UiO : Faculty of Law
University of Oslo

Illegal, Unreported, and Unregulated fishing on the high seas: international law gaps and issues

Candidate number: 500

Submission deadline: 01 December 2021

Number of words: 17 890 words

Acknowledgements

First and foremost, I would like to sincerely thank my LLM thesis supervisor Professor Alla Pozdnakova for her patience, kindness, insightful comments and continuous support throughout the writing process. Her guidance and reactivity helped me to stay on track during this semester. I would like to also thank the Scandinavian Institute of Maritime Law for proposing this LLM program, which enabled me to shape my professional future through the different courses offered.

I wish to express my infinite gratitude to my family for their greatest love and support during this wonderful academic journey that is about to soon reach an end. A very special *merci* to my parents, who introduced me to the sea world on day 1, by giving me the most sea-related name. A special mention to Michel Gentet, who transmitted his passion for the sea and the maritime world to his grandchildren.

I would also like to thank Marion Mazouzi, who supported my choices and me both during our common studies back in France and from afar for more than 6 years now. Many thanks to my LLM classmates for making this LLM so interesting, even though remotely. I would like to warmly thank my classmate and friend Nike Klemmer for proofreading this work and for her immense support since the beginning of the semester, as well as Christoph Beidenhauser for his patience and moral support throughout the process of writing this thesis, so a big *danke schön* to you two.

I am forever indebted to you all.

Table of contents

1 Introduction

'Oceans are under threat from climate change.'[1] Climate change is induced by human activities, and, applicable to the high seas and other maritime zones, by fishing activities. Fishing has been a human practice since ancient times and nowadays, the fishing industry employs approximately 59.5 million persons worldwide, with 20.5 million employed in aquaculture and 39.0 million in fisheries.[2] Unfortunately, a part of the fishing practices is not sustainable and is even considered as a threat to marine ecosystems by the International Maritime Organization (IMO).[3] These practices are qualified as 'illegal, unreported, and unregulated' (IUU) fishing and represent 26 million tons of fish caught annually (amounting between USD 10 and USD 23 billion).[4] IUU fishing mainly happens on the high seas because of the lack of regulations, but also in areas within national jurisdiction, such as in States plagued by corruption.[5] In addition, States are also struggling due to the poor enforcement capacity of laws and rules, generally because of the national situation (political, social), that renders it difficult.[6]

1.1 Statement of the problem and purpose of the thesis

The high seas are threatened by IUU fishing because of their particular situation. Indeed, no State has jurisdiction in the high seas and these areas seem insufficiently protected by international agreements. To tackle this issue, in 2017 the United Nations (UN) decided to organize the Intergovernmental Conference on Marine Biodiversity of Area Beyond National Jurisdiction (BBNJ)[7] for a better conservation and use the marine biodiversity of the high seas. As of

---

[1] VOIGT, Christina, *Oceans, IUU Fishing and Climate Change: Implications for International Law,* International Community Law Review, 2020, p. 1

[2] Food and Agriculture Organization of the United Nations 'The State of World Fisheries and Aquaculture 2020' <http://www.fao.org/state-of-fisheries-aquaculture> [last accessed 08.07.2021]

[3] International Maritime Organization 'Illegal, Unreported, and Unregulated (IUU) Fishing' <https://www.imo.org/en/OurWork/IIIS/Pages/IUU-FISHING.aspx> [last accessed 08.07.2021]

[4] Food and Agriculture Organization, 'Illegal, Unreported and Unregulated (IUU) fishing,' <http://www.fao.org/iuu-fishing/en/>last accessed 08.07.2021

[5] Ibid

[6] SDG Knowledge Hub 'Environmental Laws Impeded by Lack of Enforcement, First-ever Global Assessment Finds' <https://sdg.iisd.org/news/environmental-laws-impeded-by-lack-of-enforcement-first-ever-global-assessment-finds/> [last accessed 22.07.2021]

[7] Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (General Assembly resolution 72/249) <https://www.iucn.org/sites/dev/files/content/documents/iucn_comments_on_revised_bbnj_draft_text_february_2020.pdf> [last accessed 23.10.2021]

2021, the text is only at a draft stage and is trying to balance the interest and freedom of fishermen and the fishing industry, protected by Article 87 of the United Nations Convention for the Law of the Sea[8] (LOSC) while safeguarding the ecosystem present in the high seas.[9]

The protection of the environment in the high seas has been enshrined by the LOSC in Part XII entitled 'Protection and Preservation of the Marine Environment' as well as in Part VII named 'High Seas' where the focus of the UN has mainly been on the freedoms of the high seas and the conservation and management of the living resources, rather than actual protection of the environment within the high seas. The three terms 'illegal', 'unreported' and 'unregulated' fishing have been defined by the Food and Agriculture Organization in its International Plan to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) and will be defined in more details further below.

Overall, the goal of this thesis is to analyze the gaps and issues in international environmental law regarding IUU fishing and what could the solutions be. IUU fishing is an important cause of environmental damage to the fauna and flora in the high seas but has been addressed only little or not at all in international conventions and treaties. Certain mechanisms, such as the liability mechanism and the applicability of the due diligence principle regarding environmental damage should be better implemented in order to better tackle these issues. Flag States also have a role to play in implementing such international rules regarding IUU fishing in the high seas and these rules can only be effective if all States cooperate – both flag and port States.

The relevance of the Arctic Ocean stems from the fact that the Pacific Ocean and the Atlantic Ocean are rapidly being emptied by overfishing, more and more fishing vessels are going up north as the ice is melting, and new routes and fishing fields are opening. This issue is of growing concern to the international community as a whole and thus different solutions are being negotiated. In this regard, international cooperation is a powerful tool to reach an efficient solution. Cooperation in the Arctic has led to an agreement[10] signed between the five Arctic States[11] and five other States[12] to better conserve and manage the Arctic high sea. However, a

[8] United Nations Convention on the Law of the Sea 1982
[9] Supra 7, Article 14, proposed text
[10] Agreement to Prevent Unregulated Fisheries in the Central Arctic Ocean (the Arctic Agreement) 2018
[11] Canada, Denmark (on behalf of the Faroe Islands and Greenland), Norway, Russia and the United States of America
[12] Iceland, Japan, People's Republic of China, South Korea, and the European Union

great number of non-signatory States, such as Panama, Marshall Islands or Singapore[13] registered vessels are sailing north in order to find more fish, which threatens the effectiveness of this legal instrument.

1.2 Research question

In light of the above-mentioned observations, the main problem of this thesis, concerning itself with issues arising from IUU fishing on the high seas, will be:

- According to the high seas regime, what are the gaps and issues in international environmental law regarding IUU fishing, and how can they be solved?

Throughout this main question, several other topics will be examined after analyzing the definition and regime of the high seas and the environment. The related topics will study the question of how flag States' responsibility is achieved in international public law and if the due diligence principle can be effectively implemented for a more efficacious result regarding environmental damage on the high seas. At the end of this work, some reflections about the draft of the BBNJ will be proposed regarding the adequacy of this future new instrument as to the protection of the marine environment on the high seas.

1.3 Structure and methodology of the thesis

This thesis will be separated into three main parts. The first part will deal with the interrelation in international environmental law between the high seas, the environment, and the jurisdiction of flag States. Within this part, the question on how the high seas and the environment are correlated in the LOSC and other international agreements will be treated as well as the concept of a flag State and the issues it raises regarding efficacious responsibility in relation to environmental damage on the high seas.

The second part will analyze the responsibility of flag States with regard to IUU fishing, with the conceptualization of the terms 'responsibility' and 'liability' but also a discussion on the due diligence principle present in the general principles of international environmental law. Later on, the question of whether IUU fishing can be considered as an environmental damage will be discussed. This part will also address the question of IUU fishing in the Arctic as more routes are opening because of climate change.

[13] SILBER, Gregory, ADAMS, Jeffrey, 'Vessel Operations in the Arctic, 2015–2017' [2019] Frontiers in Marine Science, Table 2 <https://www.frontiersin.org/articles/10.3389/fmars.2019.00573/full> [last accessed 10.07.2021]

Finally, the third part will discuss the ongoing negotiated treaty, the BBNJ and analyze whether a new treaty is the solution to combat IUU fishing in the high seas. In the end, some potential solutions to fight IUU fishing will be mentioned, both already implemented and other solutions which the international community could benefit from in implementing.

