reached 360000 tons of fish.<sup>1204</sup> In 1988, the North Pacific Fisheries Management Council convened for a moratorium on fishing in the Donut Hole, but never happened. In 1991, the harvest collapsed down to 293000 tons and fishing activities were almost stopped in 1992 with a drawdown of 10000 tons.<sup>1205</sup> In 1993, a moratorium was finally established by an international agreement just before the signing of the 1994 Convention on the Conservation and Management of the Pollock Resources (CCMPR) in the Central Bering Sea.<sup>1206</sup>

### **6.1.2 The causes of Walleye pollock collapse**

The cause of criticality in the Donut Hole was a massive concentration of fishing activities in a small area and catches in the international waters of the Donut Hole were unregulated and probably misrepresented. By the time fishing was stopped by the moratorium in 1993, it was too late.<sup>1207</sup> Japanese researchers estimated that there were 148 vessels fishing for pollock in the Donut Hole in 1986-1987 and the efficiency of

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<sup>1201</sup> James Strong and Keith R. Criddle, 'Fishing for Pollock in a Sea of Change: a historical analysis of the Bering Sea Pollock Fishery', School of Fisheries and Ocean Sciences – University of Alaska Fairbanks, 2013, at p. 73.

<sup>1202</sup> Chris W. Oliver, 'Implementing the American Fisheries Act of 1998: Current and Future Actions by the North Pacific Fishery Management Council', prepared for the 1999 National Fishery Law Symposium, March 25-26, 1999, University of Washington School of Law, at p. 4.

<sup>1203</sup> Carmel Finley, 'The Industrialization of Commercial Fishing, 1930-2016', in Oxford Research Encyclopedia of Environmental Science, 2016, pp. 11-22, at p. 18.

<sup>1204</sup> Jolene Unsoeld, 'Fighting Bad Fisheries Policy', The Christian Science Monitor, November 2, 1993.

<sup>1205</sup> Katrina M. Wyman, 'Unilateral steps to end high seas fishing', in Texas A & M Law Review 259 (2018), NYU Law and Economics Research Paper No. 19-01, January 2019, pp. 259-296, at p. 268.

<sup>1206</sup> Timothy D. Smith, 'United States Practice And The Bearing Sea: Is It Consistent With A Norm Of Ecosystem Management?', in Ocean and Coastal Law Journal, Vol.1, No.2, Art.2, 1994, pp. 141-186, at p. 171.

<sup>1207</sup> Jon L. Jacobson, 'The new internationalization of North Pacific Fisheries', in Willamette Journal of International Law and Dispute Resolution, Vol. 6, No. 1, 1998, pp. 1-14, at p. 7.

methods for catching pollock was constantly improving.<sup>1208</sup> At that time, the biomass of fish in the Aleutian Basin and the Donut Hole was uncertain.<sup>1209</sup> Harvest levels were still rising in the late 1980s, just as the stock collapsed; the harvest went on regardless of knowledge of the state of the fish resource, which often happens in the initial phase of fishing.<sup>1210</sup>

Historical records show that experts in the field, while recognizing the potential for a dangerous situation, did not realize the condition of population decline in 1989 when the harvest reached its peak.<sup>1211</sup> Illegal fishing outside the international zone in U.S. waters and under-reporting of harvests on a massive scale were suspected; various verbal notes were released by the U.S. State Department on charges of evidence of industrial conspiracies organized to defraud.<sup>1212</sup> In response, the national government of Japan rigorously dished out punishments for established offenders, but effectively patrolling the distant sea expanse and capturing them was difficult.<sup>1213</sup>

IUU fishing probably occurred with the Soviet pollock fishery in the western Bering Sea and this continued to pose a serious matter in the Russian EEZ of the Bering Sea.<sup>1214</sup> The pressure of intensive fishing was created by an overlap of events that led to overfishing till commercial extinction.<sup>1215</sup> In addition, the downswing in crab harvesting in the 1980s, the increase in the price of frozen fish and a favourable currency exchange have stimulated the conversion of many crabbers to trawlers.<sup>1216</sup>

The FCMA set forth the conditions for the Americanization of the groundfish fishery in U.S. waters with the unintended consequence of directing the large foreign

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<sup>1208</sup> Sasaki, T. and T. Yoshimura, 'Past progress and present condition of the Japanese pollock fishery in the Aleutian Basin', in Annual Meeting of the International North Pacific Fisheries Commission, October 1987, Vancouver, British Columbia, Canada. Fisheries Agency of Japan, Tokyo, Japan.

<sup>1209</sup> C. Miller, 'How many pollock in donut hole?', in Alaska Fisherman's Journal, October 1987, at pp. 54-56.

<sup>1210</sup> P. Greenberg, 'Four fish: the future of the last wild food', in Penguin Press, New York, USA, 2010.

<sup>1211</sup> E. L. Miles, 'The U.S./Japan fisheries relationship in the northeast Pacific: from conflict to cooperation?', Fisheries Management Foundation and Fisheries Research Institute, FMF-FRI-002, University of Washington, Seattle, Washington, USA, 1989.

<sup>1212</sup> Ibid.

<sup>1213</sup> Mizukami Chiyuki, 'The fisheries policy of Japan under the new law of the sea', in Asian Yearbook of International Law, Vol. 8, 2020, at pp. 71-72.

<sup>1214</sup> A. Vaisman, 'Trawling in the mist. Industrial fisheries in the Russian part of the Bering Sea', in Cambridge Traffic Network Report, 2001, available at [http://www.traffic.org/fisheries-reports/traffic\\_pub\\_fisheries5.pdf](http://www.traffic.org/fisheries-reports/traffic_pub_fisheries5.pdf)

<sup>1215</sup> R. Baird, 'Illegal, unreported and unregulated fishing: an analysis of the legal, economic and historical factors relevant to its development and persistence', in Melbourne Journal of International Law, Vol. 5, No. 2, 2004, pp. 299-334, at p. 305.

<sup>1216</sup> Supra note 1201, at p. 117.

fishery to the Donut Hole, where it was unregulated.<sup>1217</sup> The attitude of foreign deep-sea fishing at that time contributed to the collapse: the resources of the open seas were considered unlimited.<sup>1218</sup> Everything outside the sovereign waters was available on the principle of ‘first come, first served’ and with the ‘pulse’ fishing, the catchers exploited one area and then moved to other more productive ones.<sup>1219</sup>

However, there was still the prevailing belief that an excellence of unused fish existed in the ocean. The perception varied slightly after the passage of the U.S. Endangered Species Act and the Marine Mammal Protection Act in the early 1970s, which highlighted the forage needs of other ecosystem components, whereas before then the pursuit of industry profit had been the main concern.<sup>1220</sup> Such considerations took hold in fishing in the Bering Sea with the halting of pollock catching in the Aleutian Islands and some areas of the shelf in 1999 to preserve sea lion habitat.<sup>1221</sup>

## **6.2 A critical analysis to the Bering Sea Donut Convention to resolve overfishing disputes**

Between 1987 and early 1991, the USA and the Soviet Union worked bilaterally to develop a proposal to keep pollock fishing in the Donut Hole under control.<sup>1222</sup> Although the two coastal States sought to regulate fishing bilaterally, they eventually agreed that fishing would be better regulated through a multilateral agreement that includes both themselves and DWFNs.<sup>1223</sup> The two coastal States also recognized that any agreement would have to be based on UNCLOS.<sup>1224</sup> At first, there was a disagreement between the

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<sup>1217</sup> ‘Laws and Policies: Magnuson-Stevens Act’, in NOAA Fisheries, available at <https://www.fisheries.noaa.gov/topic/laws-policies>

<sup>1218</sup> David Dubay, ‘Round Two for Arctic Fishing?’, in *Marine Biodiversity of Areas beyond National Jurisdiction*, 2021, pp. 331-341, at p. 335.

<sup>1219</sup> D. L. Alverson, ‘Race to the sea: the autobiography of a marine biologist’, in iUniverse, Inc., New York, USA, 2008.

<sup>1220</sup> A. F. McEvoy, ‘The fisherman’s problem. Ecology and law in the California fisheries, 1850–1980’, in Cambridge University Press, New York, USA, 1986, at p. 82.

<sup>1221</sup> *Supra* note 1201, at p. 142.

<sup>1222</sup> Rosemary Gail Rayfuse, ‘Regional Fisheries Organisations Dealing with Straddling Fish Stocks’, in *Non-Flag State Enforcement in High Seas Fisheries*, 2004, pp. 205-294, at p. 285.

<sup>1223</sup> Lourene Miovski, ‘Solutions in the Convention on the Law of the Sea to the Problem of Overfishing in the Central Bering Sea: Analysis of the Convention, Highlighting the Provisions Concerning Fisheries and Enclosed and Semi-Enclosed Seas’, in *San Diego Law Review*, Vol. 26, No. 3, 1989, pp. 525-574, at p. 529.

<sup>1224</sup> Christopher J. Carr, ‘Recent Developments in Compliance and Enforcement for International Fisheries’, in *Ecology Law Quarterly*, Vol. 24, No. 4, 1997, pp. 847-860, at p. 854.

USA and Soviet Union regarding the provisions of UNCLOS to be laid at the basis of the agreement.<sup>1225</sup>

The Soviet Union argued that the Bering Sea is a semi-closed sea within the meaning of article 122 UNCLOS.<sup>1226</sup> Furthermore, the Soviets claimed that article 123 UNCLOS provided a legal basis for the two coastal States of the Bering Sea to manage the biological resources of the entire Bering Sea.<sup>1227</sup> The USA had never recognized the Bering Sea as closed or semi-closed. The concern was that such recognition would lead to an increase of similar requests that would affect maritime areas where high seas freedoms apply, especially freedom of navigation and this would go against U.S. interests. In any case, even if the Bering Sea was considered semi-closed, the USA perceived that little would be gained from the point of view of fisheries management.<sup>1228</sup>

The USA believed that article 123 UNCLOS did not grant coastal States adjacent to a semi-enclosed area any right to regulate fishing in a high seas area in the semi-enclosed sea.<sup>1229</sup> Moreover, article 123 UNCLOS does not impose any obligation on other States to enter into any agreement; article 123 (d) merely confers on the coastal States the power to invite other States concerned or international organizations to cooperate with them.<sup>1230</sup> In the end, the USA convinced the Soviet Union that the Donut Hole Agreement should be negotiated on the basis of other UNCLOS provisions, namely those that recognize the right of the coastal State to exercise exclusive jurisdiction over fishing within its EEZ and those that regulate fishing on the high seas.<sup>1231</sup>

The USA also urged reliance on article 63(2) UNCLOS, which obliges both coastal States and DWFNs to seek agreement on measures to conserve straddling stocks in a high

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<sup>1225</sup> Stuart B Kaye, 'Legal approaches to Polar fisheries regimes: a comparative analysis of the Convention for the Conservation of Antarctic Marine Living Resources and the Bering Sea Doughnut Hole Convention', in *California Western international law Journal*, Vol. 26, No. 1, p. 75-114, 1994-1995, at p. 101.

<sup>1226</sup> *Supra* note 1223, at p. 532; *supra* note 66, art. 122

<sup>1227</sup> Joseph J. Darby, 'The Soviet doctrine of the Closed Sea', in *San Diego Law Review*, Vol. 23, 1986, p. 685-699, at p. 697; *supra* note 66, art. 123.

<sup>1228</sup> John H. McNeill, 'America's Maritime Boundary With the Soviet Union', in *Naval War College Review*, Vol. 44, No. 3, 1991, pp. 46-57, at p. 50.

<sup>1229</sup> Seokwoo Lee and Jeong Woo Kim, 'UNCLOS and the Obligation to Cooperate: International Legal Framework for Semi-Enclosed Seas Cooperation', in *Maritime Cooperation in Semi-Enclosed Seas: Asian and European experiences*, 2019, pp. 11-29, at p. 19.

<sup>1230</sup> Cf. B. Oxman, 'The Third United Nations' Conference on the Law of the Sea: The 1977 New York Session', in *American Journal of International Law*, 1978, pp. 57-83, at p. 80.

<sup>1231</sup> *Supra* note 1223, at p. 536.



seas area such as the Donut Hole.<sup>1232</sup> During the six-nation negotiations that followed, the coastal States drew heavily on UNCLOS to support their positions.<sup>1233</sup> They pointed out that UNCLOS gives them the exclusive responsibility for conserving and managing the pollock resource in their respective areas, as well as the right for their vessels to harvest the total allowable pollock catch in those zones.<sup>1234</sup> More generally, they stated that the collapse of pollock would have unforeseeable consequences for the ecosystem, calling into question the commitment of DWFNs to honour their obligations under article 192 UNCLOS to protect and preserve the marine environment.<sup>1235</sup>

The Soviet Union and the USA noted that under article 63(2) UNCLOS, DWFNs must seek to reach an agreement with coastal States with respect to the conservation of straddling stocks on the high seas, regardless of whether coastal States vessels harvest that stock on the high seas.<sup>1236</sup> Consequently, there is no corresponding obligation for the coastal State to seek agreement with the States fishing on the high seas with regard to the conservation of straddling stocks in the coastal State area.<sup>1237</sup> In addition, the right of non-coastal States to fish in deep water zones such as the Donut Hole is subject to certain conditions, including the rights, duties and interests of coastal States listed in article 116 UNCLOS.<sup>1238</sup> The freedom to harvest on the high seas is dependent on the obligation to conserve and cooperate with other States in the conservation of living marine resources of the high seas.<sup>1239</sup>

The coastal States added that people living in the fishing communities of Alaska and the Soviet Far East were more vulnerable to economic damage from overfishing in

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<sup>1232</sup> Supra note 66, art. 63(2).

<sup>1233</sup> Jeffrey L Canfield, 'Recent developments in Bering Sea fisheries conservation and management', in *Ocean Development and International Law: The Journal of Marine Affairs*, Vol. 24, No. 3, pp. 257-289, 1993, at p. 262.

<sup>1234</sup> Leilei Zou and Henry P. Huntington, 'Implications of the Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea for the management of fisheries in the Central Arctic Ocean', in *Marine policy: The International Journal for Economics Planning and Politics of Ocean Exploitation*, Vol. 88, p. 132-138, 2018, at p. 135.

<sup>1235</sup> David A. Balton, 'The Bering Sea Doughnut Hole Convention: Regional Solution, Global Implications', in *Governing High Seas Fishery: the interplay of global and regional regimes*, 2001, pp. 142-177, at p. 159.

<sup>1236</sup> Supra note 1223, at p. 541.

<sup>1237</sup> Julie R. Mack, 'International fisheries management: how the U.N. Conference on Straddling and Highly Migratory Fish Stocks changes the law of fishing on the high seas', in *California Western international law Journal*, Vol. 26, No. 2, p. 313-333, 1996, at p. 320.

<sup>1238</sup> Supra note 66, art. 116

<sup>1239</sup> Chuanliang Wang, Qian Zhao and Yen-Chiang Chang, 'On the legal status of marine fishery resources: From the perspectives of international fishery law', in *Heliyon*, Volume 9, Issue 4, April 2023.

the Bering Sea than any citizen of the DWFNs.<sup>1240</sup> Unlike the fishing vessels of the countries catching in distant waters, these communities could not move to other areas in search of other stocks once the pollock resource was exhausted.<sup>1241</sup> DWFNs responded that their ships, especially those of Japan and South Korea, had been fishing for years for pollock in the Bering Sea and indeed had developed the technology to successfully harvest and process pollock.<sup>1242</sup> They initially believed that pollock harvests in the Donut Hole had no significant influence on what they considered separate pollock stocks occurring in coastal areas.<sup>1243</sup>

In any event, the coastal States had at least the same responsibility as the DWFNs as regards the status of the pollock stock and should have borne at least the same part of the conservation burdens necessary to enable the resource to be recovered.<sup>1244</sup> States fishing on the high seas would not agree to limit or end the Donut Hole pollock fishery to just allow coastal States to continue fishing for pollock in their areas.<sup>1245</sup> According to the DWFNs, UNCLOS, recognizing the right of coastal States to establish EEZs up to 200 nm, had already transferred to those States over the relatively few desirable fishing grounds in the remaining high seas areas.<sup>1246</sup> In addition, the UN Charter acknowledges the sovereign equality of all States, a principle that must be respected when drawing up any agreement aimed at regulating fishing in the Donut Hole. Coastal States should not have preferential rights under such agreement.<sup>1247</sup>

### 6.2.1 The purpose of the Convention

The ten conferences held to negotiate the CCMPR were marked by a rising concern on the part of coastal States for the condition of pollock and the wider Bering Sea

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<sup>1240</sup> Supra note 1201, at p. 59.

<sup>1241</sup> Supra note 1193, at p. 299.

<sup>1242</sup> Supra note 1213, at p. 72.

<sup>1243</sup> Supra note 1218, at p. 333.

<sup>1244</sup> Vidar G. Westpestad, 'The Status of Bering Sea Pollock and the Effect of the "Donut Hole" Fishery', in *Fisheries*, Vol. 18, 1993, Issue 3, pp. 18-24, at p. 21.

<sup>1245</sup> Yong-Yub Kim, Yu-Kyeong Kang et al., 'Potential Impact of Late 1980s Regime Shift on the Collapse of Walleye Pollock Catch in the Western East/Japan Sea', in *Frontiers in Marine Science*, Sec. Physical Oceanography, Volume 9 – 2022,

<sup>1246</sup> Leonardo Bernard, 'Historic fishing rights and the exclusive economic zone', in *Indonesian Journal of International Law*, Vol. 18, No. 2, Article 7, 2021, pp. 161-182, at p. 176.

<sup>1247</sup> United Nations, Charter of the United Nations, 1945, 1 UNTS XVI, art. 2(1), available at <https://treaties.un.org/doc/publication/ctc/uncharter.pdf>

ecosystem.<sup>1248</sup> This trouble was opposed by disinclined concessions by DWFNs to reduce pollock fishing and eventually suspend it in the Donut Hole.<sup>1249</sup> The incentive towards a deal increased as the collapse of the Aleutian Basin pollock stock became more discernible.<sup>1250</sup> The final conference, hosted by the USA in February 1994, ended with the heads of all delegations agreeing that consistency of conservation and management measures should be achieved between the Donut Hole and the two EEZs.<sup>1251</sup> The USA, China, South Korea and Russia signed the Convention on June 16, 1994 in Washington whereas Japan and Poland ratified it later in 1994.<sup>1252</sup>

Article I of the CCMPR limits the geographical scope of the Convention to the high seas area of the Bering Sea beyond 200 nm from the baselines from which the width of the Bering Sea coastal States territorial sea of is measured, unless otherwise provided by the Convention.<sup>1253</sup> Activities under the Convention for scientific purposes may extend beyond the Convention Area within the Bering Sea.<sup>1254</sup> As a result, the Convention generally applies only to the Donut Hole, the high seas area of the Bering Sea beyond the EEZs.<sup>1255</sup> By adopting this general rule, however, the Parties recognized that scientific analysis and related research on the pollock resource could not be restricted to the Donut Hole, since the resource was located not only in the Donut Hole but also in both EEZs.<sup>1256</sup>

During the early stages of the negotiations, Poland proposed that all aspects of the Convention, including any agreed pollock conservation and management measures, apply to both the Donut Hole and the EEZs of coastal States.<sup>1257</sup> The coastal States replied that

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<sup>1248</sup> Supra note 1233, at p. 267-272.

<sup>1249</sup> Supra note 1234, at p. 133.

<sup>1250</sup> 'Central Bering Sea Pollock Workshop conducted under the Convention for the Conservation of Pollock Resources in the Central Bering Sea', 17-21 July 2000, held at NOAA Regional Center 7600 Sand Point Way NE Seattle at p. 2, available at <https://apps-afsc.fisheries.noaa.gov/REFM/CBS/Docs/Central%20Bering%20Sea%20Pollock%20Workshop%20July%202000.pdf>

<sup>1251</sup> William Dunlap, 'Bering Sea – Current Legal Developments', in *International Journal of Marine and Coastal Law*, 1995, at p. 114.

<sup>1252</sup> 'Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea', done at Washington, enacted in 1994 and entered into force on 8 December 1995, available at <https://www.jus.uio.no/english/services/library/treaties/06/6-05/pollock-resources-bering.html>

<sup>1253</sup> *Ibid.*, art. 1.

<sup>1254</sup> *Ibid.*

<sup>1255</sup> Alexey Vaisman, 'Trawling in the mist: industrial fisheries in the Russian part of the Bering Sea', in *Traffic International*, 2001, at p. 11.

<sup>1256</sup> A. Saguirian, 'Russia and Some Pending Law of the Sea Issues in the North Pacific: Controversies over High Seas Fisheries Regulation and Delimitation of Marine Spaces', in *Ocean Development and International Law*, Vol. 23, No. 1, 1992, at pp. 2-7.

<sup>1257</sup> Supra note 1233, at pp. 269-270.

the Polish proposal contravene article 63(2) UNCLOS, which calls on States to try to agree on conservation measures only for the high seas area.<sup>1258</sup> However, the coastal States have accepted that, in order to achieve effective conservation, the measures taken for pollock on the high seas should be compatible with the measures adopted by the coastal States for the management of the same stock in their respective EEZs.<sup>1259</sup> Therefore, the Record of Discussions embraced jointly with the Convention recognized the need for compatible measures. The coastal States have expressed their intent to prohibit fishing for pollock from the Aleutian Basin in their areas as long as the CCMPR continues to ban fishing for that stock in the Donut Hole.<sup>1260</sup>

If the circumstances ameliorated in such a way as to enable the resumption of fishing activities in the Donut Hole, coastal States would likewise open their zones for harvesting on the Aleutian Basin stock at an appropriate level, taking into account the level of fishing set for the Donut Hole under the CCMPR.<sup>1261</sup> The biological purpose of the Convention is generally limited to pollock. DWFNs led by Japan, wanted the Convention to deal only with pollock, leaving matters concerning the other fish stocks in the Donut Hole to be considered elsewhere.<sup>1262</sup> The USA and the Soviet Union initially sought a provision in the CCMPR to reaffirm the ban on fishing on the high seas of anadromous species found in other treaties.<sup>1263</sup> They also voted in favour of a ban on the detention of anadromous species and herring caught fortuitously in the pollock fishery.<sup>1264</sup>

Substantially, the coastal States hoped that the Convention would create a forum for cooperation efforts on all pollock-related species.<sup>1265</sup> However, due to the strong political pressure for a speedy conclusion of the negotiations, the coastal States realized that the

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<sup>1258</sup> Mark Christopherson, 'Toward a Rational Harvest: The United Nations Agreement on Straddling Fish Stocks and Highly Migratory Species', in *Minnesota Journal of International Law*, 1996, pp. 357-379, at p. 366.

<sup>1259</sup> *Supra* note 1224, at p. 855.

<sup>1260</sup> Report of the Second Annual Conference of the Parties (1997) para 6.D.2.

<sup>1261</sup> Andreas Østhagen, 'High North, Low Politics—Maritime Cooperation with Russia in the Arctic', in *Arctic Review on Law and Politics*, Vol. 7, No. 1 (2016), pp. 83-100, at p. 88.

<sup>1262</sup> *Supra* note 1222, at p. 289.

<sup>1263</sup> Art. 66 (3) of the UNCLOS generally prohibits directed fishing for anadromous stocks on the high seas, except in cases where the prohibition would result in 'economic dislocation' for a state other than the state of origin. At the time the LOS Convention was concluded, only Japan maintained a high seas fishery for anadromous stocks. The 1992 Anadromous Stocks Convention, to which Japan is party, ended that fishery.

<sup>1264</sup> Rosemary Gail Rayfuse, 'Regional Fisheries Organisations Dealing with Anadromous Species', in *Non-Flag State Enforcement in High Seas Fisheries*, pp. 103-136, 2004, at p. 120.

<sup>1265</sup> W. V. Dunlap, 'Bering Sea-The Donut Hole Agreement', in *The International Journal of Marine and Coastal Law*, Vol. 10, No. 1, p. 114-135, 1995, at p. 117.

complexity of the issues raised in relation to other species would unduly prolong the negotiations on the Convention.<sup>1266</sup> Hence, article II of the CCMPR generally restricts the Convention to consider only pollock, unless the Parties subsequently agree to take into account other species.<sup>1267</sup> Any such agreement would require the consent of all Parties.<sup>1268</sup>

Nevertheless, the coastal States have reached an agreement on the inclusion of two declarations relating to species other than pollock in the Record of Discussions:

1) It is a view shared by the representatives of the governments above-mentioned that fishing operations for living marine resources other than pollock in the Convention Area, which may occur in the future, by fishing vessels of any State should only be conducted in accordance with precise authorisation rules issued by the Party.

2) It is also beyond any doubt that no fishing activities for anadromous species are accomplished in the Convention area. The Parties should have an interest in prohibiting the keeping of anadromous species or herring on board their vessels caught accidentally in the Convention area during pollock fishing operations.<sup>1269</sup>

Although the Record of Discussions is not legally binding, the second of these statements represents at least a political commitment on the part of all the governments concerned to address the worries of coastal States with respect to the bans on fishing for anadromous species and the conservation of anadromous species and herring.<sup>1270</sup>

## **6.2.2 The conservation and management measures under the Convention**

Any successful regime for the conservation and management of fish stocks must be able to answer two fundamental questions, namely how total catch levels will be established and how they will be split among regime participants. During the negotiations,

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<sup>1266</sup> Supra note 1222, at p. 284.

<sup>1267</sup> Supra note 1252, art. II.

<sup>1268</sup> Other provisions of the Convention also provide for the possibility that activities concerning species other than pollock can take place under the auspices of the Convention. See e.g. Art. IV (1) (f), envisioning cooperative scientific research on living marine resources other than pollock; Art. IV (1) (i), giving the Annual Conference the authority to consider matters related to the conservation and management of living marine resources other than pollock; Art. IX (1) envisioning work by the Scientific and Technical Committee on 'pollock and other living marine resources covered by this Convention'.

<sup>1269</sup> Supra note 1235, at p. 165.

<sup>1270</sup> Anthony Aust, 'The Theory and Practice of Informal International Instruments', in *The International and Comparative Law Quarterly*, Vol. 35, No. 4 (Oct., 1986), pp. 787-812, at p. 801.

it was very complicated to find an answer to these questions but eventually they were resolved through the reading of some provisions.<sup>1271</sup>

Article VII(1) of the CCMPR gives the Annual Conference the obligation to set up the allowable harvest level (AHL) of pollock in the Donut Hole for the following year, on the basis of an assessment of the biomass of pollock in the Aleutian Basin by the Scientific Technical Committee.<sup>1272</sup> However, article VII(2) provides for a mechanism to address the possibility that, despite all efforts, the Annual Conference will fail to reach an agreement on this subject in a given year.<sup>1273</sup> In such cases, the AHL shall be fixed in accordance with part 1 of the Annex to the Convention. Part 1 of the Annex provides that the U.S. and Russian institutions, as coastal States of the Bering Sea, jointly establish the biomass of pollock in the Aleutian Basin.<sup>1274</sup> If these institutions fail to carry out this task together, then the biomass of pollock from the Aleutian Basin in the spawning area known for this stock off Bogoslof Island in the U.S. EEZ is considered to be 60% of the total biomass of pollock from the Aleutian Basin.<sup>1275</sup>

The USA is attributed sole responsibility for determining the entity of pollock biomass in the area off Bogoslof Island.<sup>1276</sup> After creating a mechanism for fixing the biomass size of the Aleutian Basin pollock, the CCMPR then creates a progressive scale for AHLs that depends on the size of the biomass.<sup>1277</sup> If the biomass is less than 1.67 million tons, the AHL is zero: direct fishing for pollock in the Donut Hole is not allowed.<sup>1278</sup> A pollock biomass from the Aleutian Basin of 1.67 million corresponds to a pollock biomass in the area off Bogoslof Island of about 1 million tons, below which U.S.

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<sup>1271</sup> Richard Alan Barnes, 'International Regulation of Fisheries Management in Arctic Waters', in *German Yearbook of International Law*, pp. 193-230, 2020, at p. 213.

<sup>1272</sup> *Supra* note 1252, art. VII(1); The functions of the Annual Conference consists of establishing the allowable harvest level (AHL) and individual national quotas (INQs); adopt conservation and management measures; receive reports from each party relating to measures taken to investigate and penalise violations of the Convention provisions and measures adopted under it; establish terms and conditions for trial fishing; discuss cooperative enforcement measures; and consider the effectiveness of the Central Bering Sea Observer Program which is established under the Convention; in order to see the function of the Scientific Technical Committee see article 9 of the Convention.

<sup>1273</sup> *Supra* note 1252, art. VII (2).

<sup>1274</sup> *Ibid.*, Part I of the Annex.

<sup>1275</sup> *Supra* note 1222, at p. 286.

<sup>1276</sup> *Supra* note 1265, at p. 118.

<sup>1277</sup> All participants in the negotiations recognized that US domestic law requires the United States government, as part of its management of pollock fishing in the US EEZ, to determine the pollock biomass in this area. The negotiators had confidence that this determination would be made in good faith, on the basis of the best available scientific data.

<sup>1278</sup> The Annual Conference has set AHLs of zero each year since the Convention entered into force.

law generally prohibits direct fishing for the pollock stock of the Aleutian Basin in the U.S. EEZ.<sup>1279</sup>

Therefore, the Convention establishes for harvesting in the Donut Hole the same threshold established by U.S. law for fishing in its area. Under the same circumstances, the Russian Federation would also prohibit pollock catching in the portion of the Aleutian Basin that is in its area, as provided for in the Record of Discussions.<sup>1280</sup> If the biomass of pollock in the Aleutian Basin were to increase over 1.67 million tonnes, the table would allocate about 30% of the catch in the Donut Hole. According to Russian and U.S. law, the remaining 70% would be harvested in the EEZs of the two coastal States.<sup>1281</sup> These numbers also stem from political compromise. DWFNs had advocated greater apportionment for the Donut Hole, pointing out that by the late 1980s catches in the Donut Hole accounted for about 40% of the total harvest.<sup>1282</sup>

Coastal States responded that the Donut Hole accounts for only 20% of the Aleutian Basin and just 10% of the Bering Sea.<sup>1283</sup> They criticized the fact that pollock fishing patterns in the late 1980s had directly led to the collapse of the Aleutian Basin stock and thus could hardly constitute a legitimate basis for dividing the resource.<sup>1284</sup> Subsequently, the negotiators were confronted with the question of how to divide any AHL greater than zero into individual national quotas (INQs) for each Party.<sup>1285</sup> DWFNs argued that INQs should be based on historical fishing levels in the Donut Hole, which would grant them as a group about 95% of the AHL.<sup>1286</sup> They also asserted that since Russian and U.S. vessels would be allowed to harvest pollock in the EEZs of their respective countries, such ships should not be able to fish for pollock in the Donut Hole.<sup>1287</sup>

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<sup>1279</sup> ‘Reassessment of the Alaskan pollock fishery’, Public Comment Report – Responsible Fisheries Management Certification Scheme, Version 2.1, 2022, at p. 28.

<sup>1280</sup> Supra note 1177, at p. 50.

<sup>1281</sup> Supra note 1275.

<sup>1282</sup> First Annual Conference of the Parties (1996), Report of the Meeting of the Scientific and Technical Committee, paras 5 and 11.