These questions will be analyzed through the use of international conventions and treaties, such as the LOSC, but also through case law and writings by scholars or draft texts such as the BBNJ. The LOSC is a framework treaty, which needs to be completed and detailed by multiple international agreements and treaties, but also judgements. Indeed, the Statute of the International Court of Justice (ICJ) deems the main sources to be relied upon when interpreting treaties and conventions, 'international conventions […]; international custom […]; the general principles of law recognized by civilized nations; […] judicial decisions and the teaching of the most highly qualified publicists […].'[14] As the classification of the sources by the Statute suggests, the conventions, treaties and regulations, both from international and supranational institutions, such as the European Union (EU), have a stronger authority than customary norms, inter-States agreements and scholarly writings. However, 'teaching of the most highly qualified publicists' are of a great use when it comes to explain vague treaty provisions or give a more modern-oriented explanation of it. It is for example the case with the LOSC, where two commentaries have been written. The commentary, the Virginia Commentary[15] has been written by the negotiators of the Third United Nations Conference on the Law of the Sea, based on the documentation, both formal and informal of this conference, which lead to the ratification of the LOSC by most of the countries in the world. The second commentary, the Proelß Commentary[16] has been written by legal practitioner, scholars and researchers. Scholarly writings are also extensively used in this thesis as the international courts and tribunals have been quite cautious when having to rule on international environmental law. In addition, the Vienna Convention on the Law of Treaties[17] gives more guidance on the interpretation of treaties, conventions, and agreements.

[14] Statute of the International Court of Justice 1945, Article 38(1)(a), (b), (c) and (d)

[15] NORDQUIST, Myron & University of Virginia Center for Oceans Law Policy, *United Nations Convention on the Law of the Sea, 1982: a Commentary, Vol. III,: Articles 86 to 132 and Documentary Annexes: Vol. Vol. 3* (Martinus Nijhoff, 1995), p. 280 (**116(1)**)

[16] PROELß, Alexander, et al., *United Nations Convention on the Law of the Sea: A Commentary*, (München: Beck), 2017

[17] Vienna Convention on the Law of Treaties 1969

As the topic of IUU fishing is a complex and recent one, some issues might be difficult to answer as it lacks effectively implemented international treaties, as well as scholarly writings on certain subjects, such as IUU fishing in the Arctic, which is a developing issue, and not as widely assessed as IUU fishing in the southern high seas.

2 How are the high seas, the environment and the jurisdiction of flag States interrelated in international environmental law?

To answer the question on whether or not flag States are responsible for IUU fishing, and whether or not they may be held liable for damage caused to the environment, the terms 'illegal', 'unreported' and 'unregulated' fishing shall be defined, as well the high seas and the environment.

The Food and Agriculture Organization (FAO) is 'a specialized agency of the [UN] that leads international efforts to defeat hunger.' [18] Its actions done through standards and policies, among which combating IUU fishing is of a great focus as this issue leads to the famine of population heavily relying on fishing in their diet and economy.

The Organization defined, 'illegal' fishing in its IPOA-IUU[19] as follows:

> '[fishing activities] conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations; conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organization but operate in contravention of the conservation and management measures adopted by that organization and by which the States are bound, or relevant provisions of the applicable international law; […].'[20]

'Unreported' fishing has been defined by the FAO as:

[18] <https://www.fao.org/about/en/> [last accessed 17.11.2021]
[19] FAO 'International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing' (2001),II. p. 2, <http://www.fao.org/3/y1224e/Y1224E.pdf> [last accessed 29.09.2021]
[20] Ibid, II. 3.1. p. 2

> '[fishing activities] which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; […]'[21]

And finally, 'unregulated' fishing activities are understood as follows:

> '[fishing activities] in the area of application of a relevant regional fisheries management organization[22] that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization; […]'[23]

The problem with these definitions is their absence in the LOSC, to which most States in the world are party. This raises questions regarding their interpretations in light of the LOSC. This issue, regarding IUU fishing and the LOSC will be dealt with in part 3 of this thesis, regarding the responsibility and liability of flag States in IUU fishing as an environmental damage in the high seas.

The high seas are defined by LOSC Article 86, which leaves little room for interpretation. However, the environment, and in particular environmental damage has been a source of varied definitions, interpretations, and disagreements among States and scholars. Another issue is to recognize an environmental damage in the high seas, and implement a flag State's responsibility based on the due diligence principle. One of the main issues with the fragile environment definition is the question of which elements it encompasses, and the difficulty in establishing whether IUU fishing can be considered as environmental damage on the high sea.

2.1 How are the high seas and the environment interrelated in the LOSC and other international agreements?

The high seas will be defined and explained through the prism of international environmental law, and especially in light of IUU fishing. For the purpose of this thesis, the definitions will

[21] Ibid, II. 3.2, p. 2

[22] This term refers to the different fisheries organizations: the Atlantic Ocean Regional Fisheries Management Organizations; the Indian Ocean Intergovernmental Organizations; the Pacific Ocean Regional Fisheries Management Organizations; and the Southern Ocean Intergovernmental Organizations <https://www.fisheries.noaa.gov/international-affairs/international-fisheries-organizations> [last accessed 09.07.2021]

[23] Supra 19, II. 3.3, p. 2-3

only encompass IUU fishing in the context of the high seas, however, it should be noted that different concepts and spectrum are to be taken into account when defining the high seas and IUU fishing in a more general sense.

Section 2 of Part VII of the LOSC is entitled 'Conservation and Management of the Living resources of the High Seas' and explains the freedoms of the high seas.[24] They are counterbalanced with the duties and obligations of States to cooperate and act in accordance with the international environmental principles, especially the conservation and management of the aforementioned living resources. However, the conservation and management of the living resources of the high seas do not take into account the environment as a whole, only fishing rights States can enjoy.

The following parts will concern themselves with the definitions, regulations and interpretation of both the notion of the high seas and of the environment. Understanding these notions will allow for a more comprehensive approach when it comes to IUU fishing in the high seas and the role of responsibility and liability flag States may have regarding this environmental issue.

2.1.1 Definitions, regulations and interpretations

2.1.1.1 The high seas

Article 86 of the LOSC states that the Convention 'apply to all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State. […]'[25] It means that the high seas start at 200 nautical miles (nm) limit for States that claimed their EEZ and they start at the edge of the territorial waters (12nm) when a State did not claim its EEZ.

The high seas regime is stated in the LOSC Article 87, and highlights the freedom of the high seas by citing that 'the high seas are open to all States, whether coastal or land-locked' and then by listing all the freedoms[26] States can enjoy while being on the high seas. Articles 89 and 90 hold that no State can claim sovereignty over the high seas and that 'every State, whether coastal or land-locked, has the right to sail ships flying its flag in the high seas.'[27]

This regime is also protected by the exception set in Article 221 of LOSC, setting that States shall 'take and enforce measures beyond the territorial sea'[28] in cases where a maritime casualty

[24] Particularly Article 116 LOSC regarding the right to fish on the high seas.

[25] Supra 8

[26] *Inter alia* freedom of navigation; freedom of overflight; freedom to lay submarine cables and pipelines; freedom to construct artificial islands and other installations permitted under international law; freedom of fishing; freedom of scientific research.

[27] Supra 8, Articles 89 and 90

[28] Supra 8, Article 221

threatens fishing interests. This is an exception to the freedom of the high seas, by taking exceptional measures to safeguard both the high seas, but also, and mainly, the coastal interests of the State that are at stake. However, this Article is contained in Part XII, which concerns itself with the 'Protection and Preservation of the Marine Environment.' The focus is thus more on the environment rather than the high seas.

Article 87 of the LOSC holds the freedoms of the high seas, one of which is the freedom of fishing, which is however curtailed by the conditions stipulated in Section 2 of Part VII of the LOSC. Indeed, Section 2 is titled '[c]onservation and management of the living resources' and contains Articles 116 and 117, both of which set limits on the freedom of fishing.

Article 116 of the LOSC mentions three limits to the freedom of fishing in the high seas, one of them being the treaty obligations of States. As explained in the Proelß Commentary, the treaty obligations formulation encompasses not only the LOSC obligations but also the bilateral and multilateral obligations States are subject to.[29] As the Commentary states, the treaty obligations should not restrict the freedom of fishing in the high seas but should rather be taken into consideration when negotiating new treaties between States. This freedom of fishing has in particular been balanced against environmental treaties. Indeed, in its case *Southern Bluefin Tuna*[30] of 1999, ITLOS stated that 'the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment'[31] and, accordingly, implied that some fishing practices (such as bottom trawling) were not in accordance with Section 2 of Part VII of the LOSC.[32] Among international treaties and agreements, the Regional Fisheries Managements Organizations (RFMOs) can be cited when it comes to the freedom of fishing in the high seas and the duty to protect the environment. This *Advisory Opinion* ITLOS case was decided in accordance with Article 117 of the LOSC where the obligation by States to take measures to safeguard the environment is clearly stated. The FAO's website directly refers to Article 117 with the requirement of setting up high seas fisheries 'where appropriate.'[33]

The treaty obligation mentioned by Article 116 is to be read in light of Article 26 of the Vienna Convention on the Law of Treaties[34] where it is stated that the parties to a treaty must perform the obligations contained in the said treaty 'in good faith.' This notion of good faith is repeated

---

[29] RAYFUSE, Rosemary, 'Article 116,' in supra 16, p. 798

[30] *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999*, p. 280

[31] Ibid, para. 70

[32] ROTHWELL, Donald, STEPHENS, Tim, *The International Law of the Sea* (2nd ed., Oxford: Hart., 2016), p. 799

[33] <http://www.fao.org/fishery/topic/166304/en> [last accessed 22.09.2021]

[34] Vienna Convention on the Law of Treaties 1969

further in this Convention, in Article 31 where the interpretation of a treaty shall be made 'in good faith.'
This principle of good faith has long been present in international environmental law. Indeed, as mentioned by P. Sands and J. Peel, this principle 'in the exercise of rights and prohibitions on the abuse by a State of a right that it enjoys under international law ha[s] been invoked by the ICJ and arbitral tribunals when considering international environmental issues.'[35] Regarding IUU fishing, States parties to the LOSC have the obligation to let the vessels flying their flags freely fish in the high seas, such as Article 87 encourages, but have the duty to respect their treaty obligations. These treaty obligations are reaffirmed by Article 116 LOSC and the duty of good faith when effecting jurisdiction on their vessels. This duty of effective jurisdiction from Article 91 is extensively studied in part 2.2 of this thesis.