<sup>1283</sup> Ibid.

<sup>1284</sup> Report of the First Annual Meeting of the Conference of the Parties (1996), Report of the Scientific and Technical Committee, item 5 p. 2.

<sup>1285</sup> Third Annual Conference of the Parties (1998), Report of the Scientific and Technical Committee, paras 7.4.12 and 7.5.12.

<sup>1286</sup> Report of the Fourth Annual Conference of the Parties (1999), paras 6.D.6 and 6.D.7.

<sup>1287</sup> Supra note 1193, at p. 303.

Russia and the USA responded that the fishing of the Donut Hole pollock began only in the mid-80s and cannot be considered historical.<sup>1288</sup> They also reiterated that the unsustainable fishing patterns that produced the collapse of pollock cannot be evaluated as a legitimate ground for establishing INQs.<sup>1289</sup> Russia and the USA have also stated that pursuant to the traditional rules of international law, as stated in article 116 UNCLOS, they have the same right as DWFNs so that their vessels can harvest in an area of the high seas such as the Donut Hole, as any other State.<sup>1290</sup> The negotiators finally agreed on article VIII of the CCMPR, which leaves the Annual Conference with the task of establishing INQs.<sup>1291</sup>

Nonetheless, if the Annual Conference fails to reach a consensus on INQs in a certain year, the provisions of part 2 of the Annex to the Convention shall apply, according to which vessels of all countries acceding to the Convention would be allowed to fish for pollock in the Donut Hole without the creation of INQs.<sup>1292</sup> Instead of quotas, the Annual Conference would merely set a start date for fishing and a mechanism to monitor harvests on a real time, for example by requiring independent observers on each vessel to transmit reports of all harvests to all Parties via satellite communication.<sup>1293</sup> Once the AHL is achieved, fishing activities end instantaneously. Since the pollock biomass from the Aleutian Basin has not yet reached the value of 1.67 million tons, there has never been an AHL greater than zero.<sup>1294</sup>

The Annual Conference did not address the issue of setting INQs, nor did the provisions of part 2 of the Annex ever become operational.<sup>1295</sup> However, it is possible to state that these provisions of the Convention would probably favour the interests of the Parties with the most technologically advanced vessels.<sup>1296</sup> This is due to the fact that any

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<sup>1288</sup> Supra note 1191, at p. 6; in order to know more about historical fishing, see Leonardo Bernard, 'Historic fishing rights and the Exclusive Economic Zone', in *Indonesian Journal of International Law*, Vol. 18, No. 2, Art. 7, 2021.

<sup>1289</sup> Supra note 1191, at pp. 4-5.

<sup>1290</sup> Larson, David L., 'Conventional, Customary, and Consensual Law in the United Nations Convention on the Law of the Sea', in *Ocean Development and International Law*, Vol. 25, No. 1, pp. 75-85, 1994, at p. 79.

<sup>1291</sup> Joint Press Release (1994) Tenth Conference on the Conservation and Management of the Living Marine Resources of the Central Bering Sea, 11 February 1994, Washington DC.

<sup>1292</sup> Supra note 1252, art. VIII(2)

<sup>1293</sup> Supra note 1222, at p. 287.

<sup>1294</sup> Supra note 1177, at p. 53.

<sup>1295</sup> Supra note 1135, at p. 164.

<sup>1296</sup> Miles Edward L. and Burke William T., 'Pressures on the United Nations Convention on the Law of the Sea 1982 Arising from New Fisheries Conflicts: The Problem of Straddling Stocks', in *Ocean*



State can deny consent in the Annual Conference and kick-start intensive fishing in the Donut Hole. In such an activity, no Party would receive a guaranteed quota, indeed the entire AHL would be up for grabs with the best vessels likely to harvest almost all of the catch.<sup>1297</sup>

### **6.2.3 Flag State responsibilities under the Convention on the conservation and management of pollock resources in the Central Bering Sea**

During the negotiations, the coastal States stressed on the need to ensure that all vessels harvesting for pollock in the Donut Hole comply with the conservation and management measures of the Convention and refrain from illegal fishing in the EEZs of the coastal States adjacent the Donut Hole.<sup>1298</sup> DWFNs eventually agreed on a number of requirements for vessels in order to overcome these concerns. In fact, the Convention with its unique mixture of enforcement mechanisms can be regarded as one of the most effective multinational fisheries agreements ever reached.<sup>1299</sup>

Pursuant to article XII of the Convention, each flag State must ensure that any vessel flying its flag conforms to the following conditions:

- 1) Vessels may catch for pollock in the Donut Hole only with specific authorisation issued by the flag State;<sup>1300</sup>
- 2) In order to enable each contracting Party to the Convention to be aware where each authorised vessel operates at a given time and to minimise the possibility of illegal fishing in the EEZs of coastal States, all vessels shall be equipped with satellite location tracking devices, with location data to be shared with all Parties on real time;<sup>1301</sup>
- 3) In order to facilitate the monitoring of harvest levels, fishing vessels shall notify all Parties of their intention to enter the Donut Hole at least 48 hours in advance and shall notify all Parties of the location of any transshipment of fish at least 24 hours before the transshipment as well as reporting all catch data on a regular basis;<sup>1302</sup>

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Development and International Law: the Journal of Marine Affairs, Vol. 20, No. 4, 1989, p. 343-357, at p. 348.

<sup>1297</sup> Supra note 1135, at p. 165.

<sup>1298</sup> Supra note 1223.

<sup>1299</sup> Supra note 1265, at p. 114.

<sup>1300</sup> Supra note 1252, Article XI(2)

<sup>1301</sup> Supra note 1252, Article XI(3)(a)

<sup>1302</sup> Supra note 1252, Article XI(3)(b)(c)

4) At the end, flag States must investigate and sanction violations committed by their vessels and report such actions to the Annual Conference.<sup>1303</sup>

#### **6.2.4 Cooperation regime between distant water fishing nations and coastal States**

Despite the groundbreaking provisions of the Convention, the coastal States did not believe that these measures could prevent from illegal fishing in their EEZs. Therefore, they sought additional means by which they could participate in monitoring the activities of all vessels harvesting in the Donut Hole, including the right to board and inspect vessels flying the flag of other Parties fishing in the Donut Hole. They also claimed the right to seize and criminally prosecute vessels suspected to be involved in violations.<sup>1304</sup>

At the beginning, DWFNs opposed such proposals. They argued, invoking the traditional notions of international law enshrined in UNCLOS, that a fishing vessel on the high seas remains under the exclusive jurisdiction of the flag State.<sup>1305</sup> Thus, no other State could board and inspect or otherwise exercise jurisdiction over a vessel on the high seas unless the flag State consents to such action.<sup>1306</sup> In summary, DWFNs have rigorously rejected any possibility that a State other than the flag State could take legal action or impose sanctions against a vessel for violations that occurred on the high seas.<sup>1307</sup> However, DWFNs did not object to allowing coastal States to place observers on their ships operating in the Donut Hole.<sup>1308</sup>

The practice of placing observers on ships had become more common and was accepted as a useful means to promote compliance with conservation and management rules, as well as to improve the collection and communication of fishing data.<sup>1309</sup> The main impediment lay in the costs to be incurred. Because one would have to wonder who

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<sup>1303</sup> Supra note 1252, Article XI(6)

<sup>1304</sup> Jennifer L. Talhelm, 'Curbing International Overfishing and the Need for Widespread Ratification of the United Nations Convention on the Law of the Sea', in *North Carolina Journal of International Law*, Vol. 25, No. 2, Art. 4, pp. 381-418, 2000, at p. 414.

<sup>1305</sup> Supra note 66, art. 92(1)

<sup>1306</sup> Douglas Guilfoyle, 'Interdicting Vessels to enforce the common interest: maritime countermeasures and the use of force', in *The International and Comparative Law Quarterly*, Vol. 56, No. 1, 2007, pp. 69-82, at p. 70.

<sup>1307</sup> Federico Radi, 'Illicit activities on the high seas: Piracy, Drug, Trafficking and IUU Fishing', *Luis Guido Carli University*, A.A. 2020-2021, at pp. 20-23.

<sup>1308</sup> Supra note 1235, at p. 170.

<sup>1309</sup> Iwao Fujii, Yumi Okochi and Hajime Kawamura, 'Promoting Cooperation of Monitoring, Control, and Surveillance of IUU Fishing in the Asia-Pacific', in *Sustainability* 2021, 13(18), 10231.

would finance the training of observers and their transport on fishing vessels, who would pay the observers' salaries, accommodation and meals on board of fishing vessels.<sup>1310</sup>

Article XI (5) contains the provisions concerning observers. Each vessel fishing for pollock in the Donut Hole may, upon request, accept an observer from another Party. If such an observer is not available, the flag State shall place one of its observers on board the vessel.<sup>1311</sup> The Parties agree to establish a central Bering Sea observer programme to train observers to be set on board ships.<sup>1312</sup> The activities of observers shall consist of monitoring the implementation of conservation and management measures adopted under this Convention and reporting the results to the flag State Party and the observer Party.<sup>1313</sup> The part concerning coercive actions which may be undertaken by States other than the flag State is of considerable importance within the article 11 of the Convention. Traditional international law recognizes the ability of a different State to board and inspect or otherwise take coercive action against a fishing vessel on the high seas with the consent of the flag State. Prior to the Convention, flag States generally granted such consent rarely.<sup>1314</sup> In essence, when a State requests action against a foreign vessel on the high seas, the flag State reserves the right to withhold consent when it deems appropriate.<sup>1315</sup>

In accordance with article XI (6) of the Convention, each Party agrees in advance to allow officials of any other Party to board and inspect its vessels in the Donut Hole in order to verify compliance with the conservation and management measures recommended by the Convention.<sup>1316</sup> In addition, a flag State may not withdraw its consent unless it withdraws from the Convention.<sup>1317</sup> Subsequently, the Convention deals with the measures that the State carrying out the control can take once a violation is discovered.

Pursuant to article XI(7)(b), if the violation is grave and the flag State is unable to take immediate control of the vessel (this is the case when the flag State does not have its

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<sup>1310</sup> Supra note 1235, at p. 169.

<sup>1311</sup> Supra note 1252, art. XI(5)(a)

<sup>1312</sup> Supra note 1177, at p. 53.

<sup>1313</sup> Ibid., art. XI (5)I

<sup>1314</sup> Salam Khadim Baghdad Al-Khafaji, 'The regime of boarding ships in international maritime law', in World Maritime University Dissertations, 2006, at pp. 35-39.

<sup>1315</sup> 'Jurisdiction Over Vessels', in National Oceanic and Atmospheric Administration – U.S. Department of Commerce, 2022, available at <https://www.noaa.gov/jurisdiction-over-vessels>

<sup>1316</sup> Supra note 1252, art. XI(6)(a).

<sup>1317</sup> Evelyne Meltzer, 'Central Bering Sea Donut Hole', Working Copy 04/2005, available at <https://www.webpages.uidaho.edu/fish510/PDF/DONUTHOLEfinal.pdf>

own control vessel in the immediate vicinity), the ship's officers may remain on board the vessel until the arrival on the spot of flag State's officials or until the flag State otherwise fulfils its responsibilities for the management of the ship.<sup>1318</sup> If it is found that a vessel from another country has committed a serious violation, the right of coastal States to have their boarding team remain on board should, in most cases, force an immediate end to the violation and based on the evidence gathered by the team from the operators, could lead to more severe legal proceedings.<sup>1319</sup> These provisions inspired articles 21 and 22 UNFSA.<sup>1320</sup>

### **6.3 Connections of the Donut Hole Convention with global international agreements**

Despite the fact that UNCLOS entered into force only after the conclusion of the negotiations on the Donut Hole Convention and although none of the States participating in the negotiations had formally expressed their consent to be bound by UNCLOS, each of these States accepted the basic provisions on UNCLOS fisheries as criteria for addressing the situation of straddling stocks in the Bering Sea.<sup>1321</sup>

However, these provisions did not provide specific guidance on how to make effective the right of all States for their nationals to harvest on the high seas, subordinating this right to the interests of coastal States.<sup>1322</sup> In addition, the UNCLOS provisions did not specify any particular procedure for the distribution of pollock in the Bering Sea between the two coastal States and DWFNs.<sup>1323</sup>

These provisions proved inadequate to prevent the collapse of pollock in the Donut Hole.<sup>1324</sup> To solve this situation, the international community has decided to develop new

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<sup>1318</sup> Supra note 1252, art. XI(7)(b)

<sup>1319</sup> In accordance with Art. XI (7) I, only the flag state may actually try the vessel, master, or crew for any violation and impose any penalties.

<sup>1320</sup> Supra note 1270, 180rt. 21-22.

<sup>1321</sup> 'The Bering Sea "Donut Hole" convention to resolve overfishing disputes was based on and supported by UNCLOS', in UNCLOS Debate, available at <https://www.unclosdebate.org/evidence/777/bering-sea-donut-hole-convention-resolve-overfishing-disputes-was-based-and-supported>; Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea entered into force on 8 December 1995 while the United Nations Convention on the Law of the Sea entered into force on 16 November 1994.

<sup>1322</sup> Supra note 1224, at p. 848.

<sup>1323</sup> Ibid.

<sup>1324</sup> Eugene H. Buck, 'U.N. Convention on the Law of the Sea: Living Resources Provisions', in Congressional Research Service, January 18, 2011.

agreements for the conservation and management of ocean fisheries, in particular the FAO Compliance Agreement and the UNFSA<sup>1325</sup>. The negotiation of these agreements coincided to a remarkable extent with the negotiation of the Donut Hole Convention, both chronologically and substantially.<sup>1326</sup>

### 6.3.1 The Convention's link to the FAO Compliance Agreement

The FAO Compliance Agreement was thought with the aim of discouraging the change of flag of fishing vessels from one State to another as a means of circumventing otherwise applicable conservation and management measures.<sup>1327</sup> States that were Parties to regional fisheries agreements, whose vessels were obliged to comply with the imposed fishing restrictions envisaged by those agreements were concerned about the increasing number of vessels changing flags to States that were not Parties to the agreements.<sup>1328</sup> Agenda 21, adopted by the 1992 UN Conference on Environment and Development, called for action to address this phenomenon.<sup>1329</sup>

Subsequently, FAO began negotiations on what would become the FAO Compliance Agreement. The negotiators of such an agreement soon realized that the change of flag was only part of the problem since many flag States simply did not have the ability or willingness to control the activities of their own ships fishing on the high seas.<sup>1330</sup> FAO therefore decided to draw up a broader agreement, which would extend the basic concepts of flag State responsibility set out in UNCLOS.<sup>1331</sup> Despite starting two

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<sup>1325</sup> Andrew Philips, 'Marine Environment Law Essay', in UC Research Repository, GCAS 2007, at p. 4, available at <https://ir.canterbury.ac.nz/bitstreams/305ab753-9a17-498d-95ea-d95258ca17fe/download>

<sup>1326</sup> Ibid.

<sup>1327</sup> Budislav Vukas and Davor Vidas, 'Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework', in *Governing High Seas Fisheries: The interplay of global and regional regimes*, 2001, pp. 53-90, at p. 68.

<sup>1328</sup> David Freestone, 'The effective conservation and management of high seas living resources: towards a new regime', in *The Canterbury law Review*, Vol. 5, No. 3, p. 341-362, 1994, at p. 343.

<sup>1329</sup> 'Report of the United Nations Conference on Environment and Development', UN Doc. A/CONF.151/26 (1992), vol. ii, Agenda 21, ch.17, para. 17.52. The Declaration of Cancun, adopted just before the Rio Conference at a meeting of states concerned with ocean fisheries, had also called for such action.

<sup>1330</sup> Jessica K. Ferrell, 'Controlling Flags of Convenience One Measure to Stop Overfishing of Collapsing Fish Stocks', in *Environmental Law*, Vol. 35, No. 2, p. 323-390, 2005, at p. 347.

<sup>1331</sup> *Supra* note 1224, at p. 851.

years after the start of the Donut Hole Convention negotiations, negotiators for the FAO Compliance Agreement ended earlier.<sup>1332</sup>

With the exception of Russia, which was not a member of FAO, all States involved in the negotiations of the Donut Hole Convention actively participated in the negotiation of the FAO Compliance Agreement and reached consensus in the FAO Conference on the adoption of the treaty.<sup>1333</sup> The FAO Compliance Agreement did not prove to be fully effective in addressing the problems in the Donut Hole, but it did contain three provisions regarding the responsibility of flag States for their vessels harvesting on the high seas directly relevant to the Donut Hole.<sup>1334</sup> These are the provisions:

1) Each Party shall take the necessary measures to ensure that fishing vessels authorised to fly its flag do not engage in any activity which may jeopardise the effectiveness of international conservation and management measures;<sup>1335</sup>

2) No Party shall permit a vessel authorised to fly its flag to be employed for fishing on the high seas unless it has been authorised for such use by the competent authorities of that Party;<sup>1336</sup>

3) No Party shall authorise a vessel authorised to fly its flag to be used for catching on the high seas unless the Party is satisfied that it is able, taking into account the links existing between it and the vessel concerned, to effectively exercise its responsibility under that agreement to the vessel.<sup>1337</sup>

The FAO Compliance Agreement requires flag States to actively oversee the high seas fishing operations of their vessels.<sup>1338</sup> They must decide on a case-by-case basis whether to authorise any vessel flying their flag to fish on the high seas.<sup>1339</sup> In addition, flag States may not allow any of these vessels to harvest on the high seas unless they are

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<sup>1332</sup> *Supra* note 1321.

<sup>1333</sup> Patricia Birnie, 'New Approaches to Ensuring Compliance at Sea: The FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas', in *Review of European Community and International Environmental Law*, 2002, pp. 48-55, at p. 51.

<sup>1334</sup> Jon L. Jacobson, 'The new internationalization of North Pacific Fisheries', in *Willamette Journal of International Law and Dispute Resolution*, Vol. 6, No. 1, 1998, pp. 1-14, at p. 8.

<sup>1335</sup> FAO Compliance Agreement, art. 3 (1)

<sup>1336</sup> *Ibid.*, art. 3(2)

<sup>1337</sup> *Ibid.*, art. 3(3)

<sup>1338</sup> Deirdre M. Warner-Kramer, 'Stateless fishing vessels: the current international regime and a new approach', in *Ocean and Coastal Law Journal*, Vol. 5, No. 2, p. 227-243, 2000, at p. 232.

<sup>1339</sup> *Supra* note 1330, at p. 348.

able to prevent the vessel from compromising the rules relating to conservation on the high seas.<sup>1340</sup>

Prior to the FAO Compliance Agreement, none of these rules had found explicit expression in any international agreement. All three rules derive directly from more general provisions of UNCLOS that oblige States to conserve the living resources of the high seas and require that there be a genuine link between a State and a ship authorised to fly its flag.<sup>1341</sup> The first two of these provisions were recognized in article XI of the Convention.<sup>1342</sup> That article requires each Party to take all necessary measures to guarantee that its nationals and fishing vessels flying its flag abide by the provisions of this Convention and the measures taken pursuant to it and that its fishing vessels fish pollock in the Convention Area only respecting a specific authorisation granted by that Party.<sup>1343</sup> The third of these provisions of the FAO Compliance Agreement, which requires the flag State to ensure that it can effectively exercise responsibility on a vessel before issuing an authorisation for that vessel to fish on the high seas, does not appear explicitly in the Convention.

### **6.3.2 The Convention's connection to the UNFSA**

Similarly to the FAO Compliance Agreement, UNFSA owes its origins to the 1992 UN Conference on Environment and Development.<sup>1344</sup> Negotiations for the achievement of the Donut Hole Convention ended in 1994, while UNFSA negotiations concluded in 1995 when the Agreement was finally opened for signature.<sup>1345</sup> As in the negotiations of the Donut Hole Convention, the participants in the UNFSA negotiations generally split into two sides: the coastal States and the DWFNs. Japan, South Korea, China and Poland

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<sup>1340</sup> Geir Hønneland, 'Recent Global Agreements on High Seas Fisheries: Potential Effects on Fisherman Compliance', in *Governing high seas fisheries: the interplay of global and regional regimes*, 2001, pp. 121-139, at p. 129.

<sup>1341</sup> *Supra* note 66, art. 117.

<sup>1342</sup> *Supra* note 66, art. 91(1) and art. 94(1).

<sup>1343</sup> *Supra* note 1252, art. XI(1) and XI(2)

<sup>1344</sup> *Supra* note 1320, Agenda 21, ch. 17, para. 17.49 (e), UN Doc. A/CONF.151/26 (vol. ii).

<sup>1345</sup> Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea enacted on 16 June 1994 while the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks completed its substantive work on 4 August 1995.

were members who presented themselves as DWFNs and strongly opposed proposals by the coastal States' side to impose further limitations on fishing on the high seas.<sup>1346</sup>

Russia, despite the fact that some of its ships continued to harvest on the high seas, remained abundantly in the deployment of coastal States and repeatedly demanded stricter controls on vessels fishing in the Donut Hole and the small area in the centre of the sea of Okhotsk known as the 'Peanut Hole'.<sup>1347</sup> Only the perspective of the USA in the UN Conference differed in some important aspects from the position adopted in the negotiations of the Donut Hole Convention.<sup>1348</sup>

The USA in both negotiations found itself balancing its intense interests as a coastal State with respect to the pollock stock in the Bering Sea and its interests as a DWFN with regard to highly migratory fish species, particularly tuna that the many U.S. high seas fishing vessels fish in two oceans.<sup>1349</sup> The other States that took part to the negotiations of the Donut Hole Convention appreciated the pivotal role that the USA could play and ultimately expressed such interest in the UNFSA negotiations.<sup>1350</sup> The USA not only stood on both sides for negotiations as a coastal State and a DWFN but also held the unique and enviable position of honest mediator with considerable influence.<sup>1351</sup>

At a critical moment in the negotiations for the Donut Hole Convention in October 1993, the central position of the US in the UN negotiations helped to bring about a favourable solution to some of the controversial issues of the Donut Hole.<sup>1352</sup> The USA understood that although the four DWFNs were concerned about the prospect of new restrictions on pollock fishing in the Donut Hole, they were more concerned that the UN

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<sup>1346</sup> Trond Bjørndal and Gordon Munro, 'The management of high seas fisheries resources and the implementation of the U.N. Fish Stocks Agreement of 1995', Working Paper No. 06/02, in Institute for Research in Economics and Business Administration Bergen, February 2022, at p. 8.

<sup>1347</sup> Alex G. Oude Elferink, 'The Sea of Okhotsk Peanut Hole De facto Extension of Coastal State Control', in *Governing High Seas Fisheries: The interplay of Global and Regional Regimes*, pp. 178-205, 2001, at p. 186.

<sup>1348</sup> Jean-Pierre Lévy and Gunnar G Schram, 'United Nations conference on straddling fish stocks and highly migratory fish stocks: selected documents', The Hague: Nijhoff, cop. 1996, pp. 813-829, at p. 821.

<sup>1349</sup> Gordon R Munro, 'Coastal States and Distant Water Fleets Under Extended Jurisdiction: The Search for Optimal Incentive Schemes', in *Advances in Dynamic Games and Applications*, pp. 301-317, 1994, at p. 308.

<sup>1350</sup> Veijo Kaitala and Gordon R. Munro, 'The management of high seas fisheries', in *Marine Resource Economics*, Vol. 8, pp. 313-329, 1993, at p. 317.

<sup>1351</sup> *Ibid.*, at p. 319.

<sup>1352</sup> Michaela Young, 'Then and Now: Reappraising Freedom of the Seas in Modern Law of the Sea', in *Ocean Development & International Law*, Volume 47, 2016 – Issue 2, pp. 165-185, at p. 172.



negotiations would result in even heavier curtailment on all fishing on the high seas.<sup>1353</sup> The DWFNs understood that the USA could be forced in the UN negotiations to take the standpoint of the side of the coastal States in order to solve its problems in the Donut Hole through a comprehensive agreement that would affect all deep-sea fishing for straddling and highly migratory stocks.<sup>1354</sup>

### 6.3.3 Consistency among UNFSA and the Convention

This U.S. perspective could have given rise to a UN treaty that would have inexorably disadvantaged DWFNs in many regions. Therefore, DWFNs, perhaps because they feared a similar outcome or perhaps because they realized that it did not matter that much to brawl for the depleted resource of Bering Sea pollock, softened their approach and accelerated the conclusion of the Donut Hole Convention<sup>1355</sup>. The Convention, in turn, became a relevant ground for the elaboration of the most hotly debated aspects of UNFSA: for instance, article 21 and 22 UNFSA, which provide for the right of States other than flag States to embark and inspect fishing vessels on the high seas and take certain actions to prevent the persistence of discovered violations of agreed conservation and management measures.<sup>1356</sup>

These UNFSA articles closely correspond to the concepts and to a large extent to the language of article XI of the Convention.<sup>1357</sup> There are also other elements of the Convention and UNFSA that solidly coincide. For example, both treaties require that conservation and management measures be based on the best available scientific information and both require the timely collection and sharing of fisheries data.<sup>1358</sup> The Report of Discussions adopted in concert with the Donut Hole Convention provides for a general compatibility between the measures adopted for the straddling pollock stock on

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<sup>1353</sup> Balton, David A. and Holly R. Koehler, 'Reviewing the United Nations Fish Stocks Treaty', in *Sustainable Development Law & Policy*, Vol. 7, Issue 1, Art. 4, 2006.

<sup>1354</sup> Dunn, D.C., G.O. Crespo et al., 'Policy Brief – Adjacency: How legal precedent, ecological connectivity, and Traditional Knowledge inform our understanding of proximity', at p. 5.

<sup>1355</sup> Gordon R. Munro, 'The United Nations Fish Stocks Agreement of 1995: History and Problems of Implementation', in *Marine Resource Economics*, Vol. 15, No. 4, 2000, pp. 265-280, at p. 272.

<sup>1356</sup> Andrew Serdy, 'New entrants, old problem: allocation principles in the UN Fish Stocks Agreement and other treaties', in *The New Entrants Problem in International Fisheries Law*, pp. 43-140, 2016, at p. 78.

<sup>1357</sup> *Supra* note 1252, art. XI.

<sup>1358</sup> *Supra* note 94, art. 5(b) and *supra* note 1252, art. X(2).

the high seas and those adopted for the same stock in each EEZ, as set forth by article 7 UNFSA.<sup>1359</sup>

The decision-making structure of the Donut Hole Convention with its precise rules in the event that the Annual Conference fails to reach a consensus on relevant issues, facilitates the adoption of conservation and management measures effectively and rapidly, as stated by article 10(j) UNFSA.<sup>1360</sup>

#### 6.3.4 Divergences between the two treaties

However, there are some differences between the two treaties. Where article 8(3) UNFSA grants all States with a real interest in high seas fishing to become a member of a regional agreement or organization established to regulate such fishery, a State other than the six current Parties to the Donut Hole Convention may accede to the Convention only if all current Parties unanimously invite that State to do so.<sup>1361</sup> Nevertheless, in light of the fact that pollock fishing in the Donut Hole only began in the mid-80s and that all States whose vessels participated in such fishing activities are already Parties to the Convention, it is unclear whether any other State can claim a real interest in such fishing activity and legitimately support accession to the Donut Hole Convention under article 8(3) UNFSA.<sup>1362</sup>

The most substantial divergences between the two treaties relate to the degree of precaution that must be taken in the adoption of restrictions on harvesting and the attention to the ecosystem as a whole in which regulated fishing takes place.<sup>1363</sup> UNFSA outlines a precautionary approach to ocean fisheries conservation and management that, among other things, requires regulators to take into account all species in the affected ecosystem.<sup>1364</sup> The Donut Hole Convention adopts an approach to the regulation of

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<sup>1359</sup> Supra note 1252, art. IV(2) and supra note 94, art. 7.

<sup>1360</sup> Supra note 1252, Part 2 of the Annex to the Convention and supra note 94, art. 10(j).

<sup>1361</sup> Supra note 94, art. 8(3) and supra note 1252, art. XVI(4).

<sup>1362</sup> David Balton, 'Implementing the New Arctic Fisheries Agreement', in *New Knowledge and Changing Circumstances in the Law of the Sea*, 2020, pp. 429-445, at p. 436.

<sup>1363</sup> Jill Wakefield, 'The Ecosystem Approach and the Common Fisheries Policy', in *The Ecosystem Approach in Ocean Planning and Governance*, 2019, pp. 287-316, at p. 305.

<sup>1364</sup> Supra note 94, art. 6.

pollock fishing which could be called precautionary but it does not expressly provide for the application of precautionary reference values as established in UNFSA Annex II.<sup>1365</sup>

In addition, the Donut Hole Convention deals with pollock, although it provides for the possibility of considering related species in the Bering Sea ecosystem if the Parties agree to this point.<sup>1366</sup> Finally, article 12 UNFSA envisages the adoption of transparent procedures in regional fisheries agreements that confer representatives of international and non-governmental organizations a great opportunity to take part to meetings and other proceedings.<sup>1367</sup> Article XII(5) of the Donut Hole Convention subordinates the participation of any representative of a non-Party at the invitation of the Parties by mutual agreement.<sup>1368</sup> The Parties to the Convention have so far not agreed on any kind of rules guaranteeing the transparency provided for by UNFSA.<sup>1369</sup>

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<sup>1365</sup> Supra note 94, Annex II to UNFSA and supra note 1252, Annex Part II to the Convention.

<sup>1366</sup> Supra note 1252, art. II

<sup>1367</sup> Supra note 94, art. 12.

<sup>1368</sup> Supra note 1252, art. XII(5).

<sup>1369</sup> David D. Caron and Harry N. Scheiber, 'Bringing New Law to Ocean Waters', in Publications on Ocean Development, Volume 47, 2004, pp. 3-14, at p. 7.

## CONCLUSIONS

This thesis surveyed the regulation of fisheries in the four high seas pockets into which the Arctic Ocean is divided (the Banana Hole, Loophole, CAO and the Donut Hole). A considerable number of regional, sub-regional and bilateral fisheries instruments and bodies apply to each of the four parts.<sup>1370</sup>

It is therefore appropriate to draw some final remarks on each high seas enclave.

Every part of the Arctic conveys peculiar issues.

Some are related to the fact that the coastal States and DWFNs are dissimilar and have to comply with different international obligations. Some are related to the governance of each high seas portion which reflects individual State interests disclosed through different divergent State practices.

To begin with the Banana Hole, as pointed out at the beginning of the third chapter, the three straddling fish stocks (NSSH, mackerel and redfish) are managed regionally in a significantly different form from the stocks in the other high seas enclaves. This is partly due to the fact that there is no such clear distinction between DWFNs and coastal States and partly because NSSH and mackerel are shared as well as straddling stocks. Such management arrangements may legitimately be considered as Schemes of arrangements. There are crucial links between the management arrangements of three stocks and other schemes to manage fish stocks, especially the NEAFC, the ICES and the UNFSA.<sup>1371</sup>

In particular, as analysed in the second paragraph of the third chapter on the role of NEAFC, this RFMO provides much of the substantive content of the schemes, while ICES envisages a relevant contribution of scientific knowledge. UNFSA has been supportive in various ways. Firstly, it seems to have reinvigorated the NEAFC.<sup>1372</sup> Prior to the adoption of the UNFSA, the NEAFC was stuck for many years in unsettled discussions on the management of straddling stocks. The Agreement together with the

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<sup>1370</sup> E.J. Molenaar, 'Arctic Fisheries Management', in E.J. Molenaar, A.G. Oude Elferink and D.R. Rothwell (eds), *The Law of the Sea and the Polar Regions: Interactions between Global and Regional Regimes* (Martinus Nijhoff Publishers, Leiden, 2013) 243–266, at pp. 248–258.

<sup>1371</sup> Trond Bjørndal and Nils-Arne Ekerhovd, 'Management of Pelagic Fisheries in the North East Atlantic: Norwegian Spring Spawning Herring, Mackerel, and Blue Whiting', in *Marine Resource Economics*, Vol. 29, No. 1 (March 2014), pp. 69–83, at p. 75.

<sup>1372</sup> Ingrid Kvalvik, 'The North East Atlantic Fisheries Commission and the Implementation of Sustainability Principles: Lessons to be Learned?', in *Recasting transboundary fisheries management arrangements in light of sustainability principles: Canadian and international perspectives*, 2010, pp. 387–418, at p. 396.

identification of the NSSH as a straddling stock and the recognition of this status also of redfish and mackerel seems to have stimulated the NEAFC to adopt management measures. UNFSA also pushed the NEAFC to adopt control and enforcement schemes against non-members. Then, it appears it had some influence on the shape of the schemes relating to mackerel and NSSH; it seems to have impacted on their substantial content because the mackerel regime would be based on a precautionary approach and this approach was introduced into the NSSH regime from 2001.<sup>1373</sup>

On the other hand, as regards the effectiveness of the schemes, there are some encouraging signs for the NSSH scheme. According to what was observed in the Atlanto-Scandian herring arbitration, the NSSH currently appears to be in a healthy condition and the Parties to the scheme have committed to a precautionary approach since 2001. As regards the other two schemes, there are doubts about their ability to ensure coherent management of mackerel and redfish in the long term. For the redfish regime, the main concern is related to the levels at which TACs are set, which are probably too high to be sustainable. In order to improve management and increase the possibility of long-term sustainability of this stock, it would be appropriate not to limit oneself to the use of the annual TACs management tool and to consider other types of measures such as those necessary for a precautionary approach. As noted in the mackerel war with respect to the mackerel regime the main problem is that Russia, the principal DWFN, is located outside the regime.<sup>1374</sup>

In summary, such a plurality of management tools in the Banana Hole area has not yet produced satisfactory management but these tools and the various management regimes have the capacity to improve management provided that the Parties to the various regimes have the political will to employ them.<sup>1375</sup>

Substantially, as pointed out at the beginning of the third chapter, the theory of cooperative management among countries seems to prove to be a winning solution for a fair and respectful distribution of straddling fish stocks, more cooperation and coordination would be needed between the NEAFC and the individual coastal and non-coastal States that engage in these fisheries activities. The lack of coordination stems from

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<sup>1373</sup> Report of the 20<sup>th</sup> Annual Meeting of NEAFC 5–9 November 2001, item 12(I).

<sup>1374</sup> Environmental Defense Fund, 'Building resilience of Fisheries Governance in the North East Atlantic', Final Report, January 2018, at pp. 17-20.

<sup>1375</sup> G Munro, A. Van Houtte and R. Willmann, 'The Conservation and Management of Shared Fish Stocks: Legal and Economic Aspects', FAO Fisheries Technical Paper, FAO, Rome, 2004, at p. 126.

the fact that fish quotas are allocated through agreements between coastal States and not through a management agreement adopted by the relevant RFMO.

NEAFC, however, has established a program for cooperation of non-contracting Parties, but the very absence of a NEAFC agreement on the apportionment of fish stocks quotas among States may cause non-contracting States to lose confidence in NEAFC's ability to manage the interests of the high seas area deepened in chapter III. A review of how NEAFC and coastal States make their decisions would be appropriate and urgent. In order to gain authority, NEAFC cannot transfer management responsibilities incumbent upon it to groups of coastal States.<sup>1376</sup>

According to the Loophole high seas area, as can be seen in chapter IV, the fisheries management is a mixture of coastal States regulation and a multilateral approach. On the one hand, fisheries in the Loophole are not excluded from the regulation of the NEAFC, which has in fact adopted certain measures for determined fishing activities in this area.<sup>1377</sup> On the other hand, outside the NEAFC, the two coastal States, namely Norway and Russia, under the JNRFC, have managed to restrict fishing by DWFNs, such as the EU, Greenland, Iceland and the Faroe Islands in the high seas portion of the Barents Sea through the conclusion of access agreements to their EEZs. This commitment resulted in the signing of the Trilateral Loophole Agreement.<sup>1378</sup>

As noted in the description of the cod war, six years of unregulated overfishing occurred before the Trilateral Loophole Agreement was reached by the two coastal States and Iceland as the main DWFN. During the UNFSA negotiations, the issue of the Loophole stimulated the adherence of Russia and Norway to their positions as coastal States while Iceland's commitment to this fishery prompted the country to move from an active participation in the coastal States group to a more heterogenous position.<sup>1379</sup> The bilateral Barents Sea fisheries regime, focused on the JNRFC, has had only a moderate

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<sup>1376</sup> Report of the 22<sup>nd</sup> Annual Meeting of the NEAFC, 10–14 November 2003, Vol I, Main Report; see also

<sup>1377</sup> Yoshinobu Takei, 'Filling regulatory gaps in high seas fisheries: discrete high seas fish stocks, deep-sea fisheries, and vulnerable marine ecosystems', in Leiden; Boston: Martinus Nijhoff Publishers, 2013, at p. 163.

<sup>1378</sup> RR Churchill, 'The Barents Sea Loophole Agreement: A "Coastal State" Solution to a Straddling Stock Problem', in *International Journal of Marine and Coastal Law*, Vol. 14, No. 4, 1999, pp. 467-490, at pp. 468–475.

<sup>1379</sup> Bjarni Már Magnússon, 'The Loophole Dispute from an Icelandic perspective', in Centre for Small State Studies Publication Series University of Iceland, Working Paper 1-2010, at p. 12.

impact on efforts to address the Loophole problem. A kind of harmonization of the measures of the coastal States has occurred.<sup>1380</sup>

Intense diplomatic pressure was exerted on the relevant DWFNs and requirements to restrict fishing activities on the Loophole high seas were included in agreements with DWFNs. UNFSA's influence on deep-sea fishing in the Loophole has been noteworthy. This agreement puts very high pressure on all DWFNs to reach an agreement on the implementation of appropriate measures. As regards the issue of quota allocation, the UNFSA provisions laying down the criteria for entry by newcomers to regulated fishing on the high seas lend themselves to regional application, but do not show the criteria to be observed.<sup>1381</sup>

A regional solution could only be achieved through negotiations broadly defined by the relative need of the Parties to reach an agreement. When the availability of cod declined in the second half of the 1990s, the bargaining position of the coastal States improved. Finally, UNFSA provisions setting global standards for compliance control schemes under regional management regimes significantly strengthen the basics for the effective enforcement of high-sea conservation and management measures in the Barents Sea.<sup>1382</sup>

In the light of the second paragraph of chapter IV, while the coastal States opted the JNRFC as a suitable body to ensure a fair distribution of quotas, Iceland, based on its claims under article 8(3) UNFSA, argued that not only coastal States but also States with a 'real interest' in a certain fishery should be included in the quota allocation decision-making process and ultimately succeeded in making the NEAFC the competent organization for the apportionment of fish quotas by being able to include non-coastal States in the allocation decision-making process as well.

However, it is difficult to determine which RFMO between the NEAFC and JNRFC would be more efficient in adopting management measures that avoid overfishing. The involvement in the NEAFC of the DWFNs in the decision-making process has made the system slower and more complicated since as the number of participants has also

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<sup>1380</sup> Tore Henriksen, Geir Hønneland and Are Sydnes, 'The Joint Russian Norwegian Fisheries Commission', in *Law and Politics in Ocean Governance*, 2006, pp. 131-147, at p. 139.

<sup>1381</sup> *Supra* note 1384, at p. 471.

<sup>1382</sup> Áslaug Ásgeirsdóttir, 'Oceans of Trouble: Domestic Influence on International Fisheries Cooperation in the North Atlantic and the Barents Sea', in *Global Environmental Politics*, Vol. 7, No. 1, 2007, pp. 120-144, at p. 131.

increased frictions due to the manifest inability to reconcile the contrasting interests at stake. At the same time, leaving decision-making power to the two coastal States would result in less democracy of the system and more arbitrariness in the management and allocation decisions of quotas with clear disadvantage for the DWFN. To conclude, despite the obvious difficulties, article 7 UNFSA obliges coastal States fishing on the high seas to negotiate measures that are compatible with those of coastal States in the management of a given fishing activity. Therefore, there is no doubt that the most inclusive solution is to negotiate management and conservation measures within the NEAFC in order to achieve a more shared and comprehensive agreement between coastal States and DWFNs.

With regard the CAO high seas area, the fifth chapter emphasizes that the CAO presents one of the most vulnerable ecosystems in the world and although there is currently no fishing activity, climate change will most likely lead to an increase in fishery, through the reduction of sea ice with the consequent opening of new areas of the CAO to fishing. After explaining the Oslo Declaration in paragraph 2 of the fifth chapter, the coastal States of the region signed the CAOFA in 2018. The third paragraph showed how this agreement represents an important step to protect the ecosystem from damage caused by potential fishing activity carried out with insufficient knowledge of fish resources.<sup>1383</sup>

However, the implementation of this agreement will be challenging, as the Parties will have to make many important decisions on how to comply with the commitments undertaken. The agreement entered into force on June 25, 2021 giving the Parties until June 2023 to establish a joint program and adopt a data-sharing protocol, and until June 2024 to set forth conservation and management measures for exploratory fisheries in the CAO waters. Finally, the agreement is renewable in five-year intervals, provided that a Party does not submit or submit a formal objection. Each of these tasks will present new negotiating challenges.<sup>1384</sup>

Although, the CAOFA was signed with the consent of the main DWFNs, the success of this agreement will only be evaluated once the glaciers in the CAO have melted and allow fishing in that region. Thus, cooperative management will be necessary and any

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<sup>1383</sup> A. Stępień, T. Koivurova and P. Kankaanpää, 'The changing Arctic and the European Union: a book based on the report "Strategic assessment of development of the Arctic: assessment conducted for the European Union"', (Brill, Leiden, 2016), pp. 57-80, at p.78.

<sup>1384</sup> Balton, D., 'Implementing the New Arctic Fisheries Agreement', in T. Heidar (Ed.), *New Knowledge and Changing Circumstances in the Law of the Sea*, 2020, pp. 429-445, at p. 434.



conflict between Arctic States and DWFNs driven by considerable fishing interests for the national economy must be avoided. The CAOFA also often refers to the precautionary principle but this is a too evanescent and intangible concept since the levels of precaution employed are subjective differ from State to State. It would be appropriate to establish in concrete terms when it is necessary to abstain from harvesting and when scientific knowledge will be conducive for all participants in the fishery to start fishing activities. The risk is that, in the absence of precise and rigorous limits, the major DWFNs underestimate the precaution to be used in a certain fishing activity and with the claim of starting a new and exploratory fishing damage the ecosystem generating overfishing.

In conclusion, as regards the Donut Hole high seas pocket, the Donut Hole Agreement applies to the high-seas portion of the Central Bering Sea, leaving the EEZs of the two coastal States governed by their respective States (Russia and the USA). It forms the basis of a coherent Pollock management policy for the entire Aleutian Basin as well. It is clear from the history of the negotiations that led to the Convention that the primary aim of the two coastal States was the establishment of a coherent fisheries policy for the whole Bering Sea. This agreement is described as significant trend in US practice to ensure consistency of measures applicable to the high seas with those adopted by coastal States in their EEZs.<sup>1385</sup>

Based on the description of the great Pollock collapse showed in the first paragraph of chapter VI and in light of all the measures taken to encourage the revival of that stock, the Convention seems to brilliantly balance the conflicting interests that Russia and the USA vie for in their dual role as coastal States and important DWFNs. They reached an agreement that basically hangs in favour of the interests of the coastal States in the conservation and management of living marine resources. At the same time, they avoided the diplomatic and political pitfalls associated with the various jurisdiction issues based on the UNCLOS provisions.<sup>1386</sup> By basing this rather considerable control over deep-sea fishing in the Donut Hole on a multilateral Convention rather than claims of coastal States' jurisdiction over straddling stocks, the agreement offers no precedent or

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<sup>1385</sup> Barbara Kwiatkowska, 'The high seas fisheries regime: at a point of no return?', in *The International Journal of Marine and Coastal Law*, Vol. 8, No. 3, p. 327-358, 1993, at p. 333.

<sup>1386</sup> Jon K. Goltz, 'The Sea of Okhotsk Peanut Hole: How the United Nations Draft Agreement on Straddling Stocks Might Preserve the Pollack Fishery', in *Washington International Law Journal*, Vol. 4, No. 2, 1995, pp. 443-478, at p. 454.

encouragement to other coastal States that might consider imposing unilateral or regional regimes on the high seas off their coasts.<sup>1387</sup>

However, States whose fishing vessels took part to that fishery before its collapse may have a less positive view of the Convention. From their point of view, the Convention represents the inevitable progression of events that began with the establishment of the 200-mile fisheries jurisdiction, which forced many of their vessels to abandon the most profitable fishing grounds. In the end, even the countries whose vessels operated in the Donut Hole realized that a properly regulated fishery in that area for a replenishment of the Pollock stock, on which the Convention is based, is also in their interest.

The analysis conducted in this thesis on fishing regulation issues in four different high seas areas of the Arctic Ocean has shown that, despite global legislative instruments such as UNCLOS, UNFSA, FAO Compliance Agreement, the solutions are more regional than global in character.

In the high seas areas examined as well as in other portions of high seas, regional States practice plays a key role in the effective regulation of fisheries. In this thesis, it was deliberately shown that although there are many international tools to resolve fishing disputes among States, most of the time they are inadequate and lacking in certain aspects of regulation, such as quota allocation criteria. As explained in chapters III to VI, the main regulatory interventions to tackle the issues were a result of regional efforts, through the cooperation of coastal and non-coastal States interested in a specific fishing activity. Therefore, the improvement of the regulation of fishing in the Arctic Ocean depends primarily on the will of the States involved.

In addition to this aspect, there is another element to consider and that has emerged throughout the analysis of the previous chapters: every regulatory solution adopted so far was linked to the individual interests of the States that harvest in those areas. However, such interests will inevitably be altered as soon as the fishing scenarios will change, even partially. The current instable conditions brought by climate change are increasingly placing States in a position of changing interests. The repercussions on the regulatory frameworks and on potential international disputes are evident.

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<sup>1387</sup> Andreas Østhagen, 'High North, Low Politics—Maritime Cooperation with Russia in the Arctic', in *Arctic Review on Law and Politics*, Vol. 7, No. 1 (2016), pp. 83-100, at p. 84.

To conclude, international fisheries law is a law in continuous evolution and in order to interpret it correctly, it is necessary to be aware of the internal and peculiar dynamics of that given territory where fishing activities are carried out in a constant changing sea following the volatile needs of different State actors.

## BIBLIOGRAPHY

### BOOKS

Abrahamson J., *Joint Development of Offshore Oil and Gas Resources in the Arctic Ocean Region and the United Nations Convention on the Law of the Sea*, in *The Law of the Sea 1.4*, ed. by Leiden; Boston: Koninklijke Brill NV, 2018, pp. 1-105, at p. 62.

Balton D., *Implementing the New Arctic Fisheries Agreement*, in *New Knowledge and Changing Circumstances in the Law of the Sea*, ed. by Tomas Heidar, Leiden: Brill Nijhoff, 2020, pp. 429-445, at p. 436.

Anderson D., *The Straddling Stocks Agreement of 1995*, in *Modern Law of the Sea*, ed. by Leiden; Boston: Martinus Nijhoff Publishers, pp. 361-377, 2008, at p. 366.

Ásgeirsdóttir A., *Oceans of Trouble: Domestic Influence on International Fisheries Cooperation in the North Atlantic and the Barents Sea*, in *Global Environmental Politics*, Vol. 7, No. 1, 2007, pp. 120-144, at p. 131.

Balton, D., *Implementing the New Arctic Fisheries Agreement*, in T. Heidar (Ed.), *New Knowledge and Changing Circumstances in the Law of the Sea*, 2020, pp. 429-445, at p. 434.

Balton D., *Making the New Rules Work: Implementation of the Global Fisheries Instrument*, in *Current Fisheries Issues and the Food and Agricultural Organization of the United Nations*, ed. Myron H. Nordquist and John Norton Moore, 107–135 (The Hague: Kluwer Law International, 2000), at 108.

Balton D.A., *The Bering Sea Dough-nut Hole Convention: Regional Solution, Global Implications*, in *Governing high seas fisheries: the interplay of global and regional regimes*, ed. O.S.Stokke, Oxford ; New York : Oxford University Press, pp. 142-172, 2001, at p. 143.

Balton D., *The Compliance Agreement*, in *Developments in international fisheries law*, ed. Ellen Hey, 31–53 (The Hague; Boston: Kluwer Law International, 1999), at p. 49.

Berg R., *The genesis of the Spitsbergen/Svalbard Treaty, 1871-1920*, in *The Cambridge History of the Polar Regions*, ed. by A.Howkins and P. Roberts, Cambridge University Press, 2023, pp. 354-377, at p. 361.

Berkman P.A., Vylegzhanin A.L.(Eds.), *Environmental Security in the Arctic Ocean*, in Springer, Dordrecht, 2013, at pp. 19-25.

Birnie P. and Boyle A., *International Law and the Environment*, Oxford University Press, Oxford, 1992, at p. 365.

Bjørndal, T., and Munro G.R., *The Economics and Management of World Fisheries*, Oxford, UK: Oxford University Press, 2012, at p. 87.

Bjørndal, T., and Munro G.R., *The Management of High Seas Fisheries*, In *The International Yearbook of Environmental and Resource Economics*, 2003, ed. H. Folmer and T. Tietenberg, pp. 1–35, at p. 7.

Brekke H., *Setting Maritime Limits and Boundaries: Experiences from Norway*, in *The Law of the Seabed: access, uses, and protection of seabed resources*, ed. by Catherine Banet, Leiden: Brill Nijhoff, 2020, pp.85-103, at p. 91.

Bull B., *Arctic development and environmental challenges: Information needs for decision-making and international co-operation*, in *Arctic Development and Environmental Challenges*, ed. by Davor Vidas, pp. 25–32, at p. 28.

Byers M., *Arctic Straits*, in *International Law and the Arctic*, ed. by Michael Byers, Cambridge University Press, 2013, pp. 128-170, at p. 139.

Byers M., *Beaufort Sea Boundary*, in *International law and the Arctic*, ed. by Michael Byers, Cambridge University Press, 2013, pp. 56-91, at p. 66.

Byers M., *Extended continental shelves*, in *International Law and the Arctic*, ed. by Michael Byers, Cambridge University Press, 2013, pp. 92-127, at p. 99.

Byers M., *Maritime Boundaries*, in *International Law and the Arctic*, ed. by Michael Byers, Cambridge University Press, August 2013, pp. 28-55, at p. 36.

Byers M. and Østhagen A., *Why Does Canada Have So Many Unresolved Maritime Boundary Disputes?*, in *The Canadian Yearbook of International Law*, ed. C.B. Bourne, Cambridge University Press, Volume 59, 2021, pp. 1-62, at p. 27.

Caddell R., *Deep-Sea Bottom Fisheries and the Protection of Seabed Ecosystems: Problems, Progress and Prospects*, in *The Law of the Seabed: Access, Uses, and Protection of Seabed Resources, Publications on Ocean Development*, ed. Catherine Banet, Leiden; Boston: Brill Nijhoff, Volume 90, pp. 255-284, January 2020, at p. 263.

Carpenter A., *OSPAR Review of the State of the North Sea – oil inputs and their impact on the marine environment of the North Sea*, in *Oil Pollution in the North Sea 41*, ed. by A. Carpenter, Springer, pp. 255-282, 2016, at p. 258.

Caron D.D. and Scheiber H.N., *Bringing New Law to Ocean Waters*, in *Publications on Ocean Development*, ed. by David D. Caron and Harry N. Scheiber, Leiden; Boston: M. Nijhoff Publishers, Volume 47, 2004, pp. 3-14, at p. 7

Churchill R., *Fisheries Management in European Union and United Kingdom Waters after Brexit: A Change for the Better?*, in *Ocean Yearbook Online*, ed. by E.M. Borgese and N. Ginsburg, Chicago : University of Chicago Press, 1978- Ardsley, NY Transnational Publisher Leiden, The Netherlands, Brill May 2022, pp. 287-313, at p. 298.

Churchill R.R., *Managing Straddling Fish Stocks in the North-East Atlantic: A Multiplicity of Instruments and Regime Linkages—but How Effective a Management?*, in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, ed. by O.S. Stokke, Oxford University Press, May 2001, pp. 234-272, at p. 244.

Churchill R.R. and Owen D., *External aspects of fisheries management*, in the EC Common Fisheries Policy, ed. by R.R. Churchill and D. Owen, Oxford EC Law Library, March 2010, pp. 300-398, at p. 325.

Churchill R.R. and Owen D., *The international framework of fisheries management*, in The EC Common Fisheries Policy, ed. by R.R. Churchill and D. Owen, Oxford EC Law Library, pages 75–128, March 2010, at p. 84.

Churchill R. and Ulfstein G., *Marine Management in Disputed Area: the case of the Barents Sea*, ed. by Routledge, London, 1992 1992, p. 95.

Churchill R.R. and Ulfstein G., *The Disputed Maritime Zones around Svalbard*, in Changes in the Arctic environment and the law of the sea, ed. by Myron H. Nordquist, John Norton Moore and Tomas H. Heidar, Martinus Nijhoff Publishers, Leiden, 2010, pp. 551-593, at p. 558.

Dahmani M., *Coastal State's Fisheries Management in the EEZ*, in The Fisheries Regime of the Exclusive Economic Zone, ed. by Nijhoff, Dordrecht, 1987, pp. 34-135, at p. 46.

Doulman D.J., *Code of Conduct for Responsible Fisheries: Development and Implementation consideration*, in Current fisheries issues and the Food and Agriculture Organization of the United Nations, ed. by John Norton Moore, Myron H. Nordquist., Leiden; Boston: Brill | Nijhoff, pp. 307–330, Series: Center for Oceans Law and Policy, Volume: 5, January 2000, at p. 312.

Dubay D., *Round Two for Arctic Fishing?*, in Marine Biodiversity of Areas beyond National Jurisdiction, ed. by Myron H. Nordquist and Ronán Long, Brill Nihoff, Leiden, 2021, pp. 331-341, at p. 335

Edeson W., *Towards Long-term Sustainable Use: Some Recent Developments in the Legal Regime of Fisheries*, in International law and sustainable development: Past achievements and future challenges, ed. Alan E. Boyle and David Freestone, 165–203, (New York: Oxford University Press, 1999), at p. 168.

Elferink A.G.O., *The Sea of Okhotsk Peanut Hole: De facto extension of coastal state control*, in Governing high-seas fisheries: the interplay of global and regional regimes, ed. by Olav Schram Stokke, Oxford University Press, 2001, pp. 179-205, at p. 183.

Elferink A.G.O. and Rothwell D., *The law of the sea and polar maritime delimitation and jurisdiction*, ed. by Alex G. Oude Elferink and Donald R. Rothwell, The Hague; New York: M. Nijhoff; Norwell, MA: Distributed in North, Central and South America by Kluwer Law International, Publications on Ocean Development, Volume 37, 2001, p. 244.

Engler-Palma M.C., *Allocation of Fishing Opportunities in Regional Fisheries Management Organizations: from Power to Law?*, in Recasting transboundary fisheries management arrangements in light of sustainability principles: Canadian and international perspectives, ed. by Dawn A. Russell and David L. VanderZwaag, Leiden [etc.]: Nijhoff, 2010, pp. 473-518, at p. 484.

Fabri H.R., *A bridge over troubled waters: dispute resolution in the law of international watercourses and the law of the sea*, ed. by H  l  ne Ruiz Fabri, Erik Franckx, Marco Benatar and Tamar Meshel, Leiden; Boston: Brill Nijhoff, 2021, at p. 213.

*General Provisions, United Nations Convention on the Law of the Sea: A Commentary*, ed. Alexander Proelss. M  nchen: Nomos Verlagsgesellschaft, 2017, pp. 1937–1967, at p. 1941, Bloomsbury Collections.

Goodman C., *The Framework for Coastal State Jurisdiction over Fishing in the EEZ*, in *Coastal State Jurisdiction over Living Resources in the Exclusive Economic Zone*, ed. by C. Goodman, Oxford University Press, November 2021, pp. 25-62, at p. 45.

Gullett W., *The Contribution of the Precautionary Principle to Marine Environmental Protection: from Making Waves to Smooth Sailing?*, in *Frontiers in international environmental law: oceans and climate challenges: essays in honour of David Freestone*, ed. by Richard Barnes and Ron  n Long, Leiden; Boston: Brill Nijhoff, 2021, pp.368-406 at p. 389.

Hayashi M., *The 1995 UN Fish Stocks Agreement and the Law of the Sea*, in *Order for the oceans at the turn of the century*, ed. Davor Vidas and Willy   streng, (The Hague; Boston: Kluwer Law International, 1999), pp. 37–53, at 38.

Hayashi, M., *The Straddling and Highly Migratory Fish Stocks Agreement*, in Hey, Ellen. (Ed). *Developments in International Fisheries law*, The Hague: Kluwer Law International, 1999, pp. 55-84, at p. 64

Hey E., *Developments in International Fisheries Law*, ed. by Ellen Hey, The Hague; Boston: Kluwer Law International, October 2021, at p. 28.

Hey E., *The regime for the exploitation of transboundary marine fisheries resources: The United Nations law of the Sea Convention Cooperation between states*, ed. by Ellen Hey, (Dordrecht: Nijhoff, 1989); Utrecht, Univ., Diss., 1989., at p. 50.

Henriksen T., *Allocation of Fishing Rights: Principles and Alternative Procedures*, in *Challenges of the Changing Arctic*, ed. by Myron H. Nordquist, John Norton Moore, Ronan Long, Series: Center for Oceans Law and Policy, Volume: 19, 9789004314252, Brill | Nijhoff, January 2016, pp.522-558, at p. 531

Henriksen T., H  nneland G. and Sydnes A., *Law and politics in ocean governance: The UN fish stocks agreement and regional fisheries management regimes*, Publications on Ocean Development, Volume 52, ed. by Leiden: Nijhoff, 2006, at p. 11.

Henriksen T., H  nneland G. and Sydnes A., *The Joint Russian Norwegian Fisheries Commission*, in *Law and Politics in Ocean Governance*, ed. by Leiden; Boston: Martinus Nijhoff Publishers, 2006, pp. 131-147, at p. 139.

Henriksen T., H  nneland G., and Sydnes A., *The North-east Atlantic Fisheries Commission (Neafc)*, in *Law and Politics in Ocean Governance: The UN Fish Stocks Agreement and Regional Fisheries Management Regimes*, ed. by Leiden; Boston:

Martinus Nijhoff Publishers, Publications on Ocean Development, Volume: 52 (2006), pp.99-130, at p. 104.

Hønneland G., *Recent Global Agreements on High Seas Fisheries: Potential Effects on Fisherman Compliance*, in *Governing high seas fisheries: the interplay of global and regional regimes*, ed. by Olav Schram Stokke, Oxford University Press, 2001, pp. 121-139, at p. 129

Hønneland G. and Stokke O.S., *Introduction*, in *International cooperation and arctic governance: Regime effectiveness and northern region building*, ed. Olav Schram Stokke and Geir Hønneland, (London: Routledge, 2007), pp. 1–12, at 3.

Hong N., *Non-Arctic States' Role in the High North: Participating in Arctic Governance through Cooperation*, in *Marine Biodiversity of Areas beyond National Jurisdiction*, ed. by Myron H. Nordquist and Ronán Long, Leiden; Boston: Brill Nijhoff, 2021, pp. 309-330, at p. 310.

Huebert R.N., *Article 234 and Marine Pollution Jurisdiction in the Arctic*, in *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction*, ed. by Alex G. Oude Elferink and Donald R. Rothwell, The Hague; New York: M. Nijhoff; Norwell, MA: Distributed in North, Central and South America by Kluwer Law International, 2001, pp. 249-267, at p. 255.

Ivanova E., *The Competing Jurisdictions of the WTO and the UNCLOS Dispute Settlement I in the Context of Multifaceted Disputes*, *Studies of the Max Planck Institute Luxembourg for International, European and Regulatory Procedural Law*; volume 23, ed. by Nomos Verlagsgesellschaft, Baden-Baden, Germany 2021, at p. 514.

Kaye S.B., *International fisheries management*, *International environmental law and policy series*, ed. by The Hague: Kluwer Law International, 2001, at p. 146.

Koivurova T., Kirchner S. and Kleemola-Juntunen P., *The Arctic Ocean: Are We Ready to Govern a New Ocean?*, in *Global Challenges and the Law of the Sea*, ed. by Marta Chantal Ribeiro, Fernando Loureiro Bastos and Tore Henriksen, Springer, May 2020, pp. 59-80, at p. 68.

Kvalvik I., *The North East Atlantic Fisheries Commission and The Implementation Of Sustainability Principles: Lessons To Be Learned?*, in *Recasting Transboundary Fisheries Management Arrangements in Light of Sustainability Principles*, ed. by Dawn A. Russell and David L. VanderZwaag, Leiden ; Boston : Martinus Nijhoff Publishers, 2010, pp. 387-417, at p. 395.

Lando M., *Equidistance in Maritime Delimitation as a Judicial Process*, ed. by Cambridge University Press, 2019, pp. 102-166, at p. 123.

Lando M., *Relevant Circumstances*, in *Maritime Delimitation as a Judicial Process*, ed. by Cambridge University Press, 2019, pp. 167-245, at p. 181.

Langlet D. and Rayfuse R., *The Ecosystem Approach in Ocean Planning and Governance: An Introduction*, in *The Ecosystem Approach in Ocean Planning and*



Governance: Perspectives from Europe and Beyond, ed. by David Langlet and Rosemary Rayfuse, Brill Nijhoff, 2018, pp. 1-14, at p. 6.

Lagoni R., *Monitoring Compliance and Enforcement of Compliance through the OSPAR Commission*, in *Marine issues: From a scientific, political and legal perspective*, ed. Peter Ehlers, Rudiger Wolfrum and Elisabeth M. Borgese, The Hague: Kluwer Law International, 2002, pp. 155-163, at p. 157.

Lagoni R., *Regional Protection of the Marine Environment in the Northeast Atlantic Under the OSPAR Convention of 1992*, in *The Stockholm declaration and law of the marine environment*, ed. Myron H. Nordquist, John N. Moore and Said Mahmoudi, The Hague; New York: Kluwer Law International, 2003, pp. 183–203, at 183.