In addition, Article 116, as mentioned by the Virginia Commentary, about 'the freedom of fishing, like the other freedoms of the high seas, is subject to the obligations set out in the Convention with regard to the conservation and management of the living resources.' This comment sheds light on the central fact that all rights acquired by the States or States parties to the LOSC are to be put in balance with the rights of other States or in balance with general principle of international public law, such as the due diligence principle[36] contained in Article 87. The International Law Commission stated in its 1956 Commentary that 'States are bound to refrain from any acts that might adversely affect the use of the high seas by nationals of other States.'[37] The formulation of this due diligence obligation has been changed throughout the years and negotiations until it was formulated with the word 'shall' in Article 87(2) of the LOSC.

Moreover, the Virginia Commentary adds an interesting point on Article 116(b) about taking into consideration the interests of the coastal States when exercising the freedom of fishing in the high seas. It holds that '[t]hat freedom has always contemplated that the flag State was solely competent to determine the activities of its vessels, […] and was under no obligation to recognize the rights of adjacent coastal States.'[38] This Article is to be read in accordance with Article 64 regarding migratory species. Indeed, by recognizing the interests of the coastal States, there is also a recognition of the need to not overfish on the high seas in order to allow the coastal State, when the species migrations happen, to benefit from the high seas resources as well (which become EEZ or territorial sea resources by effect of this migration).

---

[35] SANDS Philippe and PEEL Jacqueline, with FABRA Adrianna and MACKENZIE Ruth *Principles of International Environmental Law* (3rd edition, Cambridge University Press, 2012), p. 125

[36] Due diligence has been defined by the International Law Commission as 'reasonable efforts by a State to inform itself of factual and legal components that relate foreseeably to a contemplated procedure and to take appropriate measures, in timely fashion, to address them.' – Article 3(10), International Law Commission, Draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries 2001, p. 154

[37] Supra 15, p. 86 (**87.9(l)**)

[38] Ibid, p. 287 (**116.9(e)**)

2.1.1.2 The environment

The environment, on its part, has been more difficult to define and the definitions given by the treaties and dictionaries do not always satisfy the scholars. In general, there appears to be the desire to protect as many elements of the environment as possible through treaties. However, the reality is States negotiate those treaties and aim at gaining a maximum benefit with minimal burden when it comes to the ratification and application of those instruments within their own national judicial system, according to interpretation of the notion of, *inter alia*, environment.

The notion of the environment is present in various treaties, agreements and scholarly writings but remains a complex definition, which seems to always remain incomplete. According to the Webster's dictionary, the environment is defined as '[t]he circumstances, objects, or conditions by which one is surrounded, the complex physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determines survival.'[39] To complete this theoretical definition, the ICJ, in its *Advisory Opinion* of 1996 stated that 'the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.'[40] P. Sands and J. Peel state that 'the definition of the "environment" assumes particular significance in relation to efforts to establish rules governing liability for damage to the environment.'[41] However, the authors mention the difficulty to have an international uniform definition of the environment. The authors also stress that none of the past declarations and charters, such as the Stockholm Declaration or the 1982 World Charter for Nature, include a definition of the environment, only include elements that constitute the environment. In the Stockholm Declaration, the following elements have been retained: 'air, water, land, flora and fauna and […] natural ecosystems'[42] while the World Charter for Nature included 'all areas of the earth, both land and sea' stressing the principles of conservation and protection of 'all the different types of ecosystems […].'[43]

The marine environment has become a contemporary topic after several disaster causing damage at sea, such as the *Torrey-Canyon* in 1967, the *Amoco Cadiz* in 1978, or the *Prestige* in 2002, which lead to the creation of several environment committees, such as the Marine Environment Protection Committee (MEPC) and the Legal Committee.[44]

---

[39] <https://www.merriam-webster.com/dictionary/environment> [last accessed 22.09.2021]

[40] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226, para. 29

[41] Supra 35, p. 14

[42] Declaration of the United Nations Conference on the Human Environment 1972, Principle 2

[43] World Charter for Nature 1982, I. 3

[44] CHIRCOP, Aldo, 'The Use of IMO Instruments for Marine Conservation on the High Seas' in BECKMAN, R.C. et al., *High Seas Governance: Gaps and Challenges*, (BRILL Nijhoff, 2018), p. 129

On the side of the conventions, the LOSC made a goal of protecting and preserving of the oceans and the marine resources. Indeed, in Article 117, the drafters of the LOSC wrote that States parties to the LOSC have to ensure that their nationals are taking necessary protective measures for the conservation of the living resources of the high seas.[45] These measures can take different forms and can be effected through national laws but also via bilateral agreements or multilateral ones. The driving point of these agreements shall be good faith,[46] as stated in the *Fisheries Jurisdiction* case,[47] later on reproduced in Article 300 of the LOSC.

Another international legal instrument is the Convention on Biological Diversity (CBD), and especially Article 3.[48] This Article is read in the same words as Principle 21 of the Stockholm Declaration: 'States have, in accordance with the Charter of the United Nations and the principles of international law, […] pursuant to their own environmental policies, […] the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States[49] or of areas beyond the limits of national jurisdiction' but making it legally binding for States parties to the CBD.[50]

In addition, R. Warner mentions that '[t]he relationship of high seas freedom and their exercise by States with the provisions of Part XII of the LOSC on protection and preservation of the marine environment is not specifically addressed in Part VII.'[51] After comparing the two Parts of the LOSC, there is indeed no mention of Part XII in Part VII, nor vice versa. This lack of relationship renders the regime of the high seas and the regime of the protection of the environment two parallel regimes within the same convention but without an interdependency between them two.

R. Warner further argues that the BBNJ negotiations will hopefully solve the issue of the absence of 'international rule-making structure for the high seas that can hold individual States accountable for their failure to act in the face of actions by their fishing vessels that have adverse impacts on the marine environment beyond national jurisdiction.'[52] This issue will be dealt later on in part 3 of this thesis but can still be highlighted here as a general environmental issue,

---

[45] Supra 8, Article 117

[46] Explicitly mentioned by the ICJ Statute in Article 31(1)

[47] *Fisheries Jurisdiction (United Kingdom v. Iceland), Merits, Judgment, I.C.J. Reports 1974*, p. 3, para. 78

[48] Convention on Biological Diversity 1993

[49] This citation is directly referencing to the *Trail Smelter Arbitration (United States v. Canada), Report of International Arbitral Awards, 1938 and 1941, Volume III* pp. 1905-1982

[50] Contrary to the Stockholm and Rio Declarations that are not legally binding because of being 'only' declarations without any effect on the international legal order.

[51] WARNER, Robin, University of Wollongong, *Protecting the Ocean Beyond National Jurisdiction: Strengthening the International Law Framework* (BRILL, 2009), pp. 34-35

[52] WARNER, Robin. 'Conservation and Management of Marine Living Resources beyond National Jurisdiction: Filling the Gaps,' pp. 183-184 in Supra 44

where States are generally held responsible of environmental damage without any strong punishment, or any means of forbidding them to damage the environment *a priori*.

2.1.2 State practice regarding the environment on the high seas

States have the obligation to both cooperate[53] and actively conserve the living resources of the high seas.[54] The cooperation part has not raised major issues; instead, it has led to the creation of RFMOs, as previously set out. As explained in the Proelß Commentary, States understood early that overfishing was an issue (while perhaps not an environmental issue, but certainly a socio-economical issue among the populations relying on fishing), by already adopting the 1882 North Sea Overfishing Convention,[55] of which the objective was to avoid overfishing in order to manage the living resources within a 3-nautical miles zone, as several treaties and cases showed later on. For the conservation and management of the living resources in the high sea, only ten years were necessary for the Tribunal of Arbitration to conclude that the living resources in the high seas were subject to agreements between States in the *Bering Fur Seals Arbitration*[56] case.

Article 118 of the LOSC stipulates an obligation of cooperation via negotiations but these negotiations do not necessary end up in an agreement between the parties involved. Indeed, as R. Rayfuse explains, no default mechanism exists under the LOSC in order to reach an agreement at the end of the negotiations. This obligation to negotiate therefore seems to only be a superficial one, as the LOSC does not provide any mechanism for a State to 'unilaterally adopt measures where cooperative efforts had failed.'[57] This type of mechanism has been suggested in the 1958 High Seas Fishing Convention[58] but was not adopted by the LOSC in 1982. The issues of this mechanism have been highlighted by the *Southern Bluefin Tuna* case where the tribunal mentioned the difficulty of achieving negotiations and compromises on such a subject, as each State has a different view of what 'management' and 'conservation' look like, and what they require as criteria to be effectively implemented.[59]

---

[53] Supra 8, Article 118

[54] Ibid, Article 119

[55] International Convention for regulating the police of the North Sea fisheries outside territorial waters 1882 – expired in 1976

[56] *Award between the United States and the United Kingdom, Relating to the Rights of Jurisdiction of United States in the Bering's Sea and the Preservation of Fur Seals* (*United States v. United Kingdom)*, Decision of 15 August 1893, RIAA XXVIII, pp. 263-276

[57] Supra 16, p. 826

[58] High Seas Fishing Convention 1958, Article 55

[59] *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Award on Jurisdiction and Admissibility, Decision of 4 August 2000*, RIAA XXIII, 1, 42

Some countries have tried to go to the tribunal in order to get the negotiations set as a mandatory goal, but it failed in 2000. Indeed, in the *Southern Bluefin Tuna Case*,[60] ITLOS declined jurisdiction and did not give any advice on how to settle the mandatory negotiations contained in Article 118 of the LOSC into an effective agreement between the parties.

On its part, Article 119 promotes the conservation of the living resources in the high seas by taking a variety of measures designed to both maintain or restore threatened species, and to take them into consideration. As the Proelß Commentary states, 'Article 119 does not require scientific certainty before measures can be taken'[61] which can lead to the opposite effect wanted by this Article. As S. Kaye explains in *International Fisheries Management*, '[…] the provisions with respect to the management of the high seas are necessarily flawed. As a common property resource, in the absence of coordination of effort and cooperation in data collection and management, over exploitation is a logical conclusion for any high seas fisheries that is economically viable.'[62] S. Kaye adds that, as the goal of each country is to make maximum profit of the resources present in the high seas, the use of marine scientific research (MSR) to protect the living resources in the high seas may lead to a conflicting position for the States where the scientific research is blended with economic purposes. Indeed, in the *Whaling in the Antarctic* case,[63] Japan, by conducting alleged MSR on whales, violated Article 119 and the duty of conserving the living resources of the high seas but also Article 220 on the protection of marine mammals. As Australia argued in its pleadings, 'JARPA was conceived in order to continue commercial whaling under the "guise" of scientific research […]. In 1984, a study group commissioned by the Government of Japan recommended that Japan pursue scientific whaling "in order to continue whaling in the Southern Ocean.'[64] This case highlights how countries can disguise, under the provision of Article 119 of the LOSC, an overexploitation of the living resources in the high seas.

Some countries, on the contrary have taken extra measures to effectively conserve the living resources in the high seas. It is for example the case with Canada, which holds in its *Coastal Fisheries Protection Act*,[65] that the Canadian authorities are allowed to intervene beyond the 200nm off the Canadian coast. As set out in Section 5.2 of this Act, some vessels are already listed as being prohibited to fish in the NAFO[66] Regulatory Area. As D. VanderZwaag explains,

---

[60] Ibid, para. 72(1)

[61] Supra 16, p. 840

[62] KAYE, Stuart, *International Fisheries Management* (Kluwer Law International, 2000), p. 150

[63] *Whaling in the Antarctic (Australia v. Japan: New Zealand intervening), Judgment, I.C.J. Reports 2014,* p. 226

[64] Ibid, para. 101

[65] *Coastal Fisheries Protection Act*, R.S.C., 1985, c. C-33 <https://laws-lois.justice.gc.ca/eng/acts/C-33/FullText.html> [last accessed 22.09.2021]

[66] Northwest Atlantic Fisheries Organization

there is a list of fish species as well as prescribed classes of vessels or subject to enforcement action and the conservation measures needed to implement this prohibition.[67]

Given the abovementioned elements, State practice regarding environmental measures and conservation in the high seas greatly differs from State to State, following their main political and economic motivations. This is why all States and not only coastal States have their own role to play in the conservation and protection of the marine resources in the high seas. This role can be played through flag States responsibility and the efficacious application of the due diligence principle.

2.2 The concept of a flag State and issues it raises regarding efficacious responsibility in relation to environmental damage in the high seas

According to the OECD, a flag State is the 'country of registry of a sea going vessel.'[68] This definition can be completed by D. Rothwell and T. Stephens: '[f]lag States are those States which have set conditions for the grant of nationality to ships, giving them an entitlement under domestic law to fly the flag of that State.'[69] The LOSC provision attached to the obligations of the flag State is Article 94, which applies to the vessel in general, no matter where the ship is sailing (in the territorial waters of the flag State, in the high seas or in the waters of any other coastal State).

The LOSC, in Article 91(1) states that '[e]very State shall fix the conditions for the grant of its nationality to ships,' meaning that States have a large discretion to fix the conditions. The conditions vary greatly from State to State. This difference is explained by the tax costs, and in general, shipowners are keen to see the labor costs being reduced, so they tend to flag the vessel, and hire a crew, in a country where the labor force is cheaper. Moreover, as stated in the 1958 Convention,[70] 'the flag State traditionally has been responsible for ensuring compliance with national and international laws and regulations concerning marine pollution […]'[71] raising an issue when the State does not have any national environment laws and is not able nor willing to strictly apply international environmental laws and treaties.

---

[67] VANDERZWAAG, David, *Canada and Marine Environmental Protection – Charting a Legal Course Towards Sustainable Development* (Kluwer Law International, 1995), p. 117

[68] <https://stats.oecd.org/glossary/detail.asp?ID=4236> [last accessed 23.09.2021]

[69] Supra 32, p. 17

[70] Geneva Convention on the High Seas 1958, superseded by the LOS Convention in 1982

[71] ANDERSON, H. Edwin, 'The nationality of ships and flags of convenience: Economics, politics, and alternatives' [1996], Tulane Maritime Law Journal, p. 140

However, these concepts of flag State and flag State jurisdiction raise some issues, in particular regarding flags of convenience (FOC) implemented by some States. In the marine environmental protection, it raises problems regarding the mechanisms, 'the will and capability to properly regulate fishing activities by vessels flying [the State's] flag.'[72]

FOC ships are defined by the International Transport Workers' Federation (ITF) as 'ones that fly the flag of a country other than the country of ownership.'[73] These flags of convenience raise not only social and work issues but also environmental ones. This thesis will only deal with the environmental issue because of the importance of each issue would call for a proper thesis of their own.

Even though Article 91 mentions the need of a 'genuine link', there is no explicit criteria to consider a ship genuinely linked to its flag State. ITLOS and other international institutions, such as the IMO and the FAO, have not set the criteria, nor the definition of a genuine link for a vessel to be recognized as having the nationality of the flag State.[74] Indeed, as D. Guilfoyle explains in the Proelß Commentary, this question 'is less one of a genuine link and more one of effective implementation of flag State duties.'[75] However, as the author continues, the genuine link between a State and a vessel can be easily set if there is no explicit criteria; however, the implementation of duties of a flag State duties can be harder, especially in countries where the institutions are 'unable to exercise effective control over [the vessel].'[76] The ITLOS chose, in 1999 in the *MV Saiga*[77] case, to not set criteria according to which a vessel is considered genuinely linked to the flag State, and only reiterated the provisions of Article 94 by stating that '[t]here is nothing in Article 94 to permit a State which discovers evidence indicating the absence of proper jurisdiction and control by a flag state over a ship to refuse to recognize the right of the ship to fly the flag of the flag State.'[78]

C. Goodman mentions that the FOC issue is an endless one,[79] as the shipowners have the choice, and the possibility, to reflag the vessels in a less onerous or restrictive country. This means that as long as countries have open registries, FOC will continue to exist, leading to the continual issue in IUU fishing, as well as all the problems linked, as States awarding flags of convenience do not respect their LOSC obligations.