Laursen F., *Continental Shelf Policies*, in *Small Powers at Sea: Scandinavia and the New International Marine Order*, ed. by Dordrecht; Boston: M. Nijhoff, 1993, pp. 67-96, at p. 75.

Levine J. and Kimani S., *Peace, Water and the Permanent Court of Arbitration: Supporting Dispute Settlement from the Rhine to the Corentyne*, in *A bridge over troubled waters: dispute resolution in the law of international watercourses and the law of the sea*, edited by Hélène Ruiz Fabri, Erik Franckx, Marco Benatar and Tamar Meshel, Leiden; Boston: Brill Nijhoff, 2021, pp. 185-219, at p. 203.

Lévy JP. And Schram G.G., *United Nations conference on straddling fish stocks and highly migratory fish stocks: selected documents*, ed. by The Hague: Nijhoff, cop. 1996, pp. 813-829, at p. 821.

Liao X., *Geographical Circumstances: from part II – Delimitation Methodology for the Continental Shelf beyond 200 nautical miles*, in *The Continental Shelf Delimitation Beyond 200 Nautical Miles: Towards A Common Approach to Maritime Boundary-Making*, ed. by Cambridge University Press, 2021, pp. 268-300, at p. 277.

Liao X., *Overlapping Entitlements to the Continental Shelf beyond 200 Nautical Miles*, in *The Continental Shelf Delimitation Beyond 200 Nautical Miles: Towards A Common Approach to Maritime Boundary-Making*, ed. by Cambridge University Press, October 2021, pp. 13-160, at p. 49.

Lott A., *Use of Force against Sovereign Immune Vessels*, in *Hybrid Threats and the Law of the Sea*, ed. by Leiden; Boston: Brill Nijhoff, 2022, pp. 93-116, at p. 95.

Mcdorman T.L., *Canada-U.S. International Ocean Law Relations In The North Pacific: Disputes, Agreements And Cooperation*, in *Maritime Boundary Disputes, Settlement Processes, and the Law of the Sea*, ed. by Seoung-Yong Hong and Jon M. Van Dyke, Leiden ; Boston : Martinus Nijhoff Publishers, 2009, pp. 176-197, at p. 184.

McDorman T.L., *Canada–United States Maritime Boundaries*, in *Salt water neighbors: international ocean law relations between the United States and Canada*, ed. by Oxford University Press, 2009, pp. 115-206, at p. 167.

McEvoy A.F., *The fisherman's problem. Ecology and law in the California fisheries, 1850–1980*, ed. by Cambridge University Press, New York, USA, 1986, at p. 82.

Miles E.L. and Burke W.T., *Pressures on the United Nations convention on the law of the sea of 1982 arising from new fisheries conflicts: the problem of straddling stocks*, pp. 217-238, in T.A. Clingan, A.L. Kolodkin (Eds.), *The Moscow Symposium on the Law of the Sea*. Moscow, 1991, at p. 222.

Molenaar E.J., *Arctic Fisheries Conservation and Management: Initial Steps of Reform of the International Legal Framework*, in *The Yearbook of Polar Law*, ed. Gudmundur Alfredsson and Timo Koivurova, Leiden Boston: Martinus Nijhoff Publishers, 2009, pp. 427–464, at p. 433.

Molenaar E.J., *Arctic Fisheries Management*, in E.J. Molenaar, A.G. Oude Elferink and D.R. Rothwell (eds), *The Law of the Sea and the Polar Regions: Interactions between Global and Regional Regimes*, Martinus Nijhoff Publishers, Leiden, 2013, pp. 243–266, at pp. 248– 258.

Molenaar E.J., *Climate Change and Arctic Fisheries*, in *Climate governance in the Arctic, Environment and Policy*, Volume 50, edited by Timo Koivurova, E. Carina H. Keskitalo, Nigel Bankes, pp. 145-169, 2009, at p. 165.

Molenaar, E.J., *International Regulation of Central Arctic Ocean Fisheries*, in Myron Nordquist. (Eds). *Challenges of the Changing Arctic. Continental Shelf, Navigation, and Fisheries*, Brill Academic Publishers, 2016, pp. 429-463, at p. 449.

Molenaar E.J., *Participation in Regional Fisheries Management Organizations*, in *Strengthening international fisheries law in an era of changing oceans*, ed. by Richard Caddell and Erik J Molenaar, Oxford: Hart, 2019, pp. 103-129, at p. 121.

Molenaar E J, *Participation in the Central Arctic Ocean Fisheries Agreement*, in A Shibata and Others (Eds.), *Emerging Legal Orders in the Arctic: The Role of Non-Arctic Actors*, Routledge 2019, pp. 132-170, at p.141.

Molenaar E.J., *Port state jurisdiction to combat IUU fishing: the Port State Measures Agreement*, in *Recasting transboundary fisheries management arrangements in light of sustainability principles: Canadian and international perspectives*, *Legal aspects of sustainable development*, ed. by Dawn A. Russell and David VanderZwaag, Leiden: Martinus Nijhoff, 2010, pp. 369–386, at p. 373.

Molenaar E.J., *Status and Reform of International Arctic Fisheries Law*, in *Arctic Marine Governance: Opportunities for Transatlantic Cooperation*, edited by E. Tedsen, S. Cavalieri and R. Andreas Kraemer, Berlin: Springer, March 2013, pp. 103-125, at p. 111.

Molenaar E.J. and Caddell R., *International Fisheries Law: Achievements, Limitations and Challenges*, in *Strengthening International Fisheries Law in an era of Changing Oceans*, ed. by Richard Caddell and Erik J Molenaar, Oxford: Hart, 2019, pp. 3-10, at p. 5.

Molenaar E.J., Koivurova T. et al., *'Introduction to the Arctic'*, in Arctic Marine Governance: Opportunities for Transatlantic Cooperation, ed. by Elizabeth Tedsen, Sandra Cavalieri, R. Andreas Kraemer, Berlin: Springer, 2014, pp. 3-19, at p. 7.

Molito M.R., *International Environmental Law: Primary Materials*, ed. by Michael R. Molitor, in Kluwer Law and Taxation Publishers, Dordrecht, 1991, at p. 8.

Moore G., *The FAO Compliance Agreement*, in Current fisheries issues and the Food and Agriculture Organization of the United Nations, Center for Oceans Law and Policy, Volume 5, ed. Myron H. Nordquist and John N. Moore, The Hague; Boston: M. Nijhoff Publishers, 2000, pp. 77–91, at 78.

Moore R. and Furgerson J.R., *Introductory note to international guidelines for the management of deep-sea fisheries in the high seas*, in International Legal Materials, ed. by Cambridge University Press, Vol. 47, No. 6 (2008), pp. 994-997, at p. 995.

Mossop J. and Schofield C., *Biodiversity beyond National Jurisdiction and the Limits of the Commons*, in Marine Biodiversity of Areas beyond National Jurisdiction, ed. by Myron H. Nordquist and Ronán Long, Leiden; Boston: Brill | Nijhoff, 2021, pp. 285-306, at p. 293.

Munro G.R., *Coastal States and Distant Water Fleets Under Extended Jurisdiction: The Search for Optimal Incentive Schemes*, in Advances in Dynamic Games and Applications, ed. by Tamer Başar and Alain Haurie, Springer, 1994, pp. 301-317, at p. 308.

Murphy S.D., *Effects of islands on maritime boundary delimitation*, in International Law Relating to Islands, ed. by Leiden, The Netherlands: Brill Nijhoff, 2017, pp. 221-276, at p. 235.

Murphy S.D., *Taking Stock of the 'Compatibility Requirement': What Limitations Does It Impose for High Seas Fishing?*, in Persistent and Emerging Challenges in International Fisheries Law (Bjørn Kunoy, ed.) (Brill, Forthcoming), May 2023, pp. 1-21, at p. 7.

Nakamura J., *International Fisheries Law: Past to Future*, in Ocean Governance: Knowledge systems, policy foundations and thematic analysis, ed. by Stefan Partelow, Maria Hadjimichael and Anna-Katharina Hornidge, Springer, 2023, pp. 175-207, at p. 183.

Ndiaye T.M. and Wolfrum R., *Settlement of Disputes*, In Law of the Sea, Environmental Law and Settlement of Disputes, ed. by Tafsir Malick Ndiaye, Rüdiger Wolfrum; Chie Kojima, assistant editor, Leiden; Boston: Martinus Nijhoff, 2007, pp. 845-1052, at p. 924.

Nelson D., *The Development of the Legal Regime of High Seas Fisheries*, in International Law and Sustainable Development: Past achievements and future challenges, ed. by Alan Boyle and David Freestone, Oxford University Press, 1999, pp. 112-134, at p. 115.

Nordquist M.H., Rosenne S. and Jankov A., *'United Nations Convention on the Law of the Sea, 1982: a commentary'*, Vol. 4, Articles 192 to 278, Final act, Annex VI / Shabtai Rosenne and Alexander Yankov vol. eds.; Neal R. Grandy ass. ed.', in United Nations Convention on the Law of the Sea, 1982 Dordrecht [etc.]: Nijhoff, cop. 1991.

Ørebech P. and Bosselman F., *The Role of Customary Law in Sustainable Development*, ed. by Cambridge University Press, Cambridge, 2005, at p. 115.

Østreng W., *The post-Cold War Arctic: Challenges and transition during the 1990s*, in *Arctic Development and Environmental Challenges: Information needs for decision-making and international co-operation*, ed. by Davor Vidas, Ringkjøbing/Gentofte: Scandinavian Seminar College, distributed by Erling Olsens Forlag, 1997; Papers from a Nordic Policy Seminar, Arendal, Norway, September 8–10, 1996, pp. 33–49, at p. 35.

Palma M.A., Tsameny M., and Edeson W., *Port State Measures*, in *Promoting Sustainable Fisheries: The International Legal and Policy Framework to Combat Illegal, Unreported and Unregulated Fishing*, ed. by Leiden; Boston, Mass.: Martinus Nijhoff Publishers Series: Legal Aspects of Sustainable Development, Volume: 6, January 2010, pp. 157-172, at p. 161.

Platjouw F.M. and Pozdnakova A., *Strengthening the Rule of Law in Regional Seas and Oceans*, in *The Environmental Rule of Law for Oceans: Designing Legal Solutions*, ed. by Froukje Maria Platjouw and Alla Pozdnakova, Cambridge, United Kingdom; New York, NY : Cambridge University Press, 2023, pp. 281-358, at p. 293

Pyc D., *The Role of the Law of the Sea in Marine Spatial Planning*, in *Maritime Spatial Planning: past, present, future*, ed. by Jacek Zaucha and Kira Gee, Palgrave Macmillan, 24 January 2019, pp. 375–395, at p. 381.

Pusceddu A., Bianchelli S. et al., *Chronic and intensive bottom trawling impairs deep-sea biodiversity and ecosystem functioning*, PNAS, Edited by David M. Karl, University of Hawaii, Honolulu, HI, May 19 2014, 111 (24) 8861-8866, at p. 8863.

Rayfuse R., *Non-Flag State Enforcement in High Seas Fisheries*, in *Publications on Ocean Development*, ed. by Leiden; Boston: M. Nijhoff, Volume 46, 2004, at p. 212.

Rayfuse R.G., *Regional Fisheries Organisations Dealing with Straddling Fish Stocks*, in *Non-Flag State Enforcement in High Seas Fisheries*, ed. by Leiden; Boston: M. Nijhoff, 2004, pp. 205-294, at p. 221.

Rayfuse R., *Taming the Wild North?: High Seas Fisheries in the Warming Arctic*, in *Frontiers in international environmental law : oceans and climate challenges : essays in honour of David Freestone* Leiden, ed. by Richard Barnes and Ronán Long, Boston: Brill Nijhoff, 2021, pp. 263-280, at p. 267.

Roach J.A. and Smith R.W., *Exclusive Economic Zone*, in *Excessive Maritime Claims*, ed. by Leiden; Boston: Brill Nijhoff, Series: Publications on Ocean Development, Volume 73, January 2012, pp. 161-180, at p. 173.

Rothwell D., *The polar regions and the development of international law*, 1. publ., Cambridge studies in international and comparative law: New series; 3, ed. by Cambridge University Press, 1996, p. 229.

Schäli J., *The Protection of the Marine Environment from Land-based Sources of Plastic Pollution in International Law*, In *The Mitigation of Marine Plastic Pollution in International Law: Facts, Policy and Legal Implications*, ed. by Leiden; Boston: Brill Nijhoff, Series: World Trade Institute Advanced Studies, Volume: 8, published in April 2022, pp. 107-377, at p. 211.

Sands P., *Principles of international environmental law*, 2nd ed. (Cambridge: Cambridge Univ. Press, 2003), at p. 568.

Seokwoo L. and Kim J.W., *UNCLOS and the Obligation to Cooperate: International Legal Framework for Semi-Enclosed Seas Cooperation*, in *Maritime Cooperation in Semi-Enclosed Seas: Asian and European experiences*, ed. by Keyuan Zou, Leiden; Boston: Brill/Nijhoff, 2019, pp. 11-29, at p. 19.

Serdy A., *New entrants, old problem: allocation principles in the UN Fish Stocks Agreement and other treaties*, in *The New Entrants Problem in International Fisheries Law*, ed. by Cambridge University Press, February 2016, pp. 43-140, at p. 51.

Serdy A., *Quota trading in international fisheries commissions: an idea whose time has come?*, in *The New Entrants Problem in International Fisheries Law*, ed. by Cambridge University Press, February 2016, pp. 279-374, at p. 288.

Skaridov A.S., *The Seabed in the High North – How to Address Conflicts?*, in *The Law of the Seabed: Access, Uses, and Protection of Seabed Resources*, ed. by Catherine Banet, Leiden; Boston: Brill Nijhoff, January 2020, pp. 104-124, at p. 109.

Sohn L.B., *Freedom of the High Seas*, in *Cases and Materials on the Law of the Sea*, Second Edition, ed. by Leiden, Netherlands: Brill Nijhoff, 2014, pp. 46-110, at p. 52.

Stępień A., Koivurova T. and Kankaanpää P., *The changing Arctic and the European Union: a book based on the report "Strategic assessment of development of the Arctic: assessment conducted for the European Union*, ed. by Adam Stępień, Timo Koivurova, Paula Kankaanpää, Leiden; Boston: Brill Nijhoff, 2016, pp. 57-80, at p.78.

Stokke O.S., *The Loophole of the Barents Sea Fisheries Regime*, in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, ed. O.S. Stokke, Oxford University Press, 2001, pp. 273-301, at p. 277.

Stokke O.S., Anderson L.G., and Mirovitskaya N., *The Barents Sea Fisheries*, in O. R. Young (ed.), *The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms* (Cambridge, MA: MIT Press, 1999), pp. 91-154, at p. 98.

Tahindro A., *Sustainable Fisheries: The Legal Regime of the 1995 United Nations Fish Stocks Agreement and Its Contribution to Subsequent Developments Promoting Sustainable Fisheries*, In *Legal Order in the World's Oceans: UN Convention on the Law of the Sea*, Center for Oceans Law and Policy, Volume 21, ed. by Leiden; Boston: Brill Nijhoff, April 2018, pp. 323-369, at p. 352.

Takei Y., *Filling regulatory gaps in high seas fisheries: Discrete High Seas Fish Stocks, Deep-Sea Fisheries and Vulnerable Marine Ecosystems*, Publications on Ocean Development, volume 75\_0924-1922, ed. by Leiden; Boston: Martinus Nijhoff Publishers, 2013, at p. 113.

Treves T., *The Settlement of Disputes According to the Straddling Stocks Agreement of 1995*, in *International Law and Sustainable Development: past achievements and future challenges*, Oxford University Press, edited by Alan Boyle and David Freestone, September 1999, pp. 253-269, at p. 262.

Tyler T.J., James L. Loftis J.L. et al., *Developing Arctic Hydrocarbon Resources: Delineating and Delimiting Boundaries for Field Development in the Arctic*, in *The Regulation of Continental Shelf Development*, ed. by Myron H. Nordquist, John Norton Moore, Aldo Chircop and Ronan Long, Leiden; Boston: Martinus Nijhoff Publishers 2013, pp. 319-351, at p. 333.

Vicuña F.O., *The International Law of High Seas Fisheries: From Freedom of Fishing to Sustainable Use*, in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, Olav Schram Stokke (ed.), Oxford University Press, May 2001, pp. 22-52, at p. 35.

Vukas B. and Vidas D., *Flags of Convenience and High Seas Fishing: The Emergence of a Legal Framework*, in *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes*, ed. Olav Schram Stokke, Oxford University Press, May 2001, pp. 53–90, at 57.

Wakefield J., *The Ecosystem Approach and the Common Fisheries Policy*, in *The Ecosystem Approach in Ocean Planning and Governance*, ed. by David Langlet, Rosemary Rayfuse, Leiden: Brill Nijhoff, 2019, pp. 287-316, at p. 305.

Weber J., *Handbook on geopolitics and security in the Arctic: the high north between cooperation and confrontation*, in Cham, ed. by Joachim Weber, Switzerland: Springer, 2020, at p. 177.

Wolfrum R., Rohen V. and Morrison F.L., *Preservation of the Marine Environment*, in *International, regional, and national environmental law*, ed. Fred L. Morrison and Rudiger Wolfrum, The Hague; Boston: Kluwer Law International, 2000, pp. 225-284, at p. 235.

## CASE LAW

*Anglo-Norwegian Fisheries Case*, in International Law Reports, Volume 18, 1957, pp. 86-144, at p. 93

*DS469: European Union — Measures on Atlanto-Scandian Herring*, World Trade Organization.

*Implementing Regulation Preamble Recitals 9; EU-Measures on Atlanto-Scandian Herring: Request for Consultations by Denmark in respect of the Faroe Islands of 7 November 2013* (WT/DS469/1) (Request for Consultations) para. 9.

International Court of Justice, *Case concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta)*, in International Legal Materials, Vol. 24, No. 5 (SEPTEMBER 1985), pp. 1189-1276, at p. 1197.

International Court of Justice, *Land, Island and Maritime Frontier Dispute (El Salvador v. Honduras; Nicaragua intervening)*, Judgment on the Merits, 11 September 1992, CL-0238, para. 392.

*ITLOS Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (Request for Advisory Opinion Submitted to the Tribunal)* of 2 April 2015 (IUU Fishing Opinion) para 210.

*Peteris Pildegovics and SIA North Star v. Kingdom of Norway*, ICSID Case No. ARB/20/11, note 117, at para. 8.

*The Alaska Boundary Case (Great Britain, United States)*, Reports of International Arbitral Awards - 20 October 1903, United Nations, 2006, Volume XV pp. 481-540, at p. 493.

*The Atlanto Scandian Herring Arbitration between the Kingdom of Denmark in respect of the Faroe Islands and the European Union*, PCA Case No. 2013-30, Press Release (September 24, 2014).

*The Republic of Mauritius v. The United Kingdom of Great Britain and Northern Ireland*, award, Mar. 18, 2015, para. 220.

*The Republic of Philippines v. The People's Republic of China*, PCA Case n° 2013-19, award on jurisdiction and admissibility, Oct. 29, 2015, para. 150.

*WT/DS58/AB/RW United States – Import Prohibition of Certain Shrimp and Shrimp Products* (Recourse to article 21.5 of the DSB by Malaysia) AB-2001-4, Report of the Appellate Body, 22 October 2001, paras 123-124.

## EU LEGISLATION

*Agreement on Fisheries between the European Economic Community and the Kingdom of Norway (1980)*, Official Journal of the European Communities L226/48 (1980).

*Council Decision (EU) 2019/407 of 4 March 2019* on the conclusion, on behalf of the European Union, of the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean, Official Journal of the European Union. 15.3.2019. p. L73/1.

*Council Regulation (EC) No. 1026/2012 of 25 October 2012* on certain measures for the purpose of the conservation of fish stocks in relation to countries allowing non-sustainable fishing (Shared Stocks Regulation), Official Journal of the European Union, published on 14 November 2012.

*Council Regulation (EC) No. 793/2013 of 20 August 2013* establishing measures in respect of the Faroe Islands to ensure the conservation of the Atlanto-Scandian herring stock (Implementing Regulation) Preamble 6.

*EC. Council Regulation No 2791/1999 of 16 December 1999*: laying down certain control measures applicable in the area covered by the Convention on future multilateral cooperation in the north-east Atlantic fisheries; 1999.

*European Union (Common Fisheries Policy) (Faroe Islands) (Revocation) Regulations 2014, S.I. No. 419 of 2014.*

## JOURNAL ARTICLES

Abel W.T., *Fishing for an International Norm to Govern Straddling Stocks: The Canada-Spain Dispute of 1995*, in *The University of Miami Inter-American Law Review*, Vol. 27, No. 3 (Spring – Summer, 1996), pp. 553-583, at p. 560.

Ahmed A. and Mustofa M.J., *Role of soft law in environmental protection: an overview*, in *Global Journal of Politics and Law Research*, Vol.4, No.2, pp.1-18, March 2016, at p. 8

Ali M.A.B., *The Concept of Mediation as Protection of Fishery Resources from IUU Fishing Practices in Indonesia*, in *Journal of Advances in Education and Philosophy*, 2021, pp. 52-57, at p. 55.

Amon D.J., Palacios-Abrantes J. et al., *Climate change to drive increasing overlap between Pacific tuna fisheries and emerging deep-sea mining industry*, *Ocean Sustainability* volume 2, Article number: 9 (2023), pp. 1-8, at p. 2.

Anderson D.H., *The Straddling Stocks Agreement of 1995: An Initial Assessment*, in *The International and Comparative Law Quarterly*, Vol. 45, No. 2 (Apr., 1996), pp. 463-475, at p. 465.



- Agnew D.J., Pierce J. et al., *Estimating the Worldwide Extent of Illegal Fishing*, Plos one, Vol. 4, No. 2 (2009), pp. 1-8, at p. 3
- Alcock F., *Bargaining, Uncertainty, and Property Rights in Fisheries*, in World Politics, Vol. 54, No. 4 (Jul., 2002), pp. 437-461, at p. 452.
- Antinori C.M., *The Bering Sea: A maritime delimitation dispute between the United States and the Soviet Union*, in Ocean Development & International Law, Volume 18, 1987 – Issue 1, pp. 1-47, at p. 23.
- Archer C. and Scrivener D., *Frozen Frontiers and Resource Wrangles: Conflict and Cooperation in Northern Waters*, in International Affairs (Royal Institute of International Affairs 1944-), Vol. 59, No. 1 (Winter, 1982-1983), pp. 59-76, at p. 67.
- Argüello G., *Opportunities for Protecting Biological Diversity in the Arctic Ocean*, in The Yearbook of Polar Law Online, published in April 2022, pp. 127-153, at p. 137.
- Árnadóttir S., *Termination of Maritime Boundaries Due to a Fundamental Change of Circumstances*, in Utrecht Journal of International and European Law, 2016, pp. 94-111, at p. 98.
- Artur K., *The Legal Construct of Historic Title to Territory in International Law – An Overview*, in Polish Yearbook of International Law, vol. 30 (2010), pp. 61-100, at p. 69.
- Astthorsson O.S., Valdimarsson H. et al., *Climate-related variations in the occurrence and distribution of mackerel (*Scomber scombrus*) in Icelandic waters*, in ICES Journal of Marine Science, Volume 69, Issue 7, September 2012, pp. 1289–1297, at p. 1291.
- Auchet M., *Greenland at the crossroads: What strategy for the Arctic?*, in International Journal, Vol. 66, No. 4, part II (Autumn 2011), pp. 957-970, at p. 968.
- Aust A., *The Theory and Practice of Informal International Instruments*, in The International and Comparative Law Quarterly, Vol. 35, No. 4 (Oct., 1986), pp. 787-812, at p. 801.
- Bailey K.M., *An Empty Donut Hole: The Great Collapse of a North American Fishery*, Ecology and Society, Vol. 16, No. 2 (Jun 2011), pp. 1-13, at p. 2.
- Bailey M., Ishimura G. et al., *Moving beyond catch in allocation approaches for internationally shared fish stocks*, in Marine Policy, Volume 40, July 2013, pp. 124-136, at p. 128.
- Bailey, M., Sumaila U.R. and Lindroos M., *Application of Game Theory to Fisheries over Three Decades*, in Fisheries Research 102, 2010, pp. 1–8, at p. 2.
- Baird R., *Illegal, unreported and unregulated fishing: an analysis of the legal, economic and historical factors relevant to its development and persistence*, in Melbourne Journal of International Law, Vol. 5, No. 2, 2004, pp. 299-334, at p. 305.

Baker J.S. and Byers M., *Crossed Lines: The Curious Case of the Beaufort Sea Maritime Boundary Dispute*, in *Ocean Development & International Law*, Volume 43, 2012 – Issue 1, pp. 70-95, at p. 78.

Baker J.S., Betsy B., *Filling an Arctic Gap: Legal and Regulatory Possibilities for Canadian-U.S. Cooperation in the Beaufort Sea* (June 17, 2010). *Vermont Law Review*, Vol. 34, 2009, at p. 57.

Ball J.T., *Fisheries: Canada-United States Reciprocal Fisheries Relations under the Interim Fisheries Agreement of 1978*, in *Case Western Reserve Journal of International Law*, Volume 11, Issue 1, Article 12, pp. 201-210, at p. 204.

Balton D.A., *Strengthening the Law of the Sea: The New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks*, *Ocean Development and International Law* (1996), 27, pp. 125– 151, at 138.

Balton D.A. and Koehler H.R., *Reviewing the United Nations Fish Stocks Treaty*, in *Sustainable Development Law & Policy*, Vol. 7, Issue 1, Art. 4, 2006, pp. 1-7, at p. 4.

Barnes R.A., *International Regulation of Fisheries Management in Arctic Waters*, in *German Yearbook of International Law*, 2011, pp. 193-230, at p. 204.

Bassett Moore J., *A Digest of International Law*, in *The American Journal of International Law*, Vol. 1, No. 1 (Jan. - Apr., 1907), pp. 254-257, at p. 255.

Becker M.A., *International Law of the Sea*, in *The international Lawyer*, Vol. 42, No. 2, 2008, pp. 797-809, at p. 801.

Bekker P. and Van de Poll R., *Unlocking the Arctic's Resources Equitably: Using a Law-and-Science Approach to Fix the Beaufort Sea Boundary*, in *The International Journal of Marine and Coastal Law*, 2019, pp. 163-200, at p. 172.

Bell R.J., Grieve B., Ribera M., Manderson J., Richardson D., *Climate-induced habitat changes in commercial fish stocks*, *ICES Journal of Marine Science*, Volume 79, Issue 8, pp. 2247–2264, October 2022, at p. 2251.

Bell R.J., Richardson D.E. et al., *Disentangling the effects of climate, abundance, and size on the distribution of marine fish: an example based on four stocks from the Northeast US shelf*, *ICES Journal of Marine Science*, Volume 72, Issue 5, May/June 2015, Pages 1311–1322, at p. 1314.

Bennike O., Mikkelsen N. et al., *'Tuppiaq Qeqertaa (Tobias Island): a newly discovered island off northeast Greenland'*, in *Polar Record*, October 2006, pp. 309-314, at p. 311.

Berkman P.A., Vylegzhanin A.N., Pope A., Kullerud L. and Young O.R., *The Arctic Science Agreement propels science diplomacy*, in *Science* 358 (2017), at pp. 596–598.

Berkman P.A., Vylegzhanin A.N. and Young O.R., *Application and interpretation of the agreement on enhancing international Arctic scientific cooperation*, *Moscow J. Int. Law* 3 (2017), at pp. 6–17.

- Bernard L., *Historic fishing rights and the exclusive economic zone*, in *Indonesian Journal of International Law*, Vol. 18, No. 2, Article 7, 2021, pp. 161-182, at p. 176.
- Bertheussen B.A., Dreyer B.M. et al., *Institutional and financial entry barriers in a fishery*, *Marine Policy*, Volume 123, January 2021, 104303, pp. 1-9, at p. 4.
- Bertheussen B.A., Dreyer B.M. et al., *Performance differences between nations exploiting a common natural resource: The Icelandic–Norwegian mackerel case*, in *Marine Policy*, Volume 122, December 2020, 104269, pp. 1-11, at p. 4.
- Bethel L., Jessen H. and Hollander J., *Implementing the Port State Measures Agreement to combat illegal, unreported and unregulated fishing in the Caribbean*, *Marine Policy*, Volume 132, October 2021, 104643, pp. 1-9, at p. 4.
- Birnie P., *New Approaches to Ensuring Compliance at Sea: The FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas*, *Review of European Community and International Environmental Law* 8(1), pp. 48 – 55, December 2002, at p. 51.
- Bjørndal, T., ‘*Overview, Roles, and Performance of the North East Atlantic Fisheries Commission (NEAFC)*’, in *Marine Policy* 33(4), 2009, pp.685–697, at p. 688.
- Bjørndal T. and Ekerhovd NA., *Management of Pelagic Fisheries in the North East Atlantic: Norwegian Spring Spawning Herring, Mackerel, and Blue Whiting*, in *Marine Resource Economics*, Vol. 29, No. 1 (March 2014), pp. 69-83, at p. 69.
- Bjørndal, T., Foss, T., Munro, G.R., Schou, M., *Brexit and consequences for quota sharing in the Barents Sea cod fishery*, in *Mar. Policy* 2021, 131, 104622, pp. 1-8, at p. 1.
- Bjørndal T., Kaitala V., Gordon D.V., Lindroos M., *International Management Strategies for a Straddling Fish Stock: A BioEconomic Simulation Model of the Norwegian Spring-Spawning Herring Fishery*, Article in *Environmental and Resource Economics*, December 2004, pp. 435-457, at p. 441.
- Bjørndal T. and Munro G.R., *A game theoretic perspective on the management of shared North Sea fishery resources: Pre and post Brexit*, in *Marine Policy*, Volume 132, October 2021, 104669, at p. 4.
- Bloom E.T., *Establishment of the Arctic Council*, in *The American Journal of International Law*, Vol.93, No. 3 (Jul., 1999), pp. 712-722, at p. 715.
- Bloom E.T. and Greenwood J., *Securing U.S. Territorial Rights in the Arctic: new actions to protect America’s continental shelf*, *Brookings*, July 2022, pp. 1-11, at p. 3.
- Boscolo-Galazzo F., Crichton K.A. et al., *Temperature dependency of metabolic rates in the upper ocean: A positive feedback to global climate change?*, *Global and Planetary Change*, Volume 170, November 2018, Pages 201-212, at p. 205.

Bourne G.B. and McRae D.M., *Maritime Jurisdiction in the Dixon Entrance: The Alaska Boundary Re-Examined*, in Canadian Yearbook of International Law, Cambridge University Press, 2016, pp. 175-223, at p. 204.

Boyle A.E., *Problems of Compulsory Jurisdiction and the Settlement of Disputes Relating to Straddling Fish Stocks*, in The International Journal of Marine and Coastal Law, Vol. 14, No. 1, 1999, pp. 1-25, at p. 7.

Breum M., *Russia extends its claim to the Arctic Ocean seabed*, in Arctic Today, 2022.

Brown S.K., Shivilani M. et al., *Patterns and practices in fisheries assessment peer review systems*, in Marine Policy, Volume 117, July 2020, 103880, pp. 1-11, at p. 4.

Burke W.T., *Fishing in the Bering Sea Donut: Straddling Stocks and the New International Law of Fisheries*, in Ecology Law Quarterly, Vol. 16, No. 1 (1989), pp. 285-310, at p. 294.

Brooks C.M., Bloom E.T. et al., *The Ross Sea, Antarctica: A highly protected MPA in international waters*, in Marine Policy, Volume 134, December 2021, 104795, at p. 1.

Bryndum-Buchholz A., Tittensor D.P. and Lotze H.K., *The status of climate change adaptation in fisheries management: Policy, legislation and implementation*, Fish and Fisheries, Volume 22, Issue 6, November 2021, Pages 1248-1273, at p. 1253.

Byers M. and Lalonde S., *Who controls the Northwest Passage?*, Vanderbilt Journal of Transnational Law Vol. 42, No. 4 (2009), pp. 1133–1210, at 1182.

Caddell R., *Precautionary Management and the Development of Future Fishing Opportunities: The International Regulation of New and Exploratory Fisheries*, The International Journal of Marine and Coastal Law 33 (2018), pp. 199–260, at pp. 203-204.

Calderwood C. and Ulmer F.A., *The Central Arctic Ocean fisheries moratorium: A rare example of the precautionary principle in fisheries management*, in Polar Record: a Journal of Arctic and Antarctic Research, 16 January 2023, at p. 8.

Campbell B. and Hanich Q., *Principles and practice for the equitable governance of transboundary natural resources: cross-cutting lessons for marine fisheries management*, in Maritime Studies 14, 8 (2015), pp. 1-20, at p. 13.

Canfield J.L., *Recent developments in Bering Sea fisheries conservation and management*, in Ocean Development and International Law: The Journal of Marine Affairs, Vol. 24, No. 3, pp. 257-289, 1993, at p. 262.

Carlson J.D., Hubach C. et al., *Scramble for the Arctic: Layered Sovereignty, UNCLOS, and Competing Maritime Territorial Claims*, The SAIS Review of International Affairs, Vol. 33, No. 2 (Summer–Fall 2013), pp. 21-43, at p. 35.

Carmack E.C. and Macdonald R.W., *Oceanography of the Canadian Shelf of the Beaufort Sea: A Setting for Marine Life*, in Arctic, Vol. 55, Supplement 1: The Beaufort Sea

Conference 2000 on the Renewable Marine Resources of the Canadian Beaufort Sea (2002), pp. 29-45, at p. 36.

Carr C.J., *Recent Developments in Compliance and Enforcement for International Fisheries*, *Ecology Law Quarterly*, Vol.24, No.4(1997), pp. 847-860, at p. 853

Chang YC. And Khan M.I., *May China Fish in the Arctic Ocean?*, in *Sustainability* 2021, 13(21), 11875, pp. 1-17, at p. 11.

Chen Y. and Wang Y.; *The North Sea and Svalbard Fisheries Management regimes in the context of Brexit: Divergences and Implications*, pp.1-14; *Fishes* 2022, 7, 351, at p.3.

Chen X., Xu Q. and Li L., *Illegal, Unreported, and Unregulated Fishing Governance in Disputed Maritime Areas: Reflections on the International Legal Obligations of States*, Academic Editors: Yen-Chiang Chang and Dimitrios Moutopoulos, *Fishes*, 2023, 8, 36, pp. 1-11, at p. 2.

Chiyuki M., *The fisheries policy of Japan under the new law of the sea*, in *Asian Yearbook of International Law*, Vol. 8, 2020, at pp. 71-72.

Christiansen F.G., ‘Greenland mineral exploration history’, in Springer Link, 2022, pp. 1-29, at p. 13.

Christiansen F.G., *Greenland petroleum exploration history: Rise and fall, learnings, and future perspectives*, in *Resources Policy*, Volume 74, December 2021, 102425, pp. 1-21, at p. 8.

Christopherson M., *Toward a Rational Harvest: The United Nations Agreement on Straddling Fish Stocks and Highly Migratory Species*, in *Minnesota Journal of International Law*, 1996, pp. 357-379, at p. 366.

Churchill R.R., *Fisheries issues in maritime boundary delimitation*, in *Marine Policy*, Volume 17, Issue 1, January 1993, Pages 44-57, at p. 51.

Churchill R., *International Law Obligations of States in Undelimited Maritime Frontier Areas*, in *Frontiers in International Environmental Law: Oceans and Climate Challenges*, 2021, pp. 141-170, at p. 152.

Churchill R.R., *The Barents Sea Loophole Agreement: A “Coastal State” Solution to a Straddling Stock Problem*, in *The International Journal of Marine and Coastal Law*, Vol. 14, No. 4, pp. 467-490, 1999, at p. 474.

Churchill R., *The Disputed Scope of the Svalbard Treaty Offshore: a New Approach to Resolving the Issue*, in *Nordic Journal of International Law*, 91 (2022), pp. 544-567, at p. 557.

Churchill R.R., *The Greenland-Jan Mayen Case and its Significance for the International Law of Maritime Boundary Delimitation*, in *The International Journal of Marine and Coastal Law*, 1994, pp. 1-29, at p. 16.

- Clark M.R., Althaus F. et al., *The impacts of deep-sea fisheries on benthic communities: a review*, ICES Journal of Marine Science, Volume 73, Issue suppl\_1, January 2016, pp. 51–69, at p. 57.
- Colson D.A., *The Delimitation of the Outer Continental Shelf between Neighboring States*, The American Journal of International Law, Vol. 97, No. 1 (Jan., 2003), pp. 91-107, at p. 98.
- Criddle K.R., *Adaptation and maladaptation: factors that influence the resilience of four Alaskan fisheries governed by durable entitlements*, in ICES Journal of Marine Science 69(7), 2012, pp. 1168–1179, at p. 1174
- Crothers G.T.S. and Nelson L., *High Seas Fisheries Governance: A Framework for the Future?*, in Marine Resource Economics, Vol. 21, No. 4 (2006), pp. 341-353, at p. 346.
- Cuyvers L., *Maritime Boundaries: Canada vs. United States*, in Marine Policy Reports, Volume 2, Number 1, February 1979, pp. 1-6, at p. 4.
- Darby J.J., *The Soviet doctrine of the Closed Sea*, in San Diego Law Review, Vol. 23, 1986, p. 685-699, at p. 697
- Davis R.A., Hanich Q. et al., *Who Gets the Catch? How Conventional Catch Attribution Frameworks Undermine Equity in Transboundary Fisheries*, Front. Mar. Sci., 09 March 2022, Sec. Marine Affairs and Policy, Volume 9 – 2022, pp. 1-13, at p. 5.
- De Bruyn P., Murua H. and Aranda M., *The Precautionary approach to fisheries management: How this is taken into account by Tuna regional fisheries management organisations (RFMOs)*, in Marine Policy, V.38 (201303), pp. 397-406, 2013, at p. 401.
- De La Fayette L., *The OSPAR Convention comes into force*, International Journal of Marine and Coastal Law 14 (1999), 247–297, at 247.
- Delaney A., David G. Reid D.G. et al., *Socio-Technical Approaches are Needed for Innovation in Fisheries*, Reviews in Fisheries Science & Aquaculture, 2022, pp. 161-179, at p. 166.
- Delfour-Samama O. and Leboeuf C., *Review of potential legal frameworks for effective implementation and enforcement of MPAs in the high seas*, ICES Journal of Marine Science, Volume 71, Issue 5, July/August 2014, Pages 1031–1039, at p. 1034.
- De Vorse L. and De Vorse M.C., *The World Court Decision in the Canada-United States Gulf of Maine Seaward Boundary Dispute: A Perspective from Historical Geography*, in Case Western Reserve Journal of International Law, Volume 18, Issue 3, 1986, pp. 415-442, at p. 417.
- DiMento J.F.C., Kelly M.L. and O'Donnell K., *Arctic Sustainability Law: Almost Sufficient*, in North Carolina Journal of International Law, Volume 47, Number 2, Article 4, 2022, pp. 246-330, at p. 308.

Dodds K., *Real interest'? Understanding the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean*, Authored Accepted Manuscript for Global Policy online published 16<sup>th</sup> July, 2019, at p. 22.

Doering R., Goti L. et al., *Equity and ITQs: About Fair Distribution in Quota Management Systems in Fisheries*, in *Environmental Values* Vol. 25, No. 6 (December 2016), pp. 729-749, at p. 732.

Dunlap W.V., *A pollock-fishing agreement for the Central Bering Sea*, in *Boundary and Security Bulletin*, Vol. 2, No. 2, 1994, pp. 49-57, at p. 49.

Dunlap W., *Bering Sea – Current Legal Developments*, in *International Journal of Marine and Coastal Law*, 1995, at p. 114.

Dunlap W.V., *Bering Sea-The Donut Hole Agreement*, in *The International Journal of Marine and Coastal Law*, Vol. 10, No. 1, p. 114-135, 1995, at p. 117.

Eggleston E.K., *The Gulf of Maine Maritime Boundary Dispute*, in *Denver Journal of International Law & Policy*, Volume 12, Number 1 Fall, Article 9, January 1982, pp. 120-127, at p. 122.

Elferink A.G.O., *Coastal States and MPAs in ABNJ: Ensuring Consistency with the LOSC*, in *The International Journal of Marine and Coastal Law*, V.33 N.3 (20180822), pp. 437-466, 2018, at p. 449.

Elferink A.G.O., *Maritime Delimitation Between Denmark/Greenland and Norway*, in *Ocean Development & International Law*, Volume 38, 2007, Issue 4, pp. 375-380, at p. 377.

Elferink A.G.O., *The determination of compatible conservation and management measures for straddling and highly migratory fish stocks*, in *Max Planck yearbook of United Nations law*, Vol. 5, p. 551-607, 2001, at p. 567

Elferink A.G.O. and Shevardnadze E., *The 1990 USSR-USA Maritime Boundary Agreement*, in *International Journal of Estuarine and Coastal Law*, Vol.6 No.1 (1991), pp. 41-52, at p. 46.

Ellefsen, H., *The Stability of Fishing Agreements with Entry: The Northeast Atlantic Mackerel*, in *Strategic Behavior and the Environment* 3, 2013, pp.67–95, at p. 74.

Erikstein K. and Swan J., *Voluntary Guidelines for Flag State Performance: A New Tool to Conquer IUU Fishing*, *The International Journal of Marine and Coastal Law*, March 2014, pp. 116-147, at p. 131.

Fairley H.S., *Canadian federalism, fisheries and the constitution: external constraints on internal ordering*, in *Ottawa Law Review*, Volume 12, No.2, 1980, pp. 257-318, at p. 274.

Feder B.J., *A Legal Regime for the Arctic*, in *Ecology Law Quarterly*, Vol. 6, No. 4 (1978), pp. 785-829, at p. 793.

Feldman M.B. and Colson D., *The Maritime Boundaries of the United States*, in *The American Journal of International Law*, Vol. 75, No. 4 (Oct., 1981), pp. 729-763, at p. 742.

Fernández Egea R.M., *Climate Change and the Sustainability of Fishery Resources in the North Sea: The Trade Dispute between the European Union and the Faroe Islands* (2014) 4, *Journal of the Spanish Institute for Strategic Studies*, pp. 1-20, at p. 5.

Ferrell J.K., *Controlling flags of convenience: one measure to stop overfishing of collapsing fish stocks*, in *Environmental Law*, Vol. 35, No. 2 (Spring 2005), pp. 323-390, at p. 366.

Filipek M.J. and Hruzdou D., *Maritime Delimitation in the Barents Sea and International Practice in Maritime Delimitation*, in *Polish Yearbook of international law*, Vol. 31 (2011), 2011, at p. 207-231, at p. 216.

Fischer J., *How transparent are RFMOs? Achievements and challenges*, in *Marine Policy*, Volume 136, February 2022, 104106, at p. 3.

Freestone D., *The effective conservation and management of high seas living resources: towards a new regime*, in *The Canterbury law Review*, Vol. 5, No. 3, p. 341-362, 1994, at p. 343.

Freestone D. and Zen M., *The New International Law of Fisheries: the 1995 UN Straddling & Stocks Convention*, in *Yearbook of International Environmental Law*, 7 (1), 1997, at pp. 29-30.

Friedheim R.L., *The U.S.-Canada Arctic Policy Forum: Impressions from the American Co-Chair*, in *Arctic*, Vol. 39, No. 4 (Dec., 1986), pp. 360-367.

Fujii I., Okochi Y. and Kawamura H., *Promoting Cooperation of Monitoring, Control, and Surveillance of IUU Fishing in the Asia-Pacific*, in *Sustainability* 2021, 13(18), 10231, pp. 1-23, at p. 14

Gad U.P., *Greenland: A post-Danish sovereign nation state in the making*, in *Cooperation and Conflict*, Vol. 49, No. 1, Special Issue: Postimperial Sovereignty Games in Norden (March 2014), pp. 98-118, at p. 103.

Gavrilov V., *The LOSC and the Delimitation of the Continental Shelf in the Arctic Ocean*, in *The International Journal of Marine and Coastal Law*, Volume 31, No.2, pp.315-338, at p. 327.

Gavrilov V., McDorman T.L. and Schofield C., *Canada and Russian Federation: Maritime Boundaries and Jurisdiction in the Arctic Ocean*, *Arctic Review on Law and Politics*, Vol. 13 (2022), pp. 219-231, at p. 221.

Geuss M., *Reviving the Transit Pipeline Treaty of 1977: How a Michigan Pipeline could bring the US and Canada to Arbitration*, in *Arbitration Law Review*, Volume 14, Article 8, 2023, pp. 1-15, at p. 4.



Gilman E., Passfield K. and Nakamura K., *Performance of regional fisheries management organizations: ecosystem-based governance of bycatch and discards*, in *Fish and Fisheries*, Volume 15, Issue 2, June 2014, pp.327-351, at p. 332.

Gissi E., Manea E. et al., *A review of the combined effects of climate change and other local human stressors on the marine environment*, *Science of the Total Environment*, Volume 755, Part 1, 10 February 2021, 142564, pp. 1-14, at p. 6.

Goltz J.K., *The Sea of Okhotsk Peanut Hole: How the United Nations Draft Agreement on Straddling Stocks Might Preserve the Pollack Fishery*, in *Washington International Law Journal*, Vol. 4, No. 2, 1995, pp. 443-478, at p. 454.

González-Laxe F., *The Precautionary Principle in Fisheries Management*, in *Marine policy: The International Journal for Economics planning and politics of ocean exploitation*, Vol. 29, No. 6, p. 495-505, 2005, at p. 498.

Goodman C.J., *The Regime for Flag State Responsibility in International Fisheries Law - Effective Fact, Creative Fiction, or Further Work Required?*, *Australian and New Zealand Maritime Law Journal* 157, 2009, at p. 161.

Goodman C., Davis R. et al., *Enhancing cooperative responses by regional fisheries management organisations to climate-driven redistribution of tropical Pacific tuna stocks*, in *Frontiers in Marine Science*, Sec. Ocean Solutions, Volume 9, 2022, pp. 1-21, at p. 9.

Gounaris E., *The Delimitation of the Continental Shelf of Jan Mayen*, in *Archiv des Völkerrechts*, 21. Bd., No. 4, Staatsangehörigkeitsrecht / Nationality Law (1983), pp. 492-501, at p. 494.

Graczyk P. and Koivurova T., *A new era in the Arctic Council's external relations? Broader consequences of the Nuuk observer rules for Arctic governance*, *Polar Record* 50(3), October 2012, pp. 225-236, at p. 320.

Gretarsson H., *Allocation of Demersal Harvest Rights in Iceland*, in *Arctic Review on Law and Politics*, Vol. 1, No. 2 (2010), pp. 299-318, at p. 304.

Grønnevet L., *The Joint Russian–Norwegian governance of the Barents Sea LME fisheries*, in *Environmental Development*, Volume 17, Supplement 1, January 2016, pp. 296-309, at p. 301.

Gudmundsson T., *Cod war on the high seas: Norwegian – Icelandic dispute over “Loophole” fishing in the Barents Sea*, *Nordic Journal of International Law* 64, pp. 557-573, 1995, at p. 558.

Guelker D., *Fishers and seafarers in international law – Really so different?*, in *Marine Policy*, Volume 148, February 2023, 105473, at p. 3.

Guggisberg S., *Transparency in the activities of the Food and Agriculture Organization for sustainable fisheries*, *Marine Policy*, Volume 136, February 2022, 104498, pp. 1-10, at p. 4.

Guilfoyle D., *Interdicting Vessels to enforce the common interest: maritime countermeasures and the use of force*, in *The International and Comparative Law Quarterly*, Vol. 56, No. 1, 2007, pp. 69-82, at p. 70.

Gullestad P., Sundby S. and Kjesbu O.S., *Management of transboundary and straddling fish stocks in the Northeast Atlantic in view of climate-induced shifts in spatial distribution*, in *Fish and Fisheries*, Volume 21, Issue 5, September 2020, pp. 1008-1026, at p. 1013.

Gunnlaugsson S.B. and Saevaldsson H., *The Icelandic fishing industry: Its development and financial performance under a uniform individual quota system*, in *Marine Policy*, Volume 71, September 2016, pp. 73-81, at p. 75.

Haas B., Azmi K. and Hanich Q., *The unintended consequences of exemptions in conservation and management measures for fisheries management*, in *Ocean and Coastal Management*, Volume 237, 2023, pp. 1-9, at p. 3.

Haas B., Goodman C. et al., *Fact or fiction? Unpacking the terminologies used in fisheries allocation discussions*, *Marine Policy*, Volume 152, June 2023, 105630, pp. 1-7, at p. 2.

Haas B., Haward M. et al., *The influence of performance reviews on regional fisheries management organizations*, *ICES Journal of Marine Science*, Volume 76, Issue 7, December 2019, Pages 2082–2089, at p. 2084.

Haas B., McGee J. et al., *Factors influencing the performance of regional fisheries management organizations*, in *Marine Policy*, Volume 113, March 2020, 103787, pp. 1-9, at p. 4.

Hammer M. and Hoel A.H., *The Development of Scientific Cooperation under the Norway–Russia Fisheries Regime in the Barents Sea*, in *Arctic Review on Law and Politics*, vol. 3, 2/2012 pp. 244–274, at p. 250.

Hanich Q. and Ota Y., *Moving Beyond Rights-Based Management: A Transparent Approach to Distributing the Conservation Burden and Benefit in Tuna Fisheries*, in *The International Journal of Marine and Coastal Law*, Vol.28 N.1 (2013), pp. 135-170, at p. 147.

Hannesson R., *Game Theory and Fisheries*, In *Annual Review of Resource Economics*, vol. 3, ed. G. Rausser, V. K. Smith, and D. Zilberman, 2011, pp. 181–202, Palo Alto, CA: Annual Reviews, at p. 189.

Hannesson R., *Shared stocks, game theory and the zonal attachment principle*, in *Fisheries Research*, Volume 203, July 2018, pp. 6-11, at p. 8.

Hannesson R., *Sharing a Migrating Fish Stock*, in *Marine Resource Economics* 28(1), 2013, pp. 1–17, at p. 4

Hannesson R., *Sharing the Northeast Atlantic Mackerel*, in *ICES Journal of Marine Science* 70(2), 2013, pp. 259–269, at p. 262.

Hannesson R., *Zonal Attachment of Fish Stocks and Management Cooperation*, in Fisheries Research, Vol. 140(2), February 2013, pp. 149-154, at p. 150.

Hardin G., *Tragedy of the Commons*, in Science 162, 1968, pp. 1243-1248, at p. 1245.

Harsson B.G. and Preiss G., Norwegian Baselines, Maritime Boundaries and the UN Convention on the Law of the Sea, in Arctic Review on Law and Politics, Volume 3, 2012, pp.108-129, at p. 119.

Harte M., Tiller R. et al., *Countering a climate of instability: the future of relative stability under the Common Fisheries Policy*, in ICES Journal of Marine Science, Volume 76, Issue 7, December 2019, Pages 1951–1958, at p. 1953.

Hassanali K. and Mahon R., *Encouraging proactive governance of marine biological diversity of areas beyond national jurisdiction through Strategic Environmental Assessment (SEA)*, in Marine Policy, Volume 136, February 2022, 104932, at p. 2.

Hayashi M., *Enforcement by Non-Flag States on the High Seas Under the 1995 Agreement on Straddling and Highly Migratory Fish Stocks*, Georgetown International Environmental Law Review, Vol. 9 (1996), 1, at pp. 15-26, at p. 19.

Hayashi M., *Global Governance of Deep-Sea Fisheries*, International Journal of Marine and Coastal Law 19, no. 3 (2004), pp. 289–298, at p. 293.

He J., *A Jurisdictional Assessment of International Fisheries Subsidies Disciplines to Combat Illegal, Unreported and Unregulated Fishing*, in Sustainability 2022, 14(21), 14128, pp. 1-15, at p. 8.

Heikkila M., *The Rovaniemi Process: The Beginning of the Arctic Era*, Arctic Finland, due to be published in spring 2019.

Henriksen T., *Revisiting the Freedom of Fishing and Legal Obligations on States Not Party to Regional Fisheries Management Organizations*, in Ocean Development and International Law, Vol.40 N.1 (20090101), pp.80-96, January 2009, at p. 84.

Henriksen T., *Snow Crab in the Barents Sea: Managing a Non-native Species in Disputed Waters*, in Arctic Review on Law and Politics, December 2020, pp. 108-132, at p. 116.

Henriksen T. and Ulfstein G., *Maritime Delimitation in the Arctic: The Barents Sea Treaty*, in Ocean Development & International Law, Volume 42, 2011, Issue 1-2, pp. 1-21, at p. 7.

Heslenfeld P. and Enserink E.L., *OSPAR Ecological Quality Objectives: the utility of health indicators for the North Sea*, ICES Journal of Marine Science, Volume 65, Issue 8, November 2008, pp. 1392–1397, at p. 1394.

Hey E., *The OSPAR NEAFC Collective Arrangement and Ocean Governance: Regional Seas Organisations as the Setters of Conservation Standards in ABNJ?*, International Journal of Marine and Coastal Law, July 2022, pp. 610-633, at p. 619.

Higdon A., *The Canadian Submission to the United Nations Commission on the Limits of the Continental Shelf*, in McGill International Journal of Sustainable Development Law and Policy / Revue internationale de droit et politique du développement durable de McGill, Vol. 9, No. 2 (2013), pp. 43-68, at p. 47.

Hilborn R., Amoroso R.O. et al., *Effective fisheries management instrumental in improving fish stock status*, in Proceedings of the National Academy of Sciences, Vol.117 N.4 (20200128), pp. 2218-2224, 2020, at p. 2220.

Hilborn A. and Devred E., *Delineation of Eastern Beaufort Sea Sub-regions Using Self-Organizing Maps Applied to 17 Years of MODIS-Aqua Data*, in Frontiers in Marine Science, 01 July 2022, Sec. Coastal Ocean Processes, Volume 9, pp. 1-19, at p. 12.

Hoefnagel E., De Vos B. and Buisman E., ‘Quota swapping, relative stability, and transparency’, in Marine Policy, Volume 57, July 2015, pp. 111-119, at p. 114.

Hongsik K., Franco A.C. and Sumaila U.R., *A Selected Review of Impacts of Ocean Deoxygenation on Fish and Fisheries*, Fishes 2023, 8(6), 316, at p. 6.

Hønneland G., *Co-Management and Communities in the Barents Sea Fisheries*, in Human Organization, Vol. 58, No. 4 (Winter 1999), pp. 397-404, at p. 400.

Hønneland G., *Compliance in the Barents Sea fisheries. How fishermen account for conformity with rules*, in Marine Policy 24(1):11-19, January 2000, at p. 13.

Hønneland G., *Enforcement Co-operation between Norway and Russia in the Barents Sea Fisheries*, in Ocean Development and International Law 31(3), pp. 249-267, July 2000, at p. 251.

Hønneland G., *Norway and Russia: Bargaining Precautionary Fisheries Management in the Barents Sea*, in Arctic Review on Law and Politics, vol. 5, 1/2014 pp. 75–99, at p. 77.

Honniball A.N., *The Exclusive Jurisdiction of Flag States: A Limitation on Pro-active Port States?*, in The International Journal of Marine and Coastal Law 31 (2016), pp. 499-530, at p. 502.

Huntington H.P., Olsen J. et al., *Effects of Arctic commercial shipping on environments and communities: context, governance, priorities*, in Transportation Research Part D: Transport and Environment, Volume 118, May 2023, 103731, at p. 2.

Huntington H.P. and Pan M., *A precautionary approach to fisheries in the Central Arctic Ocean: Policy, science, and China*, in Marine Policy 63, January 2016, at pp. 153-157.

Jacobson J.L., *The new internationalization of North Pacific Fisheries*, in Willamette Journal of International Law and Dispute Resolution, Vol. 6, No. 1, 1998, pp. 1-14, at p. 7.

Janicki W., *Why Do They Need the Arctic? The First Partition of the Sea*, Arctic, Vol. 65, No. 1, March 2012, pp. 87-97, at p. 92.

Jares V., *The Continental Shelf Beyond 200 Nautical Miles*, in *Vanderbilt Journal of Transnational Law*, Volume 42, Issue 4, Article 7, October 2009, at p. 163.

Jensen Ø, *The Svalbard Treaty and Norwegian Sovereignty*, *Arctic Review on Law and Politics*, Vol. 11 (2020), pp. 82-107, at p. 91.

Jensen T.C., *The United States – Canada Pacific Salmon Interception Treaty: an historical and legal overview*, *Environmental Law*, Vol. 16, No. 3, Symposium on Salmon Law (Spring 1986), pp. 363-422, at p. 392.

Jeffers J., *Climate Change and the Arctic: Adapting to Changes in Fisheries Stocks and Governance Regimes*, *Ecology Law Quarterly*, Vol. 37, No. 3 (2010), pp. 917-977, at p. 927.

Jiang R. and Guo P., *Sustainable Management of Marine Protected Areas in the High Seas: From Regional Treaties to a Global New Agreement on Biodiversity in Areas beyond National Jurisdiction*, *Sustainability* 2023, 15(15), 11575, pp. 1-14, at p. 3.

Jianye T., *The Agreement on Port State Measures: A Commentary*, *China Oceans Law Review*, Vol.2, No.2, 2009, pp.312-332, at p. 317.

Johnson C. and Elferink A.G.O., *Submissions to the Commission on the Limits of the Continental Shelf in Cases of Unresolved Land and Maritime Disputes: The Significance of Article 76(10) of the Convention on the Law of the Sea*, in *The Law of the Sea: Progress and Prospects*, 2006, pp. 161-179, at p. 167.

Johnson D., *Environmental indicators: Their utility in meeting the OSPAR Convention's regulatory needs*, *ICES Journal of Marine Science* 65(8), September 2008, pp. 1387-1391, at p. 1388.

Kaitala, V., and Munro G.R., *The Conservation and Management of High Seas Fishery Resources under the Law of the Seas*, in *Natural Resource Modeling* 10, 1997, pp. 87-108, at p. 91.

Kaitala V. and Munro G.R., *The management of high seas fisheries*, in *Marine Resource Economics*, Vol. 8, pp. 313-329, 1993, at p. 317.

Kane E.A., Ball A.C. and Brehmer P., *Dilemma of total allowable catch (TACs) allocated as shareable quotas: Applying a bio-economic game-theoretical approach to Euro-Mauritanian fisheries agreements*, in *Aquaculture and Fisheries* (202205), 2022, pp. 1-8, at p. 3.

Kaye S.B., *Legal approaches to Polar fisheries regimes: a comparative analysis of the Convention for the Conservation of Antarctic Marine Living Resources and the Bering Sea Doughnut Hole Convention*, in *California Western international law Journal*, Vol. 26, No. 1, p. 75-114, 1994-1995, at p. 101.

Kelly C., Michelsen F.A., Kolding J., Alver M.O., *Tuning and Development of an Individual-Based Model of the Herring Spawning Migration*, *Frontiers in Marine*

Sciences, 13 January 2022, Sec. Marine Fisheries, Aquaculture and Living Resources, Volume 8 – 2021, pp. 1-14, at p. 7.

Kenny A.J., Campbell N. et al., *Delivering sustainable fisheries through adoption of a risk-based framework as part of an ecosystem approach to fisheries management*, in Marine Policy, Volume 93, July 2018, pp. 232-240, at p. 233.

Keskitalo C., *International Region-Building: Development of the Arctic as an International Region*, Cooperation and Conflict, Vol.42, No.2, (June 2007), pp. 187-205, at p. 194.

Khim J.S., Hong S. et al., *A comparative review and analysis of tentative ecological quality objectives (EcoQOs) for protection of marine environments in Korea and China*, in Environmental Pollution, Volume 242, Part B, November 2018, pp. 2027-2039, at p. 2031.

Killas M., *The legality of Canada's claims to the waters of its Arctic Archipelago*, in Ottawa Law Review, 1988, pp. 95-136, at p. 107.

Kim YY., Kang YK. et al., *Potential Impact of Late 1980s Regime Shift on the Collapse of Walleye Pollock Catch in the Western East/Japan Sea*, in Frontiers in Marine Science, Sec. Physical Oceanography, Volume 9, 2022, at pp. 1-2.

Kindt J.W., *The Law of the Sea: Anadromous and Catadromous fish stocks, Sedentary Species, and the highly migratory species*, Syracuse Journal of International Law and Commerce, Vol. 11, No. 1 [1984], Art. 3, pp. 9-46, at p. 17.

Kirkey C., *Delineating Maritime Boundaries: The 1977-78 Canada-U. S. Beaufort Sea Continental Shelf Delimitation Boundary Negotiations*, in Canadian Review of American Studies, Vol.25, No.2, 1995, pp. 49-66, at p. 57.

Koch L., *Some New Features in the Physiography and Geology of Greenland*, in The Journal of Geology, Vol. 31, No. 1 (Jan. - Feb., 1923), pp. 42-65, at p. 52.

Koen-Alonso M., Pepin P. et al., *The Northwest Atlantic Fisheries Organization Roadmap for the development and implementation of an Ecosystem Approach to Fisheries: structure, state of development, and challenges*, in Marine Policy, Volume 100, February 2019, pp. 342-352, at p. 347.

Kokorsch M. and Benediktsson K., *Prosper or perish? The development of Icelandic fishing villages after the privatisation of fishing rights*, in Maritime Studies (2018) 17, pp. 69-83, at p. 75.

Konyshev V. and Sergunin A., *Russia's policies on the Territorial Disputes in the Arctic*, in Journal of International Relations and Foreign Policy March 2014, Vol. 2, No. 1, pp. 55-83, at p. 76.

Korseberg L., *The law-making effects of the FAO Deep-Sea fisheries guidelines*, in International and Comparative Law Quarterly, Vol.67 n4 (201810), pp. 801-832, p. 806.

Koshkin V.A., *Delimitation of the Continental Shelf in the Central Arctic Ocean: Is It Possible Nowadays?*, in *Arctic Review on Law and Politics*, Vol. 13, 2022, pp. 393-406, at p. 394.

Koslow J., *Continental slope and deep-sea fisheries: implications for a fragile ecosystem*, *ICES Journal of Marine Science* 57, no. 3 (2000), 548–557, at 548.