---

[72] TANAKA, Yoshifumi, *The International Law of the Sea* (3rd ed., Cambridge University Press, 2019), p. 312

[73] <https://www.itfglobal.org/en/sector/seafarers/flags-of-convenience> [last accessed 23.09.2021]

[74] GUIFOYLE, Douglas, 'Article 91', in supra 16, p. 699

[75] Ibid

[76] Ibid

[77] *M/V "SAIGA" (No. 2) (Saint Vincent and the Grenadines v. Guinea), Judgement, ITLOS Reports* 1999, p. 10

[78] Ibid, para. 82

[79] GOODMAN, Camille, 'The Regime for Flag State Responsibility in International Fisheries Law – Effective Fact, Creative Fiction, or Further Work Required?' [2009] Australia & New Zealand Mar. L.J.

2.3 Intermediary conclusion

The regimes of the high seas and the environment are contained within the same convention but in two different parts which do not refer to each other, leading to an impression of two parallel regimes, while the objective of the LOSC is a better regulation of all issues arising from the use of the seas, including the high seas and the environment. In addition to the two parallel regimes, flag States' responsibility regarding environmental damage in the high seas is challenged by the existence of FOCs.

The high seas, the environment and the jurisdiction of the flag State are related to each other in the LOSC, but following their different locations in the Convention, it is difficult to consider them strongly 'interrelated' in international environmental law.

3 How is flag States' responsibility analyzed with regard to IUU fishing?

The responsibility and the due diligence obligation of flag States will be analyzed in the context of IUU fishing in this section. To start, the question of responsibility and liability in public international law will be discussed, as well as the due diligence principle. Thereafter, it will be assessed whether IUU fishing can be considered as an environmental damage. Finally, the discussion of IUU fishing in the Arctic will be treated.

3.1 Responsibility, liability, and due diligence under public international law

The Seabed Dispute Chamber of the ITLOS held that 'the term "responsibility" […] refers to the primary obligations whereas the term "liability" refers to the secondary obligation, namely, the consequences of a breach of the primary obligation.'[80]

The responsibility and liability question is dealt with in Article 235 of the LOSC, which holds that 'States are *responsible* for the fulfillment of their international obligations concerning the protection and preservation of the marine environment. They shall be *liable* in accordance with international law' (emphases added). This clearly states the liability of States for damage to the environment; however, the question is how to implement this liability. A part of the answer is found in Article 235(2), which refers to national recourse in the legal system of each State in case of 'damage caused by pollution of the marine environment by natural or juridical persons under their jurisdiction.' At first, this Article seems effective to safeguard the marine environment from pollution; however, when read in-depth, the question of corrupted States or unstable

[80] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011*, p. 10, paras. 65-66

legal systems arises. Indeed, how can international treaties be effectively implemented when, sometimes, even national laws and regulations are not respected?
In addition, the question of IUU fishing allows some countries to keep their economy running due to the (illegal) money reinjected onto the country's market.
Another pertinent phrase in Article 232(2) is 'shall be liable in accordance with international law.'[81]

As mentioned by T. Stephens in the Proelß Commentary, Article 235 does not exclude cases where no damage has occurred. Indeed, this Article should follow 'the general rule with respect to responsibility for failing to meet a State's environmental protection obligations [here the primary obligations] is the same as the ordinary rule of State responsibility, meaning a State will incur responsibility even where there is no material damage.' [82] As the primary obligation of a State regarding international environmental law, the duty of due diligence can be cited, among others. This principle of international environmental law refers to certain elements listed in the *Pulp Mills*[83] case, and summarized by A. Boyle[84] as being the 'adoption of appropriate rules and measures';[85] 'a certain level of vigilance in their enforcement';[86] 'the exercise of administrative control applicable to public and private operators';[87] 'careful consideration of the technology to be used';[88] 'EIA and notification.'[89] Through the analysis of the due diligence obligation, A. Boyle also mentioned the ITLOS *Advisory Opinion*[90] where the judges considered that due diligence is a 'variable concept',[91] 'which may change over time and differ in respect of different risks';[92] the measures taken by the States must be 'reasonably appropriate'[93] and 'the precautionary approach is also an integral part of the general obligation of due diligence of sponsoring States, which is applicable even outside this scope of the Regulation [meaning the regulations concerned by the ITLOS *Advisory Opinion*].'[94]

---

[81] Supra 8, Article 235(1)
[82] STEPHENS, Tim, 'Article 235' in supra 16, p. 1588
[83] *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgement, I.C.J. Reports 2010*, p. 14
[84] BOYLE, Alan, 'International Law and Liability for Catastrophic Environmental Damage' [2011] Proceedings of the Annual Meeting – American Society of International Law, pp. 423-427
[85] Ibid, p. 424
[86] Ibid
[87] Ibid
[88] Ibid, p. 425
[89] Ibid
[90] Supra 80
[91] Supra 84, p. 425
[92] Ibid
[93] Ibid
[94] Ibid

In the Advisory Opinion,[95] ITLOS claimed that 'it is not considered reasonable to make a State liable for each and every violation committed by persons under its jurisdiction, it is equally not considered satisfactory to rely on mere application of the principle that the conduct of private persons or entities is not attributable to the State under international law.'[96]

The difference between liability and responsibility has been explained by scholars, such as S. Sucharitkul. It should be noted that, despite their difference, those two notions are not mutually exclusive; it is possible to trigger one then the other. The author explains that '"State responsibility" refers to a State's responsibility under international law in general, whereas "international liability" denotes a State's "civil responsibility," or obligation to pay compensation or make reparations for injuries that non-nationals suffer outside its national boundaries as a result of activities within its territory or under its control.'[97] According to the author, this means that '[a] State's international liability is engaged not only under international law, but also within the national dimension of municipal legal systems in circumstances involving transnational relations.'[98] It seems clear as to where the problem lies with the State's international liability: national enforcement. Indeed, if the judicial institutions are too weak or too corrupt to effectively enforce the sanctions of the international courts and tribunals, the State will only be condemned to pay damages with regard to the environmental damage, but no implementation of effective environmental law will be made in the national judicial system.

As R. Warner states, '[t]here is no international rule-making structure for the high seas that can hold individual states accountable for their failure to act in the face of actions by their fishing vessels that have adverse impacts on the marine environment beyond national jurisdiction.'[99] However, the document created by the UN *10 Principles for High Seas Governance* states that the precautionary principle 'will require placing the burden of proof on those who argue that an activity will not cause significant harm to show that this is so, and make the responsible parties liable for environmental harm'[100]

---

[95] Supra 80, para. 66

[96] Ibid, para. 112

[97] SUCHARITKUL, Somping, 'State Responsibility And International Liability Under International Law' [1996] Loyola of Los Angeles International And Comparative Law Journal , p. 822

[98] Ibid

[99] Supra 52, p. 184

[100] <https://www.iucn.org/downloads/10_principles_for_high_seas_governance___final.pdf> [last accessed 26.09.2021] point 7, p. 3

ITLOS gave its opinion on the responsibility of flag States regarding IUU[101] by stating that '[t]he flag State is under the "due diligence obligation"[102] to take all necessary measures to ensure compliance and to prevent IUU fishing by vessels flying its flag.'[103] This advisory opinion confirms the ICJ's position on due diligence to safeguard the environment. Indeed, the Court defines the due diligence obligation as the one to adopt 'appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators […].'[104] This judgement can be linked to Article 235, which holds the 'fulfilment [for States] of their international obligations concerning the protection and preservation of the marine environment.'[105] However, an issue that could be raised with this obligation is that it is an obligation of conduct, not of result, implying that States must be willing to comply with this obligation. It has been noted by J. Kulesza that it is 'particularly difficult to identify specific efforts required of States when preventing harmful activities originated within State territory, jurisdiction or under State control.'[106]

The flag State is supposed to act as a 'good government'[107] and this criterion rests on an objective assessment of the international community. However, the international courts and tribunals seems quite reluctant to assess it, such as the ITLOS did for the 'genuine link' required by Article 91. Moreover, J. Kulesza continues by indicating that 'the principle of due diligence is perceived here as an obligation of conduct, rather than one of result […]'[108] but this raises the issue of control, both by the international community and the State, of whether the flag State actually acted as a good government in verifying that vessels flying its flag are not actively IUU fishing. It also raises the problem of effective control by the flag State: how can a flag State, without judicially-sound institutions, actively verify whether its vessels on the high seas are complying with the rules of the RFMO to which the State is party, and not overfishing?

J. Kulesza also states that the 'customary law obligation of due diligence in performing international obligations is viewed as criteria for attributing State responsibility in case of violation of international law resulting from an omission, rather than an action, of a State.'[109] However, this customary obligation is met with practical concerns: who will ensure that a vessel on the

[101] *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, 2 April 2015, ITLOS Reports 2015*, p. 4

[102] Supra 36

[103] Ibid, para. 129

[104] Supra 83, para. 197

[105] Supra 8, Article 235(1)

[106] KULESZA Joanna, *Due diligence in international law* [Brill, 2016], p. 1

[107] Ibid, p. 2

[108] Ibid

[109] Ibid

high seas is complying with the rules, and who will ensure that the flag State is actively taking measures to ensure that vessels are complying with the rules?

The duty of due diligence is, in theory, a good means to ensure that international environmental law and international law in general, is respected and complied with; however, the implementation is more complicated as certain States may not have the means to actively comply with this duty.

3.2 Can IUU fishing be considered as an environmental damage?

IUU fishing raises issues worldwide, as set out in the introduction of this work. Indeed, it raises economic, environmental, sociological and legal problems, which can only be solved with the full cooperation of the international community as a whole, and not only several actors fighting this issue while bigger industries are illegally (but with impunity) advocating for and supporting that system.

Environmental damage has been defined an 'impairment of the environment.'[110] The LOSC, on its part, focuses on 'pollution of the marine environment', leading to issues with what is considered as 'pollution' by the law of the sea. The following section will deal with the issue of IUU fishing and the LOSC, with a particular focus on IUU fishing, its inclusion in the term 'pollution' and whether States have given a satisfactory response to this growing problem.

3.2.1 The issue of IUU fishing

One of the main issues with IUU fishing is the absence of a definition of this concept in the LOSC. Indeed, the Convention only talks about fishing and fishing rights but does encompasses situations when those fishing activities are illegal, unreported and unregulated. The issue with this absence of definition leads to difficulties of triggering the responsibility and the liability of flag States. Indeed, the question is how the responsibility for a violation of a duty is triggered when not written in a convention? The main issue with the absence of a specific obligation not to engage in IUU fishing is that States cannot be held responsible and liable for it. While States have non-written obligations,[111] IUU fishing is a broad concept and is not understood similarly by all States. This resembles marine scientific research (MSR),[112] which is considered as true MSR by some States and as overfishing by others.

Article 1 of the LOSC states that '"pollution of the marine environment" means the introduction by man, directly or indirectly, of substances or energy into the marine environment, […], which

[110] MAES, Franck, *Marine Resource Damage Assessment: Liability and Compensation for Environmental Damage*, Spinger, 2005, p. 23

[111] Such as to act in good faith explained in part 2

[112] Part 4.1.1 extensively deals with MSR

results or is likely to result in such deleterious effects as harm to living resources and marine life, […] hindrance to marine activities, including fishing […].' According to this definition, there must be 'something' (substance or energy) incorporated in the sea to be considered as pollution. However, it seems that the authors of the LOSC did not consider about the removal of 'something' from the sea, such as the removal of fish when fishing activities are taking place. The ICJ, in the *Southern Bluefin Tuna* case, stated that 'the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment.'[113] This case makes a direct reference to Articles 192 (general obligation of protection of the marine environment by the States) and 194 (measures to prevent, reduce and control pollution of the marine environment).

On Article 192, the Proelß Commentary states that it is still unsure as to whether this Article was intended to be legally binding but is rather expressed through the general principle of due diligence, a general principle of international public law, previously dealt with in this thesis. Indeed, following the Working Group Paper No. 3, the 'asterisk footnote shaped the view that Art. 192 has no legal effect on its own but needs further specification.'[114] However, the author mentions a report of the UN Secretary General during a General Assembly which states that 'Art. 192 was generally regarded as a statement of customary international law with regard to the environmental responsibility of States towards the oceans.'[115] On the other hand, as mentioned by A. Boyle, '[…] customary principles are expressed at a high level of generality and as regards marine pollution are supported by little evidence of State practice.'[116]

In addition, the scope of Article 194 has been explained by the Permanent Court of Arbitration in the *Chagos* case, where the judges stated that 'Article 194 is accordingly not limited to measures aimed strictly at controlling pollution and extends to measures focused primarily on conservation and the preservation of ecosystems.'[117] Following the *South China Sea Arbitration*, this question of the environment applies to 'harmful activities [that] took place […] constitute "rare or fragile ecosystem" [and] are also the habitat of "depleted, threatened or endangered species."'[118]

---

[113] Supra 59, para. 70

[114] CZYBULKA, Detlef, 'Article 192', in supra 16, p. 1284

[115] Ibid, p. 1285

[116] BOYLE, Allan 'Marine Pollution under the Law of the Sea Convention' [1985] The American Journal of International Law, p. 366 <https://doi.org/10.2307/2201706> [last accessed 28.09.2021]

[117] *Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom), Award of the Permanent Court of Arbitration, 18 March 2015, case n° 2011-03,* para. 538

[118] *The South China Sea Arbitration (The Republic of Philippines v. The People's Republic of China), Award of the Permanent Court of Arbitration, 16 July 2016, case n° 2013-19,* para. 945

A. Boyle argues that earlier arbitrations, such as the *Trail Smelter*[119] arbitration, the *Corfu Channel*[120] case and the *Lake Lanoux*[121] arbitration, are the foundations of a principle in which States are under 'an obligation to not use or permit the use of their territory to cause loss or damage to another State, and it has been assumed that this principle is applicable by extension to damage caused by marine pollution emanating from another State or from activities under another State's jurisdiction or control.'[122]

As explained by R. Braids, the creation of EEZ by the LOSC moved the IUU issue further to the high seas, where the freedom of fishing prevails.[123] The author raises the issues of RFMOs as well, where 'vessels previously flagged to a State party [to the RFMO] reregistering with a non-member State, to avoid regulation by the RFMO.'[124]

New technologies enabling humans to fish further and further on the high seas but also deep into them is also part of the IUU fishing issue. Indeed, as mentioned by G. Petrossian *et al.*, '[f]ishing vessels operate within coastal waters of foreign countries, as well as far out at sea in internationally shared high seas areas where fisheries monitoring, control, and surveillance activities face greater challenges.'[125] The authors have stressed the fact that flags of convenience are one of the weaknesses of the international system of governance, and lead to easier IUU fishing, especially as it was not an aspect the drafters of the LOSC took into consideration when trying to reach an agreement. These weaknesses are exploited by 'rogue operators to gain an economic advantage'[126] who do not take into account the sustainable and shared resources part of the high seas. The article further argues that if flags of convenience exist, it is 'to gain access to fishing areas and resources' but also, as previously mentioned in this thesis 'to avoid rules, oversight and costs.'[127]

An issue mentioned by the FAO, and linked to the flags of convenience issue is the existence of 'international instruments addressing IUU fishing [that] have not been effective due to a lack

---

[119] Supra 49

[120] *Corfu Channel case, Judgement of April 9th, 1949, I.C.J. Reports* 1949, p. 4

[121] *Lake Lanoux Arbitration (France v. Spain)*, Arbitral Tribunal, November 16th 1957

[122] Supra 49

[123] BAIRD, Rachel, 'Illegal, Unreported and Unregulated Fishing: an Analysis of the Legal, Economic and Historical Factors relevant to its development and persistence' [2004] Melbourne Journal of International Law, p. 8

[124] Ibid, p. 14

[125] PETROSSIAN, Gohar, SOSNOWSKI, Monique, MILLER, Dana, ROUZBAHANI, Diba, 'Flag for sale: An empirical assessment of flag of convenience desirability to foreign vessels' [2020] Marine Policy, < https://www-sciencedirect-com.mime.uit.no/science/article/pii/S0308597X19306372> [last accessed 29.09.2021], p. 4

[126] Ibid, p. 5

[127] Ibid

of political will, priority, capacity and resources to ratify or accede to and implement them.'[128] Indeed, as mentioned by K. Bray, 'the global review demonstrates the significant economic gains available through IUU fishing.'[129] K. Bray explains that the consequence of these IUU fishing issues is the 'general inability of the international community to achieve the necessary degree of compliance by many flag States with obligations *they ought to have* to ensure fishing vessels flying their flag fish responsibly and in accordance with international law.'[130] This is also the issue raised by RFMO, where non-member States of one of the regional fisheries do not comply with the international rules, as they are not bound by those agreements, and do not feel the need to adjust their laws and practices to them, with a view of sustainable fishing. This is why some vessels are flagged with flags of convenience. Indeed, an example of a FOC State is Mongolia, which is not party to any RFMO because of its status of land-locked State. Therefore, Mongolian flagged fishing vessels do not need to comply with the RFMO rules, wherever they fish in the high seas. Of course, this leads to more benefits for Mongolia, or any other RFMO non-member States, because of their gains regarding flagging fees, employment, and benefit from the fishing industry, without having to be concerned by the lack of resources off their coasts or for their population living on fish catch.