Kullerud L. and Young O.R., *Adding a Gakkel Ridge regime to the evolving Arctic Ocean governance complex*, *Marine Policy*, Volume 122, December 2020, 104270, pp. 1-6, at p. 2.

Kunoy B., *Assertions of entitlement to the outer continental shelf in the Central Arctic Ocean*, *The International and Comparative Law Quarterly*, Vol. 66, No. 2, April 2017, pp. 367-409, at p. 387.

Kunoy B., *The Terms of Reference of the Commission on the Limits of the Continental Shelf: A Creeping Legal Mandate*, in *Leiden Journal of International Law*, Vol.25 N.1, (201203), February 2012, pp. 109-130, at p. 115.

Kwiatkowska B., *The high seas fisheries regime: at a point of no return?*, in *The International Journal of Marine and Coastal Law*, Vol. 8, No. 3, p. 327-358, 1993, at p. 333

Lackenbauer P.W. and Nielsen R.L., *Close, like-minded partners committed to democratic principles”: Settling the Hans Island/Tartupaluk Territorial Dispute*, in *Arctic Yearbook*, 2022, pp. 1-11, at p. 3.

Lando M., *‘Stability of maritime boundaries and the challenge of geographical change: A reply to Snjólaug Árnadóttir’*, in *Leiden journal of International Law*, Volume 35, No.2, 2022, pp.379-395, at p. 382.

Larson, D.L., *Conventional, Customary, and Consensual Law in the United Nations Convention on the Law of the Sea*, in *Ocean Development and International Law*, Vol. 25, No. 1, pp. 75-85, 1994, at p. 79.

Lathrop C., *Continental Shelf Delimitation Beyond 200 Nautical Miles: Approaches Taken by Coastal States Before the Commission On The Limits Of The Continental Shelf*, in *International Maritime Boundaries Online*, 2014, pp. 4139-4160, at p. 4144.

Lewis A., *Regionalism and the Law of the Sea: The Case of Semi-enclosed Seas*, in *Ocean Development and International Law* 2(2), 1974, pp. 151-186, at p. 168.

Li S., *Incorporation of Fisheries Policy into Regional Blocs? — Lessons from the EU’s Common Fisheries Policy*, in *Fishes*, 2022, 7(3), 102, at p. 6.

Lillegård M., Engen S. et al., *Harvesting Strategies for Norwegian Spring-Spawning Herring*, in *Oikos*, Vol. 110, No. 3 (Sep., 2005), pp. 567-577, at p. 569.

Liu D., *The 2015 Oslo Declaration on Arctic High Seas Fisheries: The Starting Point Towards Future Fisheries Management in the Central Arctic Ocean*, Arctic Yearbook, 2017, pp. 1-28, at p. 7.

Lodge M.W. and Nandan S.N., *Some Suggestions towards Better Implementation of the United Nations Agreement on Straddling Fish Stocks and Highly Migration Fish Stocks of 1995*, International Journal of Marine and Coastal Law 20 (2005), pp. 345–379, at p. 352.

Lynch A.H., Norchi C.H. and Li, X., *The interaction of ice and law in Arctic marine accessibility*, in Proceedings of the National Academy of Sciences, Vol. 119 No.26 (20220628), 2022, at pp. 1-3.

Mack J.R., *International Fisheries Management: How the U.N. Conference on Straddling and Highly Migratory Fish Stocks Changes the Law of Fishing on the High Seas*, California Western International Law Journal 26 (1995–1996), pp. 313–333, at p. 317.

Magnússon B.M., *Outer Continental Shelf Boundary Agreements*, in International and Comparative Law Quarterly, Volume 62, No.2, 2013, pp. 345-372, at p. 357.

Malone J.L., *The United States and the Law of the Sea after UNCLOS III*, in Law and Contemporary Problems, Vol. 46, No. 2, 1983, pp. 29-36, at p. 31.

McDorman T.L., *Canada-United States Cooperative Approaches to Shared Marine Fishery Resources: Territorial Subversion?*, in Michigan Journal of International Law, Volume 30, Issue 3, 2009, pp. 665-687, at p. 673.

McDorman T.L., *Stateless Fishing Vessels, International Law and the U.N. High Seas Fisheries Conference*, in Journal of Maritime Law and Commerce, Vol. 25, No. 4, pp. 531-555, 1994, at p. 538.

McDorman T.L., *Will Canada ratify the Law of the Sea Convention?*, in San Diego Law Review, Volume 25, 1988, pp. 535-579, at p. 551.

McNeill J.H., *America's Maritime Boundary With the Soviet Union*, in Naval War College Review, Vol. 44, No. 3, 1991, pp. 46-57, at p. 50.

McQuaw K. and Hilborn R., *Why are catches in mixed fisheries well below TAC?*, in Marine Policy, Volume 117, July 2020, 103931, pp. 1-7, at p. 3.

Miles E.L., *Towards more effective management of high seas fisheries*, in Asian Yearbook of International Law, Vol. 3, p. 111-127, 1993, at p. 119.

Miles E.L. and Burke W.T., *Pressures on the United Nations Convention on the Law of the Sea 1982 Arising from New Fisheries Conflicts: The Problem of Straddling Stocks*, in Ocean Development and International Law: The Journal of Marine Affairs, Vol. 20, No. 4, 1989, p. 343-357, at p. 348.

Miller C., *How many pollock in donut hole?*, in Alaska Fisherman's Journal, October 1987, at pp. 54-56.



Miller D.H., *Political Rights in the Arctic*, in *Foreign Affairs*, Vol. 4, No. 1 (Oct., 1925), pp. 47-60, at p. 52.

Miller K.F., *The Implications of UNCLOS for Canada's Regulatory Jurisdiction in the Offshore-The 200-Mile Limit and the Continental Shelf*, in *Dalhousie Law Journal*, Volume 30, Issue 2, Article 2, 2007, pp. 341-382, at p. 353.

Miovski L., *Solutions in the Convention on the Law of the Sea to the Problem of Overfishing in the Central Bering Sea: Analysis of the Convention, Highlighting the Provisions Concerning Fisheries and Enclosed and Semi-Enclosed Seas*, in *San Diego Law Review*, Vol. 26, No. 3, 1989, pp. 525-574, at p. 529.

Misund O.A. and Skjoda H.R., *Implementing the ecosystem approach: Experiences from the North Sea*, ICES, and the Institute of Marine Research, Norway, in *Marine Ecology Progress Series*.300, pp.260-265, September 2005, at p. 261

Molenaar E.J., *Addressing Regulatory Gaps in High Seas Fisheries*, in *The International Journal of Marine and Coastal Law*, Vol. 20, No. 3-4, p. 533-570, 2005, at p. 546.

Molenaar E.J., *Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea*, in *The International Journal of Marine and Coastal Law* 27(3), January 2012, pp. 553-595, at p. 561.

Molenaar E.J., *Multilateral Creeping Coastal State Jurisdiction and the BBNJ Negotiations*, in *The International Journal of Marine and Coastal Law*, published in January 2021, pp. 5-58, at p. 21.

Molenaar E.J., *The Concept of "Real Interest" and Other Aspects of Co-operation through Regional Fisheries Management Mechanisms*, in *The International Journal of Marine and Coastal Law*, Vol. 15, No.4, 2000, pp. 475-531, at p. 484.

Molenaar E.J., *Unregulated Deep-Sea Fisheries: A Need for a Multi-Level Approach*, *International Journal of Marine and Coastal Law* 19, No. 3 (2004), pp. 223–246, at p. 245.

Molenaar E.J. and Oude Elferink A.G.O., *Marine protected areas in areas beyond national jurisdiction: The pioneering efforts under the OSPAR Convention*, in *Utrecht Law Review*, Volume 5, Issue 1, June 2009, pp. 5-20, at p. 8.

Moore G., *The Food and Agriculture Organisation of the United Nations Compliance Agreement*, *International Journal of Marine and Coastal Law* 9 (1994), 412–425, at 414.

Morin A., Chamaillé S. and Valeix M., *Climate Effects on Prey Vulnerability Modify Expectations of Predator Responses to Short- and Long-Term Climate Fluctuations*, *Front. Ecol. Evol.*, 22 January 2021, Sec. Population, Community, and Ecosystem Dynamics, Volume 8 – 2020, at p. 3.

Morrison P. C. J., Torres M., and Felthoven R.G., *Fishing revenue, productivity and product choice in the Alaskan pollock fishery*, in *Environmental and Resource Economics* 44, 2009, pp. 457-474, at p. 461.

- Mossop J., *Protecting Marine Biodiversity on the Continental Shelf Beyond 200 Nautical Miles*, *Ocean Development & International Law* 38 (2007), pp. 283–304, at p. 289.
- Moyano M., Illing B. et al., *Caught in the middle: bottom-up and top-down processes impacting recruitment in a small pelagic fish*, in *Reviews in Fish Biology and Fisheries* 33, 2023, pp. 55-84, at p. 59.
- Mullon, C., Fré P., and Cury P., *The dynamics of collapse in world fisheries*, in *Fish and Fisheries* 6, 2005, pp. 111–120, at p. 114.
- Munro G.R., *Internationally Shared Fish Stocks, the High Seas, and Property Rights in Fisheries*, in *Marine Resource Economics*, Vol. 22, No. 4 (2007), pp. 425-443, at p. 434.
- Munro G.R., *The United Nations Fish Stocks Agreement of 1995: History and Problems of Implementation*, in *Marine Resource Economics*, Vol. 15, No. 4 (2000), pp. 265-280, at p. 268.
- Nandan, S.N., *Conference on the Governance of High Seas Fisheries and the United Nation Fish Agreement: Moving from Words to Action. Canada*, in *International Journal of Marine and Coastal Law*, 2005, pp. 605-629, at p. 613.
- Nguyen L.N., *Jurisdiction and Applicable Law in the Settlement of Marine Environmental Disputes under UNCLOS*, *The Korean journal of international and comparative law*, pp. 337-353, December 2021, at p. 344
- Nguyen T.H., T. Brochier et al., *Competition or cooperation in transboundary fish stocks management: Insight from a dynamical model*, in *Journal of Theoretical Biology*, Vol. 447 (20180614), pp. 1-11, 2018, at p. 6.
- Norris A.J. and McKinley P., *The central Arctic Ocean-preventing another tragedy of the commons*, in *Polar Record*, Vol.53 N.1 (201701), pp. 43-51, 26 October 2016, at p. 44.
- Oanta G.A., *International organizations and deep-sea fisheries: Current status and future prospects*, *Marine Policy*, Volume 87, January 2018, Pages 51-59, at p. 52
- Oda S., *Fisheries under the United Nations Convention on the Law of the Sea*, in *American Journal of International Law* 77 (1983), pp. 739–755, at 751.
- Ogawa M. and Reyes J.A.L., *Assessment of Regional Fisheries Management Organizations Efforts toward the Precautionary Approach and Science-Based Stock Management and Compliance Measures*, *Sustainability* 2021, 13(15), 8128, pp. 1-24, at p. 13
- Olson C.L., Seidenberg M.J. and Selle R.W., *U.S.-Russian maritime boundary giveaway*, in *Orbis*, Volume 42, Issue 1, Winter 1998, Pages 75-89, at p. 79.
- Oral N., *Navigating the Oceans: Old and New Challenges for the Law of the Sea for Straits Used for International Navigation*, *Ecology Law Quarterly*, Vol. 46, No. 1 (2019), pp. 163-190, at 171.

Ørebech P., *The Barents Sea 2010 Norway-Russia Border: The Triumph of the Negotiation Principle at the Expense of the Median- and Sector Line Pretentions*, in *The Yearbook of Polar Law Online*, 2012, pp. 505-517, at p. 510.

Ørebech P., *The “Lost Mackerel” of the North East Atlantic— The Flawed System of Trilateral and Bilateral Decision-making*, in *The International Journal of Marine and Coastal Law*, Vol. 28, No.2, 2013, at p. 359.

Ørebech P., Sigurjonsson K., and McDorman T.L., *The 1995 United Nations Straddling and Highly Migratory Fish Stocks Agreement: Management, Enforcement and Dispute Settlement*, in *International Journal of Marine and Coastal Law*, Vol. 13 (1998), 119, at p. 124.

Orttung R.W. and Wenger A., *Explaining Cooperation and Conflict in Marine Boundary Disputes Involving Energy Deposits*, in *Region*, Vol. 5, No. 1 (2016), pp. 75-96, at p. 79.

Østhagen A., *High North, Low Politics—Maritime Cooperation with Russia in the Arctic*, *Arctic Review on Law and Politics*, Vol. 7, No. 1 (2016), pp. 83-100, at p. 89.

Østhagen A., *Maritime boundary disputes: What are they and why do they matter?*, in *Marine Policy*, Volume 120, October 2020, 104118, pp. 1-9, at p. 3.

Østhagen A. and Schofield C.H., *An ocean apart? Maritime boundary agreements and disputes in the Arctic Ocean*, in *The Polar Journal*, 11:2, 2021, pp. 317-341, at p. 334.

Østhagen A. & Schofield C.H., *The Arctic Ocean: Boundaries and Disputes*, in *Arctic Yearbook*, 2021, at p. 7

Østhagen A., Spijkers J. and Totland O.A., *Collapse of cooperation? The North-Atlantic mackerel dispute and lessons for international cooperation on transboundary fish stocks*, in *Maritime Studies* 19, 2020, pp. 155–165, at p. 158.

Overland J., Dunlea E. et al., *The urgency of Arctic change*, *Polar Science*, Volume 21, September 2019, pp. 6-13, at p. 9.

Oxman C.B., *The Third United Nations’ Conference on the Law of the Sea: The 1977 New York Session*, in *American Journal of International Law*, 1978, pp. 57-83, at p. 80.

Pan M. and Huntington H.P., *A precautionary approach to fisheries in the Central Arctic Ocean: Policy, science, and China*, in *Marine Policy*, Volume 63, January 2016, pp. 153-157, at p. 154.

Efthymios Papastavridis E., *Fisheries Enforcement on the High Seas of the Arctic Ocean: Gaps, Solutions and the Potential Contribution of the European Union and Its Member States*, in *The International Journal of Marine and Coastal Law*, Vol.33, No.2, 2018, pp. 324-360, at p. 338.

Park J., Van Osdel J. et al., *Tracking elusive and shifting identities of the global fishing fleet*, in *Science Advances* v9 n3 (20230118), 2023, at p. 4.

Pedersen T., *Denmark's Policies Toward the Svalbard Area*, in *Ocean Development & International Law*, Volume 40, 2009, Issue 4, pp.319-332, at p. 326.

Pedersen T. and Henriksen T., *Svalbard's Maritime Zones: The End of Legal Uncertainty?*, in *The International Journal of Marine and Coastal Law*, 2009, pp. 141-161, at p. 146.

Perkins N.L., *World Trade Organization: United States – Import Prohibition of Certain Shrimp and Shrimp Products*, *International Legal Materials*, Vol. 38, No. 1 (January 1999), pp. 118-175, at p. 132.

Pharand D., *The Continental Shelf Redefinition, with Special Reference to the Arctic*, in *McJill Law Journal*, Volume 18:4, September 1972, at p. 11.

Pharand D., *The Legal Régime of the Arctic: Some Outstanding Issues*, in *International Journal*, Vol. 39, No. 4, *Polar Politics* (Autumn, 1984), pp. 742-799, at p. 752.

Pharand D., *The Northwest Passage in International Law*, *The Canadian Yearbook of International Law*, Vol.17 (1980), pp. 99–133, at 123.

Pintassilgo P. and Costa Duarte C., *The New-Member Problem in the Cooperative Management of High Seas Fisheries*, in *Marine Resource Economics* 15(4), January 2000, pp. 361-378, at p. 369.

Pomeroy R., Parks J. et al., *Drivers and impacts of fisheries scarcity, competition, and conflict on maritime security*, *Marine Policy*, Volume 67, May 2016, Pages 94-104, at p. 97.

Poos J.J., Bogaards J.A. et al., *Individual quotas, fishing effort allocation, and over-quota discarding in mixed fisheries*, *ICES Journal of Marine Science*, Volume 67, Issue 2, March 2010, pp. 323–33, at p. 325.

Probst W.N., Kempf A. et al., *Six steps to produce stock assessments for the Marine Strategy Framework Directive compliant with Descriptor 3*, *ICES Journal of Marine Science*, Volume 78, Issue 4, August 2021, Pages 1229–1240, at p. 1233.

Rahbek-Clemmensen J. and Thomasen G., *How has Arctic coastal state cooperation affected the Arctic Council?*, in *Marine Policy*, Volume 122, December 2020, 104239, pp. 1-7, at p. 2.

Rahbek-Clemmensen J., *When Do Ideas of an Arctic Treaty Become Prominent in Arctic Governance Debates?*, *Arctic*, Vol.72, No.2, (June 2019), pp.116-130, at p. 121.

Rayfuse R., *Taming the Wild North? High Seas Fisheries in the Warming Arctic*, in *Frontiers in International Environmental Law: Oceans and Climate Challenges*, 2021, pp.263-280, at p. 272.

Rayfuse R., *To our children's children's children: From promoting to achieving compliance in high seas fisheries*, *International Journal of Marine and Coastal Law* 20, 3/4 (2005), pp. 509–532, at p. 528.

Refai N., *The Beaufort Sea Boundary Dispute: A Consideration of Rights of Inuit in Canada and the United States*, in *Alberta Law Review*, Volume 60, No.1, 2022, pp. 267-306, at p. 281.

Reichert C., *Determination of the Outer Continental Shelf Limits and the Role of the Commission on the Limits of the Continental Shelf*, in *The International Journal of Marine and Coastal Law*, pp. 387-399, January 2009, at p. 394.

Rhee SM., *Equitable Solutions to the Maritime Boundary Dispute between the United States and Canada in the Gulf of Maine*, in *The American Journal of International Law*, Vol. 75, No. 3 (Jul., 1981), pp. 590-628, at p. 604.

Ribeiro M.C., *The 'Rainbow': The First National Marine Protected Area Proposed Under the High Seas*, *International Journal of Marine and Coastal Law* 25 (2010), pp. 183–207, at p. 185.

Ricketts P., *Geography and international law: the case of the 1984 Gulf of Maine boundary dispute*, Wiley Online Library, published in September 1986, pp. 194-205, at p. 200.

Riddell-Dixon E., *The seven-decade quest to maximize Canada's continental shelf*, in *International Journal*, Vol. 69, No. 3 (September 2014), pp. 422-443, at p. 428.

Rieser A., *International Fisheries Law, Overfishing and Marine Biodiversity*, *The Georgetown International Environmental Law Review* 9 (1996–1997), pp. 251–280, at p. 271.

Roberts C.M., *Deep impact: The rising toll of fishing in the deep sea*, *Trends in Ecology & Evolution* 17(5), pp. 242-245, May 2002, at p. 243.

Rosello M., *Regional fishery management organisation measures and the imposition of criminal and administrative sanctions in respect of high seas fishing*, in *Marine Policy*, Volume 144, October 2022, 105213, pp. 1-6, at p. 2.

Rothwell D.R., *International Law and the Protection of the Arctic Environment*, *The International and Comparative Law Quarterly*, Vol.44, No.2 (April 1995), pp. 280-312, at p. 284.

Ryngaert C. and Ringbom H., *Introduction: Port State Jurisdiction: Challenges and Potential*, in *The International Journal of Marine and Coastal Law*, September 2016, pp. 379-394, at p. 384.

Saguirian A., *Russia and Some Pending Law of the Sea Issues in the North Pacific: Controversies over High Seas Fisheries Regulation and Delimitation of Marine Spaces*, in *Ocean Development and International Law*, Vol. 23, No. 1, 1992, at pp. 2-7.

Schatz V., *Combating Illegal Fishing in the Exclusive Economic Zone – Flag State Obligations in the Context of the Primary Responsibility of the Coastal State*, in *Goettingen Journal of International Law* 7 (2016) 2, pp. 383-414, at p. 393.

Schatz V., *The Incorporation of Indigenous and Local Knowledge into Central Arctic Ocean Fisheries Management*, in *Arctic Review on Law and Politics*, Vol. 10 (2019), at pp. 130-134.

Schatz V. and Proelss A., *The 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean: a Primer*, in *The International Journal of Marine and Coastal Law*, October 2018, at p. 2.

Schatz V., Proelss A. and Nengy L., *The 2018 agreement to prevent unregulated high seas fisheries in the Central Arctic Ocean: A critical analysis*, in *International Journal of Marine and Coastal Law*. 34, (2), 2019, pp. 195-244, at p. 197.

Schneider J., *The Gulf of Maine Case: The Nature of an Equitable Result*, in *The American Journal of International Law*, Vol. 79, No. 3 (Jul., 1985), pp. 539-577, at p. 546.

Schofield C., *A New Frontier in the Law of the Sea? Responding to the Implications of Sea Level Rise for Baselines, Limits and Boundaries*, In *Frontiers in International Environmental Law: Oceans and Climate Challenges*, 2021, pp. 171-193, at p. 182.

Schofield C., *Options for Overcoming Overlapping Maritime Claims: Developments in Maritime Boundary Dispute Resolution and Managing Disputed Waters*, in *The Journal of Territorial and Maritime Studies*, Vol. 8, No. 2 (2021), pp. 21-41, at p. 28.

Schlüter M., Lindkvist E. and Basurto X., *The interplay between top-down interventions and bottom-up self-organization shapes opportunities for transforming self-governance in small-scale fisheries*, in *Marine Policy*, Volume 128, June 2021, 104485, pp. 1-10, at p. 5.

Schütz S.E., *Marine Spatial Planning – Prospects for the Arctic*, in *Arctic Review on Law and Politics*, Vol. 9 (2018), pp. 44-66, at p. 52.

Serdy A., *Postmodern International Fisheries Law, or We are all Coastal States now*, in *International & Comparative Law Quarterly*, May 2011, pp. 387-422, at p. 398.

Serdy A., *The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean: An Overview*, in *Ocean Yearbook Online*, Vol. 33, No. 1, 2019, at pp. 409-410.

Serghei G., *'The Russian-U.S. Borderland: Opportunities and Barriers, Desires and Fears'*, in *Eurasia Border Review*, 2016, pp. 31-50, at p. 41.

Sethi S.A., Branch T.A., and Watson R., *Global fishery development patterns are driven by profit but not trophic level*, in *Proceedings of the National Academy of Sciences*, Vol.107 N.27 (20100706), pp. 12163-12167, June 21, 2010, pp. 12164.

Shephard G.E., Dalen K. et al., *Assessing the added value of the recent declaration on unregulated fishing for sustainable governance of the central Arctic Ocean*, in *Marine Policy*, Volume 66, April 2016, pp. 50-57, at p. 53

Shusterich K.M., *International jurisdictional issues in the Arctic Ocean*, in *Ocean Development and International Law: The Journal of Marine Affairs*, Vol. 14, 1984, p. 235-272, at p. 242.

Smith J.J.P., *The Arctic's Final Frontier: Canada and Denmark Settle the Territorial Question of Hans Island*, in *Asia-Pacific Journal of Ocean Law and Policy*, Vol.8, No.1, 2023, pp. 156-164, at p. 157

Smith T.D., *United States Practice And The Bearing Sea: Is It Consistent With A Norm Of Ecosystem Management?*, in *Ocean and Coastal Law Journal*, Vol.1, No.2, Art.2, 1994, pp. 141-186, at p. 171

Smith R.W., *The Maritime Boundaries of the United States*, *Geographical Review*, Vol. 71, No. 4 (Oct., 1981), pp. 395-410, at p. 401.

Snoeijs-Leijonmalm P., Flores H. et al., *Unexpected fish and squid in the central Arctic deep scattering layer*, in *Science Advances*, Vol. 8, No. 7, 18 February 2022, at p. 5.

Sollie F., *Norway's Continental Shelf and the Boundary Question on the Seabed*, in *Cooperation and Conflict*, Vol. 9, No. 2/3, The challenge of new territories (1974), pp. 101-113, at p. 109.

Solski J.J., *Northern Sea Route Permit Scheme: Does Article 234 of UNCLOS Allow Prior Authorization?*, in *Ocean Yearbook Online*, pp. 443-472, July 2021, at p. 457.

Solski J.J., *The 'Due Regard' of article 234 of UNCLOS: Lessons from Regulating Innocent Passage in the Territorial Sea*, in *Ocean Development & International Law*, Volume 52, pp. 398-418, 2021 – Issue 4, p. 402.

Solski J.J., *The Genesis of Article 234 of the UNCLOS*, *Ocean Development & International Law*, Volume 52, pp. 1-19, 2021 – Issue 1, p. 10.

Song A.M. and Soliman A., *Situating human rights in the context of fishing rights – Contributions and contradictions*, in *Marine Policy*, Volume 103, May 2019, pp. 19-26, at p. 21.

Steenkamp, R.C., *Svalbard's "snow crab row" as a challenge to the Common Fisheries Policy of the European Union*, in *Int. J. Mar. Coast. Law* 2019, 35, pp. 106–132, at p. 118.

Stokke O.S., *Barents Sea Fisheries – the IUU Struggle*, in *Arctic Review on Law and Politics*, Vol. 1, No. 2 (2010), pp. 207-224, at p. 208.

Stokke O.S., *Managing Fisheries in the Barents Sea Loophole: Interplay with the UN Fish Stocks Agreement*, in *Ocean Development & International Law*, 32:241–262, 2001, at p. 241.

Stokke O.S., *Trade Measures and the Combat of IUU Fishing: Institutional Interplay and Effective Governance in the Northeast Atlantic*, in *Marine policy: the International Journal for economics planning and politics of ocean exploitation*, Vol. 33, No. 2, p. 339-349, 2009, at p. 342.

Sulanke E. and Rybicki S., *Community Development Quotas and Support of Small-Scale Fisheries as Two Key Concepts for Blue Growth in Fisheries*, Review article Front. Mar. Sci., 15 November 2021 Sec. Marine Fisheries, Aquaculture and Living Resources, Volume 8 – 2021, pp. 1-20, at p. 10.

Swan G.S., *That Gulf of Maine Dispute: Canada and the United States Delimit the Atlantic Continental Shelf*, in Natural Resources Lawyer, Vol. 10, No. 2 (1977), pp. 405-456, at p. 432.

Tahindro A., *Conservation and Management of Transboundary Fish Stocks: Comments in Light of the Adoption of the 1995 Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, in Ocean Development and International Law, Vol. 28 (1997), 1, at p. 20.

Takei Y., *The Role of the Arctic Council from an International Law Perspective: Past, Present and Future*, in The Yearbook of Polar Law Online, v6 n1 (20140311), pp. 349-374, at p. 358.

Talhelm J.L., *Curbing International Overfishing and the Need for Widespread Ratification of the United Nations Convention on the Law of the Sea*, in North Carolina Journal of International Law, Vol. 25, No. 2, Art. 4, pp. 381-418, 2000, at p. 414.

Tanaka Y., *Reflections on Maritime Delimitation in the Romania/Ukraine case before the International Court of Justice*, in Netherlands International Law Review, Vol.56 No.3 (2009), pp. 397-427, at p. 409

Tiller R. and Nyman E., *Having the cake and eating it too: To manage or own the Svalbard Fisheries Protection Zone*, in Marine Policy, Volume 60, October 2015, Pages 141-148, at p. 143.

Tkachenko B.I., *Comparative analysis of the USA/USSR maritime boundary agreement of 1990 and treaty between Norway and Russia concerning maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean of 2010*, in Asia-Pacific Journal of Marine Science & Education, Vol.2, No.2, 2012, pp. 35-69, at p. 43.

Toresen, R., and Østvedt, O. J. 2000, *Variation in abundance of Norwegian spring-spawning herring (Clupea harengus, Clupeidae) throughout the 20<sup>th</sup> century and the influence of climatic fluctuations*, in Fish and Fisheries, 1(3): 231- 256, at p. 236.

Townhill B.L., Couce E. et al., *Climate change projections of commercial fish distribution and suitable habitat around north western Europe*, Fish and Fisheries, Volume24, Issue5, pp. 848-862, September 2023, at p. 852.

Trondsen T., Matthiasson T.T., Young J.A., *Towards a market-oriented management model for straddling fish stocks*, in Marine Policy, Volume 30, Issue 3, May 2006, pp. 199-206, at p. 202.

Usher P.J., *Inuvialuit Use of the Beaufort Sea and Its Resources, 1960-2000*, in Arctic, Vol. 55, Supplement 1: The Beaufort Sea Conference 2000 on the Renewable Marine Resources of the Canadian Beaufort Sea (2002), pp. 18-28, at p. 23.



Vaisman A., *Trawling in the mist: industrial fisheries in the Russian part of the Bering Sea*, in Traffic International, 2001, at p. 11.

VanderZwaag D.L., *The Gulf of Maine Boundary Dispute and Transboundary Management Challenges: Lessons To Be Learned*, in Ocean and Coastal Law Journal, Volume 15, Number 2, Article 5, 2010, pp. 241-260, at p. 249.

Vanderzwaag D.L. and Lamson C., *Ocean Development and Management in the Arctic: Issues in American and Canadian Relations*, in Arctic, Vol. 39, No. 4 (Dec., 1986), pp. 327-337, at p. 331.

VanderZwaag D.L., Vorobev V. and Koubrak O., *Canadian and Russian Fisheries Management in the Arctic: Complexities, Commonalities and Contrasts*, in Arctic Review on Law and Politics, June 2022, pp. 361-392, at p. 372.

Van Pelt T.I., Huntington H.P. et al., *The missing middle: Central Arctic Ocean gaps in fishery research and science coordination*, Marine Policy, Volume 85, November 2017, pp. 79-86, at p. 80.

Victorero L., Watling L. et al., *Out of Sight, But Within Reach: A Global History of Bottom-Trawled Deep-Sea Fisheries From >400 m Depth*, Front. Mar. Sci., 11 April 2018, pp. 1-17, at p. 12.

Virzo R., *Competência dos Estados Costeiros Relativa à Segurança da Navegação Marítima: tendências recentes*, in Sequencia: Publicação do Programa de Pós – Graduação em Direito da UFSC, v. 36 n. 71 (2015), pp. 19-42, at p. 27.

Von Gustedt A.A. and Joyner C.C., *The Turbot War of 1995: Lessons for the Law of the Sea*, in The International Journal of Marine and Coastal Law, Volume 11, No.4, 1996, pp. 425-458, at p. 446.

Vylegzhanin A., Dudinka I., *International legal grounds for drawing Denmark, Norway and Canada straight baselines in the Arctic*, Moscow J. Int. Law 1 (2017), pp. 28–40, at p. 31

Vylegzhanin A., Young O.R. and Berkman P.A., *The Central Arctic Ocean Fisheries Agreement as an element in the evolving Arctic Ocean governance complex*, in Marine Policy 118 (2020) 104001, at p. 7.

Vylegzhanin A.N. and Zilanov V.K., *International Law Basics of Management of Marine Living Resources: Theory and Documents*, 2000 (in Russian with English Content). Moscow, at pp. 9-33.

Wang C., Zhao Q. and Chang Y.C., *On the legal status of marine fishery resources: From the perspectives of international fishery law*, Heliyon, Volume 9, Issue 4, pp. 1-8, April 2023, at p. 3.