3.2.2 The international response

At the level of the international community, some scholars have been more optimistic than others. G. Petrossian *et al.* argue that '[t]he path towards tackling IUU fishing […] is relatively uncomplicated compared to the challenge of addressing […] other marine conservation issues'[131] (such as climate change or ocean acidification). However, as mentioned further in the paper, tackling this issue would require a cooperation from a host of different actors, including port States, the World Trade Organization (WTO), and international and national market actors. They also mention that the initiatives (that generally are translated by a treaty or an agreement between countries), need to consider all loopholes and weaknesses that can emerge through the interpretation of those instruments. This raises the issue of the participation, signature and ratification of States that are less likely to comply with these measures to combat IUU fishing. The authors also set out some 'promising economic strategies' that have emerged with the objective of increasing costs and financial risks of actors being involved in IUU fishing. It is for example the case with the seafood supply chain businesses but also insurance companies, which have for instance, implemented restrictions for the access of IUU fishing vessels to insurance

[128] Supra 19, para. 1, p. 1

[129] BRAY, Kevin, 'Illegal, Unreported, and Unregulated Fishing' in NORDQUIST, Myron and NORTON MOORE, John, *Current Fisheries Issues and the Food and Agriculture Organization of the United Nations* (Nijhoff, 2000), p. 117

[130] Ibid, p. 119

[131] Supra 125, p. 7

services for example.[132] As the paper suggests, insurers should modify their policy in order to fight IUU fishing because it does not appear as though many insurance companies are involved in this global issue. The paper further refers 'the ability to purchase insurance contributes to a more favorable economic situation for an IUU vessel operator. […] Theoretically, therefore, having insurance is financially beneficial and thereby encourages IUU fishing when operators have access to coverage.'[133] This would also mean that insurance companies have a better overview of the activities the insured fishing vessels are engaged in.

The article by G. Petrossian *et al.* also mentions that one of the solutions to fight IUU fishing would be for countries with open registries to close them to fishing vessels.[134] Indeed, the link between FOC and IUU fishing is well known by the international community. However, each country having the slightest interest in having vessels registered under its flag will try to circumvent the rules in its favor. Closing open registries to fishing vessels could be the solution but it still has to be accepted by countries exercising those practices, and cannot be made mandatory by the international community or by the international tribunals and courts as this is a question of national sovereignty. It is doubtful that FOC countries will accept being ordered by an international body to close such registries.

The RFMOs are one of the international community responses, under the umbrella of Article 197 LOSC but an issue remains with RFMOs non-member States. As pointed out by M. Rosello, '[w]hilst these agreements provide a detailed and comprehensive framework for cooperation, their convention nature means they are not binding on States who do not consent to be bound by them.'[135] However, some States have gone further than the international cooperation required by Article 197 LOSC and directly included in their national legislation some rules to fight IUU fishing. Norway is a good example with its *Havressurslova*,[136] (Marine Fisheries Act) which holds that it is possible to forbid foreign vessels from fishing in Norwegian waters if it is found that certain criteria found within the *Havressurslova* are met.[137] This law also

---

[132] Ibid

[133] MILLER, Dana, et al. 'Cutting a lifeline to maritime crime : marine insurance and IUU fishing' [2016] Frontiers in Ecology and the Environment, p. 3

[134] Supra 125, p. 7

[135] ROSELLO, Mercedes 'Cooperation and unregulated fishing: interactions between customary international law, and the European Union IUU fishing regulation' [2017] Marine Policy, p. 1

[136] *Lov om forvaltning av viltlevande marine ressursar (havressurslova)* (Act relating to the management of wild living marine resources), LOV-2008-06-06-37 < https://lovdata.no/dokument/LTI/lov/2008-06-06-37> [last accessed 29.09.2021]

[137] Ibid, Kapittel 8, §51, original text: 'Kongen kan fastsetje forskrift som forbyr fartøy som ikkje er norsk, jf. fiskeriforbudsloven § 2, tilgang til norske indre farvatn, dersom vilkåra for å forby ilandføring av fangsten etter § 50 eller etter paragrafen her første ledd bokstav a, b eller f, er oppfylte.' ('The King may adopt regulations prohibiting vessels that are not Norwegian, cf section 2 of the Act relating to a prohibition against fishing

makes a direct reference to IUU fishing and international cooperation by stating that, by taking measures to fight IUU fishing, the Ministry can forbid some activities that are contrary to the national management measures and international and regional organizations management measures.[138]

The EU has also taken initiative to fight IUU fishing on the high seas, via the IUU Regulation.[139] This Regulation has been applied in 2013 against Belize, Cambodia and Guinea in a decision from the European Commission.[140] The Commission sets out the lack of application of Article 94 of the LOSC by flag States, especially regarding the jurisdiction obligations. The Commission explained that Belize and Guinea 'failed to ensure that fishing vessels entitled to fly its flag do not engage in or support IUU fishing, which is not in line with the recommendation of point 34 of the IPOA-IUU stipulating that states should ensure that fishing vessels entitled to fly their flag do not engage in or support IUU fishing.'[141] For Cambodia, the issue raised was based on the 'basic responsibilities of flag States […]' and where 'flag States shall assume responsibility under its internal law over each ship flying its flag […]', particularly since Cambodia did not show any improvement 'to its legal framework since the adoption of the Decision of 15 November 2012.'[142] This decision of the Commission resulted in EU Member States being obliged 'to refuse, where appropriate, the importation into the Union of fishery products without having to request any additional evidence or send a request for assistance to the flag State where they become aware that the catch certificate has been validated by the authorities of a flag State identified as a non-cooperating State in accordance with Article 31 [of the IUU fishing Regulation].'[143] This measure taken by the Commission allows Member States to be more aware of

---

etc by foreign nationals in Norway's territorial waters, from entering Norwegian internal waters if the requirements for prohibiting landing of catches under section 50 or under the first paragraph, a), b) or f), of this section are satisfied.' – translation available at <https://app.uio.no/ub/ujur/oversatte-lover/data/lov-20080606-037-eng.pdf>)

[138] Ibid, § 52, original text: 'Departementet kan for å motvirke ulovleg, urapportert og uregulert fiske forby verksemd som kan vere med på å undergrave nasjonale forvaltningstiltak og tiltak frå internasjonale og regionale fiskeriforvaltningsorganisasjonar.' ('The Ministry may, in order to combat illegal, unreported and unregulated fishing, prohibit activities that may undermine national management measures or measures taken by international or regional fisheries management organisations.' – translation available at <https://app.uio.no/ub/ujur/oversatte-lover/data/lov-20080606-037-eng.pdf>)

[139] Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999, [2008] OJ L286/1

[140] Commission Implementing Decision of 26 November 2013 identifying the third countries that the Commission considers as non-cooperating third countries pursuant to Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, [2013] OJ C346/2

[141] Ibid, paras. 37, 150

[142] Ibid, para. 94

[143] Ibid, para. 202

IUU fish that come into the EU territory, and, as the EU is the biggest seafood importer,[144] it sends a message to other exporter countries (such as China, Vietnam, Norway, India),[145] which will have to comply with the IUU fishing Regulations rules as well as with the provisions of the LOSC as flag States for fishing vessels.

Several other legally binding instruments have been implemented by the United Nations and the international community as whole. It is for example the case with the Compliance Agreement[146] or with the Fish Stocks Agreement.[147] Those agreements share similar provisions, such as the duty to cooperate, the liability and responsibility of flag States, the duty to conserve and manage resources of the high seas, etc. However, one negative point that must be highlighted is their lack of international attention and the possibility for non-parties States to not comply with the obligations contained in the agreements without repercussion. Indeed, regarding the first point, only 45 States are parties to the Compliance Agreement, and the main FOC States (such as Panama, Mongolia or Liberia) are not signatories; for the Fish Stocks Agreement, 91 countries are members, and among those countries, some main FOC States are signatories. Regarding the second point about the third-party States to the agreements, as mentioned by R. Rayfus 'the difficult question […] is whether the duty to *cooperate or refrain* can now be regarded as a rule of customary international law binding on *all* States.'[148] In any case, there is a duty on the flag State to exercise jurisdiction and control over their vessels, according to Article 94 of the LOSC. However, the measures contained in the agreements seem to go further than a 'simple' duty of exercising jurisdiction. Indeed, both agreements explicitly require having control and overview on their vessels through different means, such as fishing authorizations, or denial of their nationality for vessels that are known for IUU fishing.[149]

To sum up, States are responsible in general, and *a priori* for their nationals when it comes to IUU fishing, and they should ensure that vessels flying their flag are not engaged in any form

---

[144] < https://research.rabobank.com/far/en/sectors/animal-protein/world-seafood-trade-map.html> [last accessed 30.09.2021]

[145] Ibid

[146] Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993

[147] Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 1995

[148] RAYFUSE, Rosemary, 'The Anthropocene, Autopoiesis and the Disingenuousness of the Genuine Link: Addressing Enforcement Gaps in the Legal Regime for Areas Beyond National Jurisdiction' in MOLENAAR, Erik and OUDE ELFERINK, Alex *The International Legal Regime of Areas Beyond National Jurisdiction: Current and Future Developments* (Nijhoff, 2010), p. 175

[149] Ibid, p. 176

of IUU fishing. However, they can be held liable when they are blacklisted by international institutions, such as the European Commission.