Wang W. and Xue G., *Revisiting Traditional Fishing Rights: Sustainable Fishing in the Historic and Legal Context*, in Sustainability 2023, 15(16), 12448, pp. 1-12, at p. 7.

Wang R., *The precautionary principle in maritime affairs*, WMU Journal of Maritime Affairs, volume 10, pp. 143–165 (2011), at p. 146.

Warner-Kramer D.M., *Stateless fishing vessels: the current international regime and a new approach*, in Ocean and Coastal Law Journal, Vol. 5, No. 2, p. 227-243, 2000, at p. 232.

Watson M., *An Arctic Treaty: a solution to the international dispute over the polar region*, in Ocean and Coastal Law Journal, Volume 14, Number 2, Article 8, January 2009, pp. 307-334, at p. 318.

Weber M., *Defining the Outer Limits of the Continental Shelf across the Arctic Basin: The Russian Submission, States' Rights, Boundary Delimitation and Arctic Regional Cooperation*, in the International Journal of Marine and Coastal Law 24 (2009), pp. 653-681, at p. 660.

Wegge N., *The emerging politics of the Arctic Ocean. Future management of the living marine resources*, in Marine Policy 51, January 2015, at pp. 331-338.

Wespstad V.G., *The Status of Bering Sea Pollock and the Effect of the "Donut Hole" Fishery*, in Fisheries, Vol. 18, 1993, Issue 3, pp. 18-24, at p. 21.

Whittemore Boggs S., *Delimitation of Seaward Areas Under National Jurisdiction*, in The American Journal of International Law, Vol. 45, No. 2 (Apr., 1951), pp. 240-266, at p. 252.

Wilhelmsen J. and Lundby Gjerde K., *Norway and Russia in the Arctic: New Cold War Contamination?*, in Arctic Review on Law and Politics, Vol. 9 (2018), pp. 382-407, at p. 387.

Wilson A.R., Miller S.K. and Galland G.R., *Management procedure development in RFMOs offer lessons for strategic and impactful stakeholder engagement and collaboration*, in Frontiers in Marine Science, Sec. Marine Fisheries, Aquaculture and Living Resources, Volume 10 – 2023, pp. 1-12, at p. 6.

Wilson P., *Society, steward or security actor? Three visions of the Arctic Council*, Cooperation and Conflict, Vol.51, No.1 (March 2016), pp. 55-74, at p. 64.

Witbooi E., *Illegal, Unreported and Unregulated Fishing on the High Seas: The Port State Measures Agreement in Context*, The International Journal of Marine and Coastal Law, pp. 290-320, June 2014, at p. 296.

Wyman K.M., *Unilateral steps to end high seas fishing*, in Texas A & M Law Review 259 (2018), NYU Law and Economics Research Paper No. 19-01, January 2019, pp. 259-296, at p. 268.

Young M., *Then and Now: Reappraising Freedom of the Seas in Modern Law of the Sea*, in Ocean Development & International Law, Volume 47, 2016 – Issue 2, pp. 165-185, at p. 172.

Young O.R., *Arctic Governance - Pathways to the Future*, in *Arctic Review on Law and Politics*, Vol. 1, No. 2 (2010), pp. 164-185, at p. 169.

Young O.R. and Kim J.D., *Next steps in Arctic Ocean Governance Meeting the challenge of coordinating a dynamic regime complex*, in *Marine Policy*, Volume 133, November 2021, 104726, at p. 3

Yu L., *A Fairer Governance of High Sea Fishing through a Systemic Interpretation Approach*, in *Fishes*, 2022, 7(6), 344, pp. 1-10, at p. 4.

Zhang Z., Huisinigh D. and Song M., *Exploitation of trans-Arctic maritime transportation*, in *Journal of Cleaner Production* 212, March 2019, pp. 960-973, at p. 968.

Zou L. and Huntington H.P., *Implications of the Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea for the management of fisheries in the Central Arctic Ocean*, in *Marine policy: The International Journal for Economics Planning and Politics of Ocean Exploitation*, Vol. 88, p. 132-138, 2018, at p. 135.

## MISCELLANEOUS

Abrahamson J., *Joint Development of offshore polar oil and gas resources and the United Nations Convention on the Law of the Sea*, Law Australian National University, 2015, at p. 82.

Al-Khafaji S.K.B., *The regime of boarding ships in international maritime law*, in *World Maritime University Dissertations*, 2006, at pp. 35-39.

Arctic Council, *The Inuvik Declaration (1996) - Declaration from the Ministerial meeting of the Arctic Environmental Protection Strategy (AEPS)*, held in Inuvik, Canada.

*Arctic Fisheries Nuuk Chairmans and ToR for 3<sup>rd</sup> Meeting. Chairman's Statement, Meeting on Arctic Fisheries.* (2014, February 24-26). Nuuk, Greenland.

Arctic Environmental Protection Strategy, *Declaration on the Protection of Arctic Environment*, Rovaniemi, 14 June 1991.

Bennett M., *Moratorium on fishing north of Alaska*, in *Foreign Policy Association*, 22 August 2009

Boillet N., *L'aménagement du territoire dans le context de la politique maritime integree* A. Pderone, Paris, 2015, pp. 83-134, at p. 87.

Burke A. and Raycraft R., *Canada and Denmark sign deal to divide uninhabited Arctic Island*, in *CBC News*, 2022

Castonguay N., *The Efficiency of Institutions in Regards to Disputes within the Arctic: A Case Study of the Beaufort Sea and the Barents Sea Disputes*, Mémoire présenté à l'École nationale d'administration publique dans le cadre du programme de Maîtrise en

administration publique pour l'obtention du grade de Maître ès science (M. Sc.) concentration Administration internationale, 2017, at p. 61.

CCAMLR, *The Commission at the Thirty-fifth Meeting. 2016, October 17-28. Schedule of Conservation Measures in Force 2016/17*

*Claimants' Memorial, ICSID CASE NO. ARB/20/11 Peteris Pildegovics and SIA North Star v. The kingdom of Norway.* 11 March 2021, paras. 630-697.

Conférence de la Paix, Commission du Spitsberg, *Travaux Préparatoires, Procès-Verbal de la Commission*, No.5, Recueil des actes de la Conférence, Partie VII, Préparation et Signature des Traités et Conventions, Paris, 1924, CL-006, paragraph 372-374, 392-406.

Covey N., *Legitimization of the Arctic Coastal States (A5) through the Central Arctic Ocean (CAO) Fisheries Agreement*, in Policy Primer – North American and Arctic Defence and Security Network, October 28, 2021, at p.5.

Denmark Ministry of Science, Technology and Innovation, *The Continental Shelf Project*.

Dusik J., *A new and perhaps last? Chance for resuming Arctic cooperation*, WWF Sweden, May 10, 2023.

Elfarsdóttir K.M., *The Atlantic mackerel (Scomber scombrus) conflict in the Northeast Atlantic: The Icelandic perspective*, Master's thesis in Fisheries and Aquaculture Science FSK-3960 May 2020, Norwegian College of Fisheries Science, at p. 48.

Ermolina N., *Implications of the Barents Sea Treaty for fisheries matters*, in Small Master's Thesis Master of Laws (LLM) in Law of the Sea, UIT The Arctic University of Norway, Faculty of Law, Fall 2013, at p. 24.

Evans M.D., *Maritime Delimitation after Denmark v. Norway: Back to the Future?*, in *The Reality of International Law: Essays in Honour of Ian Brownlie*, published in October 1999, pp. 153-176, at p. 161.

Fernandes P.G. and Fallon N., *Fish distributions reveal discrepancies between zonal attachment and quota allocations*, in *Conservation Letters*, Vol.13, No.3, January 2020, pp. 1-6, at p. 3.

Finley C., *The Industrialization of Commercial Fishing, 1930-2016*, in *Oxford Research Encyclopedia of Environmental Science*, 2016, pp. 11-22, at p. 18.

Fredrik S., *The Loophole, The Power and the Sea: Small States in Asymmetric negotiations*, Lunds universitet/Statsvetenskapliga Institutionen, 2006, at p. 18.

Frost L.A., *The Joint Venture Controversy: A Short-Term Solution for a Long -Term Fisheries Policy*, in *Theses and Major Papers. Paper 82*, 1983, at p. 26.

Glomsrød S. and Aslaksen I., *The Economy of the North*, Statistics Norway Oslo–Kongsvinger, December 2006.

Gorbachev M., *The Speech in Murmansk at the ceremonial meeting on the occasion of the presentation of the Order of Lenin and the Gold Star Medal to the city of Murmansk*, October 1, 1987 (Moscow: Novosti Press Agency, 1987), p. 730.

Gray D.H., *Canada's unresolved maritime boundaries*, in *Boundary and Security Bulletin*, Vol. 5, No. 3, 1977, p. 61-70, at p. 64.

Guimond M.V., *An Analysis of the U.S.-Canadian East Coast Fisheries Resource Agreement*, in *Theses and Major Papers*, 1979, pp. 1-46, at p. 22.

Hartmann J., *Canada and Denmark reach agreement on the Lincoln Sea Boundary*, in *Dipublico.org – Derecho International*, 2013.

Henriksen T., *Norwegian by-catch regulations alleged to violate the Svalbard Treaty*, *The NCLOS Blog*, 18-03-2014.

Honnibal A.N., *Extraterritorial Port State Measures: The Basis and Limits of Unilateral Port State Jurisdiction to Combat Illegal, Unreported and Unregulated Fishing*, *Max Planck Society for the Advancement of the Sciences - Max Planck Foundation for International Peace and the Rule of Law*, March 2020, at p. 95.

Hornackova N.M., *Hans Island Case: A territorial dispute in the Arctic*, *Master Thesis – Aalborg University*, May 2018, at p. 29.

Hornnes R., *Norwegian investments in the U.S. factory trawler fleet, 1980–2000*, in *Thesis – University of Bergen, Bergen, Norway*, 2006, at p. 53.

Hotvedt B.D., *The Problem of Sharing a Common Stock: An Analysis of the Mackerel Conflict in the North East Atlantic*, *M.Sc. Thesis, University of Tromsø*, 2010, at p. 62.

Jaal M.L., *Implementation of the Port State Measure Agreement (PSMA) to combat IUU Fishing in the Philippines*, *World Maritime University Dissertations*. 2092, October 2022, pp. 1-62, at p. 21

Jarlier-Clément C., *The Ospar Convention and its Implementation: Radioactive Substances*, in *Nuclear law bulletin No. 67 (2001)*, p. 21-26., at p. 23.

Malik J., Fahrudin A. et al., *Overfishing and Overcapacity small scale fisheries in Semarang City*, in *Jurnal Ilmu dan Teknologi Kelautan Tropis*, Vol. 11 N.2 (20190821), pp. 427-435, 2019, at p. 430.

Malmin Ø, *Norwegian-Americans in the King Crab Fishery – Exploring and Explaining the Norwegian-American participation in the King Crab Fishery in Alaska from 1920-1983*, *Master Thesis in History – University of Bergen*, Spring 2008, at p. 59.

Margat P., *Considering the significance of historic and traditional fishing rights in today's law of the sea, illustrated with the post-Brexit fisheries legal regime*, *Faculty of Law UIT The Arctic University of Norway*, *Master's thesis in Law of the Sea, JUR-3910*, September 2020, at p. 29.

Matz-Lück N., *The Faroe Islands' Response to EU Trade Restrictions on Atlanto-Scandian Herring*, The blog of the Norwegian Centre for the Law of the Sea, (March 5, 2014).

Molenaar E.J., *An introduction to the Central Arctic Ocean Fisheries Agreement*, Seminar Breaking new ground in the melting north: a fisheries agreement for the central Arctic Ocean, DG MARE, Brussels, 13 Feb 2018,

Morrissey M.K., *The Canadian-American Dispute Over Dixon Entrance*, in *Theses and Major Papers*. Paper 203, 1990, pp. 1-62, at p. 15.

Neubacher C., Silva J., and Thil P.J., *Norwegian Exceptionalism: How the European Union can use Norway to further European Integration*, in *European Horizons*, The University of Chicago, 2018,

Neumann T., 'Norway and Russia Agree on Maritime Boundary in the Barents Sea and the Arctic Ocean', in *American Society of International Law*, Volume 14, Issue 34, November 10, 2010.

Ortiz A.J., *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*, in *International Legal Materials*, Vol. 55, No. 6 (2016), pp. 1157-1179, at p. 1159.

OSPAR Commission, *Ministerial Meeting of the OSPAR Commission*, Bergen, 23–24 September 2010, para. 28.

Petkunaite D., *Cooperation or Conflict in the Arctic? UNCLOS and the Barents and Beaufort Sea Disputes*, in *Dissertations and Theses*, City College of New York, 2011, pp. 1-87, at p. 46.

Pomerants D., *The Beaufort Sea Maritime Boundary Dispute: High Stakes for Canadian Arctic Sovereignty and Resource Extraction in a Changing Climate*, Faculty of Environmental Studies, York University, 2013, at p. 67.

*Position of the European Commission concerning a call to act from the Republic of Latvia pursuant to Article 265 TFEU*, Brussels, Mar. 12, 2018, C(2018) 1418 final (Annex, para. 55-58).

Radi F., *Illicit activities on the high seas: Piracy, Drug, Trafficking and IUU Fishing*, Luiss Guido Carli University, A.A. 2020-2021, at pp. 20-23.

Rahbek-Clemmensen J. and Thomasen G., *Learning from the Ilulissat Initiative: State Power, Institutional Legitimacy, and Governance in the Arctic Ocean 2007–18*, University of Copenhagen – Centre for Military Studies, February 2018, at pp. 23-24.

Romani M.V., *Environmental Governance in a Changing Arctic: how a new governance regime for the protection of biodiversity beyond national jurisdiction can help tackle future challenges*, Luiss Guido Carli University – Department of Law – Final Thesis in International Law, A.Y. 2019-2020, at pp. 32-35.

Rønning S.B., *Two countries sharing a renewable resource – the allocation of the renewable natural resources in the Norwegian-Russian fisheries management regime of the Barents Sea*, University of Tromsø, Norway, 2002, at p. 31.

Ryder S., *The Declaration concerning the prevention of unregulated high seas fishing in the Central Arctic Ocean*, in The University of Calgary Faculty of Law Blog, July 31, 2015.

Sanchez JB, *Port State Measures to combat IUU fishing: the role of the FAO and the EU*, Faculté de droit et de criminologie, Université catholique de Louvain, 2017, at p. 51.

Scovazzi T., *Sovereignty over Land and Sea in the Arctic Area*, Agenda Internacional Año XXIII N° 34, 2016, pp. 169-196, at p. 174.

Seventh Ministerial Meeting of The Arctic Council, *The Nuuk Declaration*, Nuuk, 16 September 1993.

*Recommendation by Denmark (in respect of the Faeroe Islands and Greenland), the European Community and Norway, for a NEAFC Recommendation on Management Measures for Mackerel in 2005.*

Roucou Y.J., *The Inclusion of Fisheries in a New Internationally Legally Binding Instrument for the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction*, United Nations-Nippon Foundation of Japan Fellowship, pp. 1-108, December 2017, at p. 21

Sillwatwinyoo N., *Zonal Versus Functional Approach in the New Law of the Sea*, Master's thesis in Maritime Law, Faculty of Law – Lund University, Spring 2012, at p. 47.

*The Minister of Foreign Affairs, Espen Barth Eide, speech to the Norwegian Parliament EU-Committee*, the Storting, 18 October 2012.

*The potential of the International Tribunal for the Law of the Sea in the management and conservation of marine living resources*, in Presentation given by the President of the International Tribunal for the Law of the Sea to the Meeting of the Friends of the Tribunal at the Permanent Mission of Germany to the United Nations in New York, 21 June 2007.

Thomassen I.C., *The Continental Shelf of Svalbard: Its Legal Status and the Legal Implications of the Application of the Svalbard Treaty Regarding Exploitation of Non Living Resources*, Small Master's Thesis - Master of Law in the Law of the Sea, UiT The Arctic University of Norway, Faculty of Law, Fall 2013, at p. 29.

Todorov A., *The UN High Seas Treaty in the Arctic Context*, in Belfer Center for Science and International Affairs, Harvard Kennedy School, 21 March 2023, at p. 2.

Treves T., *The legal nature of coastal States' rights in the maritime areas under UNCLOS*, International Symposium on the Law of the Sea, The rule of law in the seas of Asia, Tokyo, Ministry of Foreign Affairs, 12 and 13 February 2015, at p.3.

Wolf, S., *Svalbard's Maritime Zones, Their Status under International Law and Current and Future Disputes Scenarios*, German Institute for International and Security Affairs: Berlin, Germany, 2013, at p. 33.

Xiaolu L., *The application of international law principle in practice of the delimitation on continental shelf*, in *The Maritime Commons: Digital Repository of the World Maritime University*, 2013, pp. 1-80, at p. 42.

## ONLINE RESOURCES

Adolf S., *Why a harvest strategy matters for markets in the Northeast Atlantic's 'Mackerel War*, in *Harveststrategies.org*, published on 30 October 2023, available at the following link: <https://harveststrategies.org/blog/2023/10/30/why-a-harvest-strategy-matters-for-markets-in-the-northeast-atlantics-mackerel-war/#:~:text=Harvest%20strategies%20not%20only%20ensure,the%20supply%20for%20the%20markets.>

*Aftenposten*, 14 April 1999, available at the following link: <https://firstmonday.org/ojs/index.php/fm/article/view/4308/3708>

Alverson D.L., *Race to the sea: the autobiography of a marine biologist*, in iUniverse, Inc., New York, USA, 2008, available at the following link: <https://books.google.com/books?id=bejMIYkr5IQc&printsec=copyright>

Augustyn A., *Svalbard*, in *Britannica*, September 2023, available at the following link: <https://www.britannica.com/place/Svalbard>

Bloom E.T., *The rising importance of non-Arctic States in the Arctic*, in *The Wilson Quarterly*, 2022, available at the following link: [https://www.wilsonquarterly.com/quarterly/\\_/the-rising-importance-of-non-arctic-states-in-the-arctic](https://www.wilsonquarterly.com/quarterly/_/the-rising-importance-of-non-arctic-states-in-the-arctic)

Breum M., *Canada, Denmark agree on a landmark deal over disputed Hans Island*, in *Arctic Today Business Journal*, 13 June 2022, available at the following link: <https://www.arctictoday.com/canada-denmark-agree-on-a-landmark-deal-over-disputed-hans-island/>

*Daily News of Iceland*, 13 and 14 July 1995, the vessel *Már*, and 22 July 1996, the vessel *Klakkur*, available at the following link: <https://journals.sagepub.com/doi/10.1177/002200947400900402>

*Daily News of Iceland*, 18 July 1996, available at the following link: <http://seismo.berkeley.edu/~rallen/research/iceland/eruption96/DailyNews/index.html>

*Daily News of Iceland*, 5 November 1997, available at the following link: <https://www.timeanddate.com/calendar/?year=1997&country=88>



*Daily News of Iceland*, 22 October 1998, available at the following link: <https://www.idunn.no/doi/pdf/10.18261/ISSN1891-1773-2013-04-03>

*Daily News of Iceland*, 14 April 1999, available at the following link: [https://www.stortinget.no/globalassets/pdf/dokumentserien/2007-2008/dokument322007\\_2008s1195.pdf](https://www.stortinget.no/globalassets/pdf/dokumentserien/2007-2008/dokument322007_2008s1195.pdf)

*Economy of the Faroe Islands, A Dynamic and Resilient Economy*, Føroya landsstýri – The Government of the Faroe Islands, 2019, available at the following link: <https://www.faroeislands.fo/economy-business/economy/>

*Fiskaren*, 6 May 1994, 5, available at the following link: [https://fiskarsgroup.com/wp-content/uploads/2021/09/Fiskars\\_ENG\\_1994.pdf](https://fiskarsgroup.com/wp-content/uploads/2021/09/Fiskars_ENG_1994.pdf)

*Fiskaren*, 7 March 1995, 15, available at the following link: <http://hudoc.echr.coe.int/tur?i=001-58369>

Føroya H., *Faroe Island in Figures 2015*, available at the following link:

[http://www.hagstova.fo/sites/default/files/Faroe\\_Islands\\_in\\_figures\\_2015.pdf](http://www.hagstova.fo/sites/default/files/Faroe_Islands_in_figures_2015.pdf)

Gibbs W., ‘Russia and Norway Reach Accord on Barents Sea’, in *The New York Times*, April 27, 2010, available at the following link: <https://www.nytimes.com/2010/04/28/world/europe/28norway.html>

Greenberg P., *Four fish: the future of the last wild food*, in Penguin Press, New York, USA, 2010, available at the following link: [https://books.google.com/books/about/Four\\_Fish.html?id=ZVvK7yp1FzkC](https://books.google.com/books/about/Four_Fish.html?id=ZVvK7yp1FzkC)

Helm L., *Catch as catch can...Seattle's factory trawlers run into an Alaskan storm*, in *Seattle Post Intelligencer*, October 23, 1989, B3, available at the following link: [https://issuu.com/peninsuladailynews/docs/kbhjv\\_pdmn20150426c](https://issuu.com/peninsuladailynews/docs/kbhjv_pdmn20150426c)

Hofverberg E., *The Hans Island “Peace” Agreement between Canada, Denmark, and Greenland*, in *Library of Congress Blogs*, June 22, 2022, available at the following link: <https://blogs.loc.gov/law/2022/06/the-hans-island-peace-agreement-between-canada-denmark-and-greenland/>

*Joint Press Release (1994) Tenth Conference on the Conservation and Management of the Living Marine Resources of the Central Bering Sea*, 11 February 1994, Washington DC, available at the following link: <https://www.fao.org/fishery/en/organization/ccbsp>

*Joint Statement by the Presidents of the United States of America and the Russian Federation on Enhanced Bilateral Engagement*, in *The White House – Office of the Press Secretary*, 17 June 2013, available at the following link: <https://obamawhitehouse.archives.gov/the-press-office/2013/06/17/joint-statement-presidents-united-states-america-and-russian-federatio-1>

*Jurisdiction Over Vessels*, in National Oceanic and Atmospheric Administration – U.S. Department of Commerce, 2022, available at the following link: <https://www.noaa.gov/jurisdiction-over-vessels>

Kapstein K., Maureaud A. et al., *The Fish that Ate an Agreement: How migrating mackerel undermine international fisheries cooperation*, in Carnegie Endowment for International Peace, published on 18 July 2023, available at the following link: <https://carnegieendowment.org/2023/07/18/fish-that-ate-agreement-how-migrating-mackerel-undermine-international-fisheries-cooperation-pub-90217#:~:text=Carnegie%20Europe-.The%20Fish%20That%20Ate%20an%20Agreement%3A%20How,Mackerel%20Undermine%20International%20Fisheries%20Cooperation&text=The%20breakdown%20of%20cooperation%20among,in%20response%20to%20climate%20change>.

Lieutenant – Colonel Alain Lafrenière, *Can we just get along already? Canadian Arctic Sovereignty is American Security*, Maxwell Air Force Base – Alabama, June 2017, available at the following link: <https://apps.dtic.mil/sti/citations/AD1042094>

Linnitt C., *Shell Gives Up Nearly 40-Year Fight for Expired Arctic Permits, Opening Up Conservation Area*, in *The Narwhal*, June 8, 2016, available at the following link: <https://thenarwhal.ca/shell-gives-nearly-40-year-fight-expired-arctic-permits-opening-conservation-area/>

Liu N., *China and the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean*, in *The Diplomat*, June 10, 2021, available at the following link: <https://thediplomat.com/2021/06/china-and-the-agreement-to-prevent-unregulated-high-seas-fisheries-in-the-central-arctic-ocean/>

Mearsheimer J.J., *The tragedy of great power politics*, New York, NY: Norton, 2001, available at the following link: <https://is.cuni.cz/studium/predmety/index.php?do=download&did=216573&kod=JPM755>

Molenaar E.J., *Relative Stability in Context International Fisheries Law*, Pew Workshop Relative Stability – Quo Vadis, Brussels 17-18 May 2017, pp. 1-11, at p. 6, available at the following link: [https://www.uu.nl/sites/default/files/rebo-nilos\\_pew\\_relative\\_stability\\_molenaar\\_pres\\_int\\_and\\_eu\\_law\\_2017\\_05\\_17.pdf](https://www.uu.nl/sites/default/files/rebo-nilos_pew_relative_stability_molenaar_pres_int_and_eu_law_2017_05_17.pdf)

*Morgunbladid of Iceland*, May 13 1994, available at the following link: <https://www.regjeringen.no/contentassets/dcc31d86fb6a42f385e50e1e4c8592ad/protokoll-53.-sesjon.pdf>

*MSC certificates suspended for all North East Atlantic mackerel fisheries*, in Marine Stewardship Council, released on 31 January 2019, available at the following link: <https://www.msc.org/media-centre/press-releases/press-release/msc-certificates-suspended-for-all-north-east-atlantic-mackerel-fisheries>

NOAA Fisheries, *Alaska Pollock*, available at the following link: <https://www.fisheries.noaa.gov/species/alaska-pollock>

*North-East Atlantic Fisheries Commission (NEAFC) with EEZs*, in Arctic Portal.org – The Arctic Gateway, September 2023, available at the following link: <https://arcticportal.org/maps/download/maps-arctic-council-member-states-and-observers/3310-north-east-atlantic-fisheries-commission-neafc-with-eezs>

Norway, Ministry of Fisheries, *Felles norsk-færøysk pressekommuniké om kvoteavtalen for 1996*, Press Release, 23 February 1996, available at the following link: <https://www.regjeringen.no/no/tema/mat-fiske-og-landbruk/fiskeri-og-havbruk/1/fiskeri/internasjonalt-fiskerisamarbeid/internasjonalt/fiskerisamarbeidet-med-faroyene/id437334/>

*Norwegian Black List*, Directorate of Fisheries, updated to 16 February 2022, available at the following link: <https://www.fiskeridir.no/English/Fisheries/Norwegian-Black-List>

*Norwegian press statement quoting last-minute agreements reached in the early hours of 16 March, 1994*, on Norwegian accession to the European Union, available at the following link: <https://www.govinfo.gov/content/pkg/CPRT-106SPRT66922/html/CPRT-106SPRT66922.htm>

Olsen J.H.T., *Fiske på det åpne hav*, in *Fiskeribladet*, 21 September 1995, 6, available at the following link: <https://www.regjeringen.no/no/tema/mat-fiske-og-landbruk/fiskeri-og-havbruk/1/fiskeri/internasjonalt-fiskerisamarbeid/internasjonalt/fn-avtalen-om-fiske-pa-det-apne-hav/id445764/>

*Press Release from the Ministry of Fisheries and Agriculture of Iceland of 12.12.2011*, available at the following link: <http://eng.sjavarutvegsraduneyti.is/news-and-articles/nr/10772>

*Protokoll fra den 22. Sesjon I den blandete norsk-russiske fiskerikommisjon*, (1993), 14-5, available from Ministry of Fisheries, Oslo, available at the following link: <https://www.regjeringen.no/contentassets/82ec36a4bdd547479edca6395fc83294/protokoll-52.-sesjon.pdf>

*Reuters News Agency dispatch from Oslo*, August 19, 1993, available at the following link: <https://www.reuters.com/>

Roman R., *Settling Sovereignty Claims over the Hans Island*, in The Pub MPPGA Student Media, October 10, 2017, available at the following link: <https://arcticyearbook.com/arctic-yearbook/2022/2022-briefing-notes/442-close-like-minded-partners-committed-to-democratic-principles-settling-the-hans-island-tartupaluk-territorial-dispute>

Shahbazi A., *Sustaining tomorrow's Central Arctic Ocean today using best practices to guide the Central Arctic Ocean Fisheries Agreement's Implementation*, in WWF, November 2022, at p. 3, available at the following link: [https://files.worldwildlife.org/wwfcmprod/files/Publication/file/7zhj2wrz1i\\_CAOFA\\_Full\\_Report\\_pages\\_web\\_version.pdf](https://files.worldwildlife.org/wwfcmprod/files/Publication/file/7zhj2wrz1i_CAOFA_Full_Report_pages_web_version.pdf)

St.meld. nr. 30 (2004–2005) *Muligheter og utfordringer I nord* paragraph 3.3, p. 23, available at the following link: <https://www.regjeringen.no/no/dokumenter/stmeld-nr-30-2004-2005-/id407537/>

Swiftsure Bank, Wild Coast Wilderness Resort Ltd., 2022, available at the following link: <https://wildcoastwildernessresort.com/swiftsure-bank/>

The Economist, *A tale of two fisheries*, 10 September 2009, available at the following link: <https://www.economist.com/science-and-technology/2009/09/10/a-tale-of-two-fisheries>

*The Norwegian Newspaper FiskeribladetFiskaren*, 5 September 2011, p. 6, available at the following link: <https://www.fiskeribladet.no/>

The Oskar System of Ecological Quality Objectives for the North Sea, OSPAR Commission, Update 2010, available at the following link: [https://qsr2010.ospar.org/media/assessments/EcoQO/EcoQO\\_P01-16\\_complete.pdf](https://qsr2010.ospar.org/media/assessments/EcoQO/EcoQO_P01-16_complete.pdf)

Towers L., *Faroe Islands Herring Fishing Ignoring Science, says EC*, The Fish site – Aquaculture for all, May 2013, available at the following link: <https://thefishsite.com/articles/faroe-islands-herring-fishing-ignoring-science-says-ec>

Unsoeld J., *Fighting Bad Fisheries Policy*, The Christian Science Monitor, November 2, 1993, available at the following link: <https://www.csmonitor.com/1993/1102/02203.html>

Uryupova E., *Why do we need a shared Pan-Arctic Fisheries Governance Complex?*, in the Arctic Institute – Center for Circumpolar Security Studies, 27 April 2021, available at the following link: <https://www.thearcticinstitute.org/need-shared-pan-arctic-fisheries-governance-complex/>

Weber M., *From abundance to scarcity*, in Island Press, Washington, D.C., USA, 2001, available at the following link: <https://islandpress.org/books/abundance-scarcity>

*What the loss of MSC certification for Atlanto Scandian herring and blue whiting means*, IFFO – The Marine Ingredients Organization, 2021, available at the following link: <https://www.iffco.com/what-loss-msc-certification-atlanto-scandian-herring-and-blue-whiting-means> .

Winter A., *U.S. Bans Commercial Fishing in Warming Arctic*, in Scientific American, 21 August 2009, available at the following link: <https://www.scientificamerican.com/article/ban-commercial-fishing-arctic-global-warming/>

WWF-Norway, *WWF International Arctic Programme, Factsheet, Effects of Climate Change on Arctic Fish*, Oslo February 2008, p. 1, available at the following link: [http://awsassets.panda.org/downloads/arctic\\_fish\\_factsheet.pdf](http://awsassets.panda.org/downloads/arctic_fish_factsheet.pdf)

## POLITICAL AGREEMENTS

*Agreed Record of Conclusions of Fisheries Consultations on the Management of the Norwegian Spring- Spawning (Atlanto-Scandian) Herring Stock in the North-East Atlantic for 2007*, Jan.18, 2007.

*Agreed Record of Conclusions of Fisheries Consultations between The Faroe Islands, The European Community and Norway on the Management of Mackerel in the North-East Atlantic for 2009*, 31 October 2008, London (Agreed Record).

*Agreement between the United States of America and the Union of Soviet Socialist Republics on the maritime boundary*, done at Washington 01 June 1990 (29 ILM 1990, p. 942).

*Agreement in the Form of an Exchange of Letters between the European Community and the Kingdom of Norway Relating to the Agreement on Fisheries between the European Communities and the Kingdom of Norway* (1992).

*Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean*, signed by the the five Arctic Ocean coastal States (Canada, Denmark (acting on behalf of Greenland and the Faroe Islands), Norway, Russia, and the United States – the “A5”) together with China, the European Union (EU), Iceland, Japan, and South Korea (which together with the A5 form the so-called ‘A5+5’) on 3 October 2018 in Ilulissat, Greenland and entered into force June 2021.

NEAFC. *Scheme of Control and Enforcement*, adopted and entered into force in 2007.

## REPORTS

Aasen P.J., *The Law of Maritime Delimitation and the Russian–Norwegian Maritime Boundary Dispute*, Fridtjof Nansen Institute, FNI Report 1/2010, at p. 32.

Arbuckle M., Atkinson B. and Germani V., *Performance Review Panel Report of the North East Atlantic Fisheries Commission*, NEAFC, 6 November 2006, at p. 54.

Arctic Council, *Arctic Marine Shipping Assessment 2009 Report*, April 2009, at p. 4.

Arctic Monitoring and Assessment Programme, *Arctic Pollution Issues: a state of the Arctic environment report*, 1997, pp. 1-12, at p. 10.

Bakkala R.G., *Structure and Historical Changes in the Groundfish Complex of the Eastern Bering Sea*, NOAA Technical Report NMFS 114, July 1993, at p. 65

Benn A., Rogers A.D. et al., *The impact of deep-sea fisheries and implementation of the UNGA Resolutions 61/105 and 64/72. Report of an international scientific workshop*, National Oceanography Centre 2011-09-09, pp. 1-46, at p. 15.

Bjørndal T., Arnason R. et al., *SFN Report No. 02/22 - Post-Brexit Management of Pelagic Fisheries in the North-East Atlantic: Norwegian Spring Spawning – Atlanto Scandian Herring, Mackerel, and Blue Whiting*, Centre for Applied Research at NHH Bergen, March 2022, p.15.

Byers M., *Arctic Oil: Canada's chance to get it right*, SSHRC Knowledge Synthesis Report, University of British Columbia, 1 June 2016, TypePad, at p. 43.

*Central Bering Sea Pollock Workshop conducted under the Convention for the Conservation of Pollock Resources in the Central Bering Sea*, 17-21 July 2000, held at NOAA Regional Center 7600 Sand Point Way NE Seattle at p. 2.

*Changes in the Arctic: Background and Issues for Congress*, in Congressional Research Service – Report prepared for for members and committees of congress, updated to January 18, 2014, at p. 17.

Deep-Ocean Stewardship Initiative, *A Review of Impact Assessments for Deep-Sea Fisheries on the High Seas Against the FAO Deep-Sea Fisheries Guidelines*, Fisheries Working Group Report, July 2022, pp. 1-38, at p. 19.

Devoid, F. (1963), *The life history of the Atlanto-Scandian herring. Rapports et Procès-Verbaux des Réunions du Conseil International pour l'Exploration de la Mer*, 154: pp. 98-108, at p. 101.

Dragesund, O., Hamre, J., and Øyvind, U. (1980). *Biology and population dynamics of the Norwegian spring-spawning herring. Rapports et Procès-Verbaux des Réunions 177*, 43–71, at p. 51.

Environmental Defense Fund, *Building resilience of Fisheries Governance in the North East Atlantic*, Final Report, January 2018, at pp. 17-20.

FAO, Report of the Technical Consultation on International Guidelines for the Management of Deepsea Fisheries in the High Seas. Rome, 4–8 February and 25–29 August 2008, Annex F.

*Final Report – Building Resilience of Fisheries Governance in the North East Atlantic*, Environmental Defense Fund, January 2018.

*Final Report – Northeast Atlantic Pelagic Fisheries – Management Challenges for Straddling Fish Stocks*, in Marine Stewardship Council, June 2023.

Foreign Affairs and International Trade Canada, *Third Canada-U.S. Joint Continental Shelf Survey to Showcase Scientific Cooperation in the Arctic*, 2010.

*Freedom to Provide Services*, EFTA Surveillance Authority: Annual Report 1998.

Gillett R. and Lightfoot C., *The Contribution of Fisheries to the Economies of Pacific Island Countries*, A report prepared for the Asian Development Bank, the Forum Fisheries Agency, and the World Bank, December 2001, at p. 146.

Gray D.H., *Canada's Unresolved Maritime Boundaries*, in *Boundary and Security Bulletin*, Vol. 5, No. 3, p. 61-70, 1997, at p. 64.

Hardy R., *A cold dispute over a hot issue: Settling Canada's Sovereignty in the Far North*, Centre for International and Defence Policy, published in *Contact Report*, June 2019.

Holst J.C., Dragesund O., Hamre J., Misund O.A., and Østvedt O.J., *Fifty years of herring migrations in the Norwegian Sea*, *ICES Marine Science Symposia*, 215: 352-360. 2002, at p. 355.

Hoppman M., *Exploring the Arctic Ocean: The Agreement that protects an unknown ecosystem*, in *Arctic Council*, 28 October 2020.

Ianelli J.N., Barbeaux S.J. et al., *Assessment of walleye pollock in the Bogoslof Island Region*, Alaska Fisheries Science Center, December 2022, at p. 2.

*ICES Advice*, Vol. 9, October 2005, 1.4.2 Northeast Atlantic Mackerel (combined Southern, Western and North Sea spawning components), pp. 31–41, at p. 37.

*ICES Cooperative Research Report, 221*, Part 1, (1997), at pp. 50-51

*ICES Cooperative Research Report*, Vol. 229, Part 1 (1999), pp. 27–32, at p. 28.

*ICES. 2000. Report of the Northern Pelagic and Blue Whiting Fisheries Working Group*. ICES Headquarters, 26 April—4 May 2000. ICES CM 2000/ACFM:16, p. 302,

*ICES WG Wide Report 2011* (Copenhagen 2011) p. 43.

Interpol, *International Law Enforcement Cooperation in the Fisheries Sector: A Guide for Law Enforcement Practitioners*, February 2018, pp. 1-163, at p. 62.

Jakobsson J., Jonsson E. and Guömundsdóttir A., *The North Icelandic Herring Fishery and the Atlanto-Scandian Herring 1939-1969*, International Council for the Exploration of the Sea, ICES CM 1996H:30, at p. 42.

Japp D.W. and Wilkinson S., *Deep-sea resources and fisheries*, in: *FAO Fisheries Report No. 838, FIEP/R838*, Report and documentation of the expert consultation on deep-sea fisheries in the high seas, Bangkok, Thailand, 21–23 November 2006, p. 39.

Kaczynski V.M., *US-Russian Bering Sea Marine Border Dispute: Conflict over Strategic Assets, Fisheries and Energy Resources*, *Russian Analytical Digest* 20/07, 2007, pp. 1-13, at p. 4.

Koivurova T. and Molenaar E.J., *International Governance and Regulation of the Marine Arctic: Overview and Gap Analysis*, report prepared for the WWF International Arctic Programme, January 2009, at p. 15.

*Limits in the Seas No.148 – Norway Maritime Claims and Boundaries*, Office of Ocean and Polar Affairs Bureau of Oceans and International Environmental and Scientific Affairs U.S. Department of State, August 28, 2020.



Lodge M., *Managing International Fisheries: Improving Fisheries Governance by Strengthening Regional Fisheries Management Organizations*, Chatham House, Energy, Environment and Development Programme EEDP BP 07/01, March 2007, pp. 1-8, at p. 3.

Lodge M.W, Anderson D. et al., *Recommended Best Practices for Regional Fisheries Management Organizations: Report of an independent panel to develop a model for improved governance by Regional Fisheries Management Organizations*, Chatham House, 2007, at p. 35

Magnason S., *Faroese Fish Needs New Markets*, Nora Region Trends 26 July 2013.

Mirabile M., *The Central Arctic Ocean Fisheries Agreement – What it is, is not and might be*, WWF Global Arctic Programme, November 21, 2023.

National Centers for Environmental Information – National Oceanic and Atmospheric Administration, *Predicting the Future of Arctic Ice*, published on 28 February 2020.

*North East Atlantic Fisheries Commission (NEAFC)*, Quality Status Report 2010 – Assessment of the environmental impact of fishing.

*North-East Atlantic coastal states reach agreement on mackerel, blue whiting and Atlanto-Scandian herring TACs for 2024*, European Commission – Directorate-General for Maritime Affairs and Fisheries, published on 23 October 2023.

Office of the UN High Commissioner for Human Rights, *Mapping Human Rights Obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Individual Report on global and regional environment agreements*, Report no.9, December 2013, pp. 1-43, at p. 14.

OSPAR Commission, Report on North Sea Pilot Project on Ecological Quality Objectives, 2006, at p. 59.

Palacios Abrantes J., Reygondeau G. et al., *'The transboundary nature of the world's exploited marine species'*, Scientific Reports, Volume 10, Article number 17668, pp. 1.12, 21 October 2020, at p. 2.

Philips A., *Marine Environment Law Essay*, in UC Research Repository, GCAS 2007, at p. 4

*Preventing unregulated commercial fishing in the Central Arctic Ocean (CAO) – A compilation of reports from meetings of experts in Shanghai (China), Incheon (Korea) & Sapporo (Japan)*, in Ocean Conservancy, March 2017, at p. 1.

Rasmussen M.H., *Current Trends in the Faroese Economy (2014)*.

*Reassessment of the Alaskan pollock fishery*, Public Comment Report – Responsible Fisheries Management Certification Scheme, Version 2.1, 2022, at p. 28.



*Recommendation of a Standing Committee of the Storting, Norway, Innst. 29 (1995–1996), Annex I.*

*Report of the Fourth Annual Conference of the Parties (1999), paras 6.D.6 and 6.D.7.*

*Report of the First Annual Meeting of the Conference of the Parties (1996), Report of the Scientific and Technical Committee, item 5 p. 2.*

*Report of the 22<sup>nd</sup> Annual Meeting of the North-East Atlantic Fisheries Commission, 10–14 November 2003, item 8(a).*

*Report of the 23<sup>rd</sup> Annual Meeting of the North-East Atlantic Fisheries Commission, 8 – 12 November 2003, item 7(b) and (c) on blue whiting and Norwegian spring-spawning herring respectively.*

*Report of the International Committee on the EEZ: Principles applicable to living resources occurring both within and without the Exclusive Economic Zone or in zones of overlapping claims, by Dr. Rainer Lagoni, 1992, at p. 6.*

*Report of the NAFO/NEAFC Working Group on Oceanic Redfish, 13-14 February 2001, Reykjavik, Iceland, Serial No. N4354 – NAFO/FC Doc. 01/3, at p. 14.*

*Report of the United Nations Conference on Environment and Development', UN Doc. A/CONF.151/26 (1992), vol. ii, Agenda 21, ch.17, para. 17.52. The Declaration of Cancun, adopted just before the Rio Conference at a meeting of states concerned with ocean fisheries, had also called for such action.*

*Report to the Storting, Norway, St.meld. 11 (1997–1998), Sec. 3. A broader discussion is found in St.meld. 49 (1994–1995).*

Rogers A.D. and Gianni M., *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, London, United Kingdom, 2010, at p. 8.

Sasaki, T. and Yoshimura T., *Past progress and present condition of the Japanese pollock fishery in the Aleutian Basin*, in Annual Meeting of the International North Pacific Fisheries Commission, October 1987, Vancouver, British Columbia, Canada. Fisheries Agency of Japan, Tokyo, Japan, at p. 41

Sinkevičius V., *Arctic: Agreement to prevent unregulated fishing enters into force*, in Directorate-General for Maritime Affairs and Fisheries, 25 June 2021.

Skjoldal H.R., *Overview report on ecological quality (EcoQ) and ecological quality objectives (EcoQOs)*, Report prepared within the framework of the OSPAR Commission, Institute of Marine Research, Bergen, Norway, June 1999, pp. 1-20, at p. 11.

Steadman D., Thomas J.B. et al., *New perspectives on an old fishing practice: Scale, context and impacts of bottom trawling*, in Fauna & Flora International, Report 2021, pp. 1-44, at p. 33.

Tamis J.E., Heusinkveld J., Asjes J., Leopold M.F.L. & Karman C.C., *Developments in North Sea policy and their impact on the offshore oil and gas industry*, Report number C067/07, Institute for Marine Resources and Ecosystem studies Wageningen IMARES, July 6, 2007, pp. 1-61, at p. 44.

*The NEAFC 2009 Mackerel Decision; Recommendation by the North East Atlantic Fisheries Commission in accordance with article 5 of the Convention on Future Multilateral Cooperation in North East Atlantic Fisheries at its annual meeting in November 2008 to adopt management measures for mackerel in the NEAFC Convention area in 2009.*

*Third Annual Conference of the Parties (1998)*, Report of the Scientific and Technical Committee, paras 7.4.12 and 7.5.12.

Thompson C., *The Gulf of Maine in Context: State of the Gulf of Maine Report*, Gulf of Maine Council on the Marine Environment, June 2010, pp. 1-58, at p. 4.

Vaisman A., *Trawling in the mist. Industrial fisheries in the Russian part of the Bering Sea*, in Cambridge Traffic Network Report, 2001

Vilhjálmsón H. and Hoel A.H., *Fisheries and Aquaculture*, in Arctic Climate Impact Assessment, Cambridge University Press, 2005.

Widjaja S., Long T., Wirajuda H., et al., *Illegal, Unreported and Unregulated Fishing and Associated Drivers*, Washington, DC: World Resources Institute, 2020, at p. 13

*Working Group Oceanic Redfish*, 4–5 October 1995, and Working Group on Mackerel and Blue Whiting, pp. 25–27, March 1998.

Wright G., Rochette J. et al., ‘High seas fisheries: what role for a new international instrument?’, IDDRI STUDY, No. 03/16, August 2016, Oceans, pp. 1-20, at p. 8

Yadava Y.S., *Nature, Scope and Objectives of the Code of conduct for responsible fisheries*, Report of the National Workshop on the Code of Conduct for Responsible Fisheries, Chennai 29-30 September 2000, at p. 31.

## TREATIES AND CONVENTIONS

*Agreement between the Government of the Kingdom of Norway on the one hand, and the Government of the Kingdom of Denmark together with the Home Rule Government of Greenland on the other hand, concerning the delimitation of the continental shelf and the fisheries zones in the area between Greenland and Svalbard*, adopted and entered into force on 20 February 2006, 2378 (p. 21)

*Agreement on Port State measure to prevent, deter and eliminate illegal, unreported and unregulated fishing (PSMA)*, adopted at the Food and Agriculture Organization of the United Nations, in Rome, Italy, on November 22 2009, entered into force on June 5, 2016.

*Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on High Seas*, adopted on 24 November 1993, entered into force on 24 April 2003, 2221 (p. 91).

Arctic Portal Library, *Treaty between Norway, The United States of America, Denmark, France, Italy, Japan, the Netherlands, Great Britain and Ireland and the British overseas Dominions and Sweden concerning Spitsbergen*, adopted in Paris on 9 February 1920, entered into force on 14 August 1925.

CCAMLR, *The Convention on the Conservation of Antarctic Marine Living Resources*, opened for signature on 1 August 1980 and entered into force on 7 April 1982 by the Commission for the Conservation of Antarctic Marine Living Resources, headquartered in Tasmania, Australia.

EFTA, *The Agreement on the European Economic Area*, adopted and entered into force in 1994.

Food and Agriculture Organization of the United Nations (FAO), 'Code of Conduct for Responsible Fisheries', Rome, adopted and entered into force in 1995.

FAO, *Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea*, signed at Washington, enacted in 1994 and entered into force on 8 December 1995.

*General Agreement on Tariffs and Trade*, adopted on 30 October 1947, entered into force on 1 January 1948, vol. 64, p. 187.

HELCOM, *The 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area*, signed on 22 March 1974, entered into force on 17 January 2000.

NEAFC, *Convention on Future Multilateral Cooperation in the North-East Atlantic Fisheries*, adopted on 18 November 1980 and entered into force in 1982.

OSPAR, *1992 Convention for the protection of the Marine Environment of the North-East Atlantic*, Paris, France, Ministerial Meeting of the Oslo and Paris Commissions, adopted on 22 September 1992, entered into force on 25 March 1998.

OSPAR Commission, *Bergen Declaration*, Fifth International Conference on the Protection of the North Sea, 20– 21 March 2002, Bergen, Norway.

*Protocol between the Government of Norway and the Government of Iceland under the Agreement between the Government of Norway, the Government of Iceland and the Government of the Russian Federation concerning certain aspects of cooperation in the area of fisheries*, adopted on 15 May 1999, entered into force on 28 July 1999, 2073 (p. 253).

*Charter of the United Nations*, adopted on 26 June 1945, entered into force on 24 October 1945, 1 UNTS XVI.

*United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, adopted on 4 August 1995, entered into force on 11 December 2001, 2167 (p.3).

*United Nations Convention on the Law of the Sea*, adopted on 10 December 1982, entered into force on 16 November 1994, 1833 UNTS 397, 21 ILM 1261 (1982)

*Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations*, adopted in 1969, entered into force on 27 January 1980, 1155 UNTS 331, 8 ILM 679 (1969), 63 AJIL 875 (1969).

## UN DOCUMENTS

CLCS, *Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Kingdom of Norway*, submitted 27 November 2006.

FAO, '*International Guidelines for the Management of Deep-Sea Fisheries in the High Seas*', Rome, 2008.

ICJ, *Memorial on the Merits of the Dispute Submitted by the Government of the United Kingdom of Great Britain and Northern Ireland (1973)*.

*Partial Submission of the Government of the Kingdom of Denmark together with the Government of the Faroes to the Commission on the Limits of the Continental Shelf, The Continental Shelf North of the Faroe Islands*, submitted 29 April 2009.

Hamd V., Frem S. et al., *The Maritime Boundaries and Natural Resources of the Republic of Lebanon: Challenges and Opportunities*, United Nations Development Programme, December 2014, at p. 26

*Partial Submission of the Government of the Kingdom of Denmark together with the Government of the Faroes to the Commission on the Limits of the Continental Shelf, The Southern Continental Shelf of the Faroe Islands*, submitted 2 December 2010.

*Russian Federation, Executive Summary*, (20 December 2001), 14 May 2008.

*Summary of the recommendations of the Commission on the limits of the continental shelf in regard to the submission made by Norway in respect of areas in the Arctic Ocean, the Barents Sea and the Norwegian Sea on 27 November 2006*, adopted by the Subcommission on 13 March 2009, and submitted to the Commission on the Limits of the Continental Shelf for consideration and approval by the Commission, at p. 18.

United Nations Conference on the Law of the Sea, *Summary Records of the 21<sup>st</sup> to 25<sup>th</sup> Meetings of the Fourth Committee*, note **Errore. Il segnalibro non è definito.** at p. 55. Para. 3.

United Nations FAO, *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*, Rome 2001.

United Nations FAO, *Model Scheme on Port State Measures to Combat Illegal, Unreported and Unregulated Fishing*, Rome 2007, pp. 1-56, at p. 17.

UN Doc. A/RES/61/105, *UNGA Res. 61/105*, (December 8, 2006), paragraph 80.

UN General Assembly, *Oceans and the law of the sea, Report of the Secretary-General, Addendum*, 8 October 2002, UN Doc. A/57/57/Add.1, para 41.

UN Publication A/57/57/Add.1 of 08 October 2002, *Report of the Secretary-General of the United Nations to the Fifty-seventh Session of the United Nations General Assembly under the agenda item Oceans and the Law of the Sea*, New York, at: at 14 May 2008, para. 38-41.

UNGA, '*Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its seventh meeting*,' Letter dated 14 July 2006 from the Co-Chairpersons of the Consultative Process addressed to the President of the General Assembly, A/61/156, para. 100.

## WORKING PAPERS

Addis D., *The protection and preservation of the marine environment*, Vlaams Instituut voor de Zee, 2012, pp. 1-28, at pp. 15-16.

Baker B., *Beyond the Northern Sea Route: Enhancing Russian-United States Cooperation in the Bering Strait Region*, Polar Institute, No. 8 1 November 2021, pp. 1-27, at p. 16.

Barnay AS., Degre E. et al., *Evaluation of the OSPAR system of Ecological Quality Objectives for the North Sea*, OSPAR Commission, Biodiversity series, 2009, pp. 1-101, at p. 14.

Beckman R. and Davenport T., *The EEZ Regime: Reflections after 30 Years*, LOSI Conference Papers, Papers from the Law of the Sea Institute, UC Berkeley–Korea Institute of Ocean Science and Technology Conference, held in Seoul, Korea, May 2012, pp. 1-41, at p. 23.

Bjørndal, T., Hole A.S., Slinde W.M. and Asche F. (1998), *Norwegian Spring-Spawning Herring – Some Biological and Economic Issues*, SNF-Working paper No. 46/1998, pp. 1-24, at p. 11.

Bjørndal T. and Munro G., *The management of high seas fisheries resources and the implementation of the U.N. Fish Stocks Agreement of 1995*, Working Paper No. 06/02, in Institute for Research in Economics and Business Administration Bergen, February 2022, at p. 8.

Brideau I., *The Duty to Consult Indigenous People*, Publication No. 2019-17-E, Library of Parliament, June 2019, pp. 1-13, at p. 5.

Buck E.H., *U.N. Convention on the Law of the Sea: Living Resources Provisions*, in Congressional Research Service, January 18, 2011, pp. 1-14, at p. 3

Caddy J.F., *An alternative to equilibrium theory for management of fisheries*, Marine Resources Service, FAO Fisheries Department Rome, Italy, at p. 5.

Campos Maza G.P., *The legal regime of the continental shelf and the establishment of the outer limits of the continental shelf beyond the 200 nautical miles*, The United Nations-Nippon Foundation Fellowship Programme 2011 – 2012, Divisions for Oceans Affairs and the Law of the Sea office of legal affairs, The United Nations, New York, 2012.

*Case Study: Individual Transferable Quotas for Cod Fisheries, Iceland (on-going)*, The Commonwealth Blue Charter, 21 October 2020.

*Case Study: Walleye Pollock and the North Pacific “Donut Hole”*, in The Footprint of Distant Water Fleets on World Fisheries, WWF, Endangered Seas Campaign, 1998, at p. 42.

Dankel D., Haraldsson G. et al., *Allocation of Fishing Rights in the NEA - Discussion paper*, TemaNord 2015, 546 ISSN 0908-6692, pp. 1-91, at p. 67.

Dundua N., *Delimitation of maritime boundaries between adjacent States*, United Nations – The Nippon Foundation Fellow, 2006-2007, at p. 45.

Dukic S. and Zerini M., *Port State Measures Agreement: Tackling IUU fishing through inspections*, in Vertic Brief, 28, June 2017, pp. 1-12, at p. 5.

Dunn D.C., Crespo G.O. et al., *Policy Brief – Adjacency: How legal precedent, ecological connectivity, and Traditional Knowledge inform our understanding of proximity*, 2020, at p. 5

Eliassen S., Sverdrup-Jensen S., Holm P. and Johnsen J.P., ‘Nordic experience of fisheries management seen in relation to the reform of the EU Common Fisheries Policy’, TemaNord 2009:579, Nordic Council of Ministers, Copenhagen 2009, at p. 47.

European Association of Fish Producers Organisations – Northern Pelagic Working Group, *EU pelagic industry position paper on fishing opportunities and Coastal States negotiations for pelagic stocks for 2024*, 5 October 2023, pp. 1-7, at p. 4.

Gissurarson H.H., *The Politics of Enclosures with Special Reference to the Icelandic ITQ System*, in An introduction to rights-based management.

Gjerde K.M. with the assistance of Harm Dotinga, Sharelle Hart, Erik Jaap Molenaar, Rosemary Rayfuse and Robin Warner, *Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*, IUCN Environmental Policy and Law Papers online – Marine Series No. 1, 2008, pp. 1-74, at p. 29.

Gjerde, K. and Wright, G., *Towards Ecosystem-based Management of the Global Ocean: Strengthening Regional Cooperation through a New Agreement for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction*, Strong High Seas Project, 2019, at pp. 12-13.

Gold M., *Negotiating the International Agreement to Prevent Unregulated Fishing in the High Seas of the Central Arctic Ocean*, in Fisheries and Oceans Canada Arctic Biodiversity Congress, October 10, 2018, pp. 1-17, at p. 8.

Hamanaka S., Tafgar A., and Lazaro D., *Trade Facilitation Measures Under Free Trade Agreements: Are They Discriminatory Against Non-Members?*, ADB Working Paper Series on Regional Economic Integration – No. 55, July 2010, p. 5.

Hannesson R., *Buy-back programs for fishing vessels in Norway*, Working Paper No. 13/04, Centre for Fisheries Economics – Discussion paper No. 3/2004, Institute for Research in Economics and Business Administration Bergen, March 2004, pp. 1-15, at p. 7.

Hedley C., Molenaar E.J. and Elferink A.G., *The implications of the UN Fish Stocks Agreement (New York, 1995) for Regional Fisheries Organisations and International Fisheries Management*, European Parliament Directorate-General for Research, Fisheries Series, FISH 112 EN, pp. 1-94, January 2004, at p. 57.

Heininen L., Everett K. et al., *Arctic Policies and Strategies — Analysis, Synthesis, and Trends*, International Institute for Applied Systems Analysis, February 2020, at p. 165.

Hoggarth D.D., Abeyasekera S. et al., *Stock assessment for fishery management: a framework guide to the stock assessment tools of the Fisheries Management Science Programme*, FAO Fisheries Technical Paper 487, 2006, at p. 41.

Holden M.J., *The procedures followed and the problems met by the European Economic Community in implementing the Scientific Recommendations of the International Council for the Exploration of the Sea on Total Allowable Catches*, Directorate General for Fisheries Commission of the European Communities Brussels, 2006.

Høst J. and Christiansen J., *Nordic fisheries in transition – future challenges to management and recruitment*, Nordic Council of Ministers, TemaNord 2018:545, at p. 41.

International Seminar, *Opportunities for Cooperation in Environmental Protection, Conservation and Rational Management of Biological Resources in the Arctic Ocean*, Russian International Affairs Council, Working Paper N.1, 2013. Moscow. Ed. I.S. Ivanov, at p. 38.

Lorance P., *Deep-Sea fisheries resources and ecosystem*, Directorate General Internal Policies of the Union, Policy Department Structural and Cohesion Policies, Fisheries, Brussels, European Parliament, 2007, pp. 1-25, at p. 9.

Lugten G.L., *A Review of Measures Taken by Regional Marine Fishery Bodies to Address Contemporary Fishery Issues*, FAO Fisheries Circular, 940 (1998), at p. 85.

Magnússon B.M., *The Loophole dispute from an Icelandic perspective*, Centre for Small State Studies Publication Series – University of Iceland, Working Paper 1 – 2010, at p. 17.

Matthíasson T., *Right based fisheries management in Iceland and economic and financial crisis*, Directorate General for Internal Policies – Policy Department B: Structural and cohesion policies – Fisheries, European Parliament, March 2012, p. 17

Meld.St. 26 (2010–2011) *Fiskeriavtalane Noreg har inngått med andre land for 2011 og fisket etter avtalane I 2009 og 2010* [Norwegian Parliament White Paper (2010–2011) Norway and Third Country Agreements on Fisheries in 2011 and According to Agreements of 2009 and 2010] p. 38.

Meltzer E., *Central Bering Sea Donut Hole*, Working Copy 04/2005, at p. 4.

Miles E.L., *The U.S./Japan fisheries relationship in the northeast Pacific: from conflict to cooperation?*, Fisheries Management Foundation and Fisheries Research Institute, FMF-FRI-002, University of Washington, Seattle, Washington, USA, 1989, at p. 32.



Molenaar E.J., *The Oslo Declaration on High Seas Fishing in the Central Arctic Ocean – Briefing Note*, in Arctic Yearbook, 2015, pp. 427-431, at p. 428.

Molenaar E.J. and Caddell R., '*Background Paper – Arctic Fisheries*', Arctic Transform, pp. 1-28, 9 February 2009, at p. 12.

Molenaar and Corell R., *Arctic Shipping: Background paper*, Arctic Transform, 12 February 2009, at p. 18.

Munro G., Van Houtte A. and Willmann R., *The Conservation and Management of Shared Fish Stocks: Legal and Economic Aspects*, FAO Fisheries Technical Paper, FAO, Rome, 2004, at p. 126.

Nowlan L., *Arctic Legal Regime for Environmental Protection*, IUCN Environmental Policy and Law Paper No. 44, IUCN - The World Conservation Union 2001, pp. 1-72, at p. 57.

Okoye U., *What Is the Status of the Northwest Passage in the Arctic Under International Law of the Sea?*, Swansea University, (February 20, 2022), pp. 1-25, at p. 13.

Oliver C.W., *Implementing the American Fisheries Act of 1998: Current and Future Actions by the North Pacific Fishery Management Council*, prepared for the 1999 National Fishery Law Symposium, March 25-26, 1999, University of Washington School of Law, at p. 4.

O'Rourke R., *Changes in the Arctic: Background and Issues for Congress*, Congressional Research Service, July 5, 2013, at p. 37.

Pascoe S. and Gréboval D., *Measuring capacity in fisheries*, FAO Fisheries Technical Paper. No. 445, Food and Agriculture Organization of the United Nations Rome, 2003, pp. 1-56, at p. 29.

Rogers A.D., Clark M.R. et al., *The Science behind the Guidelines: A Scientific Guide to the FAO Draft International Guidelines (December 2007) for the Management of Deep-Sea Fisheries in the High Seas and Examples of How the Guidelines may be Practically Implemented*, IUCN - The World Conservation Union, 2008, pp. 1-39, at p. 7.

Rudloff B., *The EU as fishing actor in the Arctic: stocktaking of institutional involvement and existing conflicts*, Working Paper – Research Division EU External Relations, July 2010, p. 21.

Strong J. and Criddle K.R., *Fishing for Pollock in a Sea of Change: a historical analysis of the Bering Sea Pollock Fishery*, School of Fisheries and Ocean Sciences – University of Alaska Fairbanks, 2013, at p. 73.

*Sustaining Iceland's fisheries through tradeable quotas – Country study*, OECD Environment Policy Paper No. 9, 2017, at p. 5.

Vilhjálmsón H. and Hoel A.H., *Fisheries and Aquaculture*, in Arctic Climate Impact Assessment, 2005, pp. 691-780, at p. 747.

Walmsley S., Pack K., Roberts C. and Skyrme B., *Vulnerable Marine Ecosystems and Fishery Move-on-Rules - Best Practice Review*, published by the Marine Stewardship Council, June 2021, pp. 1-134, at p. 71.

Working Group on Oceanic Redfish (*Sebastes mentella*), 2–5 October 1995, item 3.1.3.