3.3 The question of IUU fishing in the Arctic

While the issue of IUU fishing in the EEZ and on the high seas is no longer a novel one, the practice of IUU fishing in the Arctic is quite recent. Indeed, as the ice is melting around the North Pole due to climate change, faster than anywhere else,[150] new routes are opening up, leading to more and more vessels entering the Arctic waters to fish.[151] To this climate change issue, the depletion of the southern oceans, such as the Pacific Ocean or the Atlantic Ocean, due to overfishing, also plays a big role in the impending overexploitation of the Arctic Ocean's waters.

The Marine Protected Areas (MPAs) are present all over the world, including in the Arctic Ocean. As mentioned by A. Oude Elferink, E. Molenaar and D. Rothwell, 'most of high seas areas are covered by RFMOs, although some gaps remain in that respect, including in a part of the Arctic Ocean.'[152] This affirmation has been confirmed by D. A. Blaton, who stressed the importance of international agreements on fisheries and fishing, such as the Fish Stock Agreement abovementioned or other regional instruments, such as the RFMOs. He states that '[s]everal of these [instruments] apply, at least in principle, in portions of the Arctic Ocean.'[153]

Two remarks can be made regarding this statement. The first one concerns the phrase 'in principle', on the basis of which it appears that the author of the citation shares the view of other scholars that high seas fisheries agreements are not totally efficient as other third States non-parties to the agreement can come and illegally fish in these areas. This raises the question of knowing whether flag States parties to those agreements are efficiently exercising jurisdiction over vessels flying their flag. Some States, such as Norway, can easily be believed to have effective jurisdiction over their fishing vessels, however, other States, such as the U.S.A. or Russia, can raise doubts. Indeed, the U.S.A. are not party to the LOSC, and, lacking a capable international institution, escape without sanction in case of breach of the Convention. The high

---

[150] NANDAN, Satya, 'Panel I Introductory Remarks: Overview of Changes in the Arctic Environment and the Law of the Sea' in NORDQUIST, Myron, NORTON MOORE, John, HEIDAR, Thomas, *Changes in the Arctic Environment and the Law of the Sea* (Nijhoff, 2010), p. 15

[151] <http://www.iuuwatch.eu/2017/12/eu-arctic-partners-agree-prevent-unregulated-fishing-high-seas/> [last accessed 01.10.2021]

[152] OUDE ELFERINK, Alex, MOLENAAR, Erik and ROTHWELL, Donald, 'The Regional Implementation of the Law of the Sea and the Polar Regions' in OUDE ELFERINK, Alex, MOLENAAR, Erik and ROTHWELL, Donald, *The Law of the Sea and the Polar Regions – Interactions between Global and Regional Regimes* (Nijhoff, 2013), p. 7

[153] BALTON, David A. 'Considering Future Arctic Fisheries', p. 403 in supra 150

level of corruption present in Russia[154] may be an obstacle to the effective implementation of control over Russian flagged fishing vessels.

The second phrase, 'in portions of the Arctic Ocean' directly references geographical holes in the physical implementation of RFMOs. Among those gaps, the so-called Loophole, Donut Hole and Banana Hole are three unregulated high seas sectors respectively located in the Barents Sea, in the Arctic Ocean, and in the Norwegian Sea.

To overcome those issues raised by the lack of legislation in those regions, several bilateral or multilateral agreements have been signed between the '5 Arctic Coastal States'[155] and the People's Republic of China, Japan, the Republic of Korea and the EU. To ensure better protection, the latter agreement is to be effective for the next 16 years after its entry into force (2021 for most of the countries), with a renewal every five years after this 16-years period. However, this agreement also has its downsides, with Article 13 stating that a Party to the agreement can object to the renewal of this agreement, without any justification. It means there is a probability that in 16 years this agreement will not be renewed because of a change in one of the signatories' government or politics.

Article 8(1) of the mentioned agreement states that States Parties to the agreement have the obligation ('shall') to promote this agreement as being the overarching structure in taking measures to protect the Arctic environment. The Article 8(2) makes the link between the protection of the Arctic environment with flag States jurisdiction by taking 'measures consistent with international law to deter the activities of vessels entitled to fly the flags of non-parties that undermine the effective implementation of this Agreement.'[156] This Article could be the legal basis for one of the suggestions to ensure a more efficient treaty to fight IUU fishing in the high seas (and it will be dealt with more extensively in 4.2.).

An issue could arise from the BBNJ agreement that is currently being negotiated, where Article 2 of the Draft text states that the main objective of the agreement would be the 'sustainable use of marine biological diversity'[157] through MSR established by Article 6(2). However, MSR would raise the same issue in the Arctic Ocean as the one raised in the Antarctic Ocean and dealt with in the *Whaling in the Antarctic* case.[158] This agreement would also, in case of discovery of new species due to research, lead to more countries being interested in fishing in those regions (in particular in the different holes set out above, where no legislation is highly effective). If these countries are third parties to the bilateral or multilateral agreements signed

[154] <https://www.transparency.org/en/cpi/2020/index/rus> [last visited 05.10.2021]
[155] Supra 11
[156] Supra 10, Article 8
[157] Supra 7, Article 2
[158] Supra 63

between the Arctic coastal States, they will not be subject to any of the relevant treaty obligations.

The issue with the Arctic Ocean is the non-compliance of non-Arctic States to different agreements signed between the Arctic States. Vessels flying flags of convenience are even more problematic when it comes to fishing in the Arctic, as their main targets are important fish stocks and their ports of landing are generally not in the signatory States of the mentioned agreements. This directly refers back to the discussion on third parties to the RFMOs (in 3.1.1.).

3.4 Intermediary conclusion

The preceding discussion demonstrates that flag States responsibility seems to be well implemented in the international hard law and customary law when it comes to IUU fishing. However, the liability of those States regarding IUU fishing still has a long way to go before being fully effective and implemented by the international community. One of the downsides of flag States is that some States, such as Mongolia, are known for being flag States of convenience, which shipowner actively search for and register under, in order to avoid taxes and labor laws, but also in order to avoid fisheries agreements and avoid national environmental laws where international environmental treaties have not yet been translated into the national legislation.

Measures that could counter environmental damage could be effected *inter alia* by more extensive inspections on vessels flying certain flags, such as those present on the black lists and those known for being FOC, and better enforcement at sea. This could be achieved, for example by negotiating agreements for regional fisheries with a larger number of participating countries, in order to try to get all countries party to at least one RFMO to tackle IUU fishing on the high seas. However, this also raises the question of State's sovereignty, and the impossibility of obliging States to ratify a treaty or be part of an international organization.

4 Is a new treaty, such as the BBNJ, the solution to fight IUU fishing in the high seas?

4.1 The current BBNJ negotiation and the path it is heading towards

4.1.1 The question of marine research in light of IUU fishing

A compelling point regarding the BBNJ text is the use of the expression 'sustainable use of marine biological diversity of areas beyond national jurisdiction.[159] Indeed, the term 'sustainable use' seems quite counter intuitive regarding the objective of this draft. The main objective

[159] Supra 7, Article 2 draft text, p. 7

of this text is 'to ensure the [long-term] conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction through effective implementation of the relevant provisions of the Convention and further international cooperation and coordination.'[160] The 'Convention' refers to the LOSC[161] where the protection and preservation of the marine environment is an important topic. The past ITLOS case *Whaling in the Antarctic* has shown that some countries used the MSR as an excuse to overfish some species. It seems that the risk with this BBNJ treaty would be that, without any scientific evidence, States would authorize IUU fishing under the cover of MSR, and particularly under Article 2 of the Agreement.

D. Kennet Leary argues that '[MSR] can lead to a range of second order biological effect including: a decrease in population numbers, local extinction of species; regional or global extinction of species.'[162] These examples are mentioned in the case of normal scientific research, without any commercial objective. This leads questions about the consequences on the ecosystem if there was a commercial objective. This issue has been raised by I. Kirchner-Feis and A. Kirchner where they explained that '[m]arine organisms and the genetic information that they contain are of growing scientific and commercial interest. Their potential for biotechnological, pharmaceutical, and cosmetic applications are of particular value.'[163] The authors mention that those genetic resources are mainly found in the high seas, meaning in areas beyond national jurisdiction. In itself, the future agreement regarding the conservation and sustainable use of the marine genetic resources is a good idea where 'many States have expressed their concerns regarding the legal status, the exploration for, and exploitation of these organisms, as well as the patentability of invention derived from them.'[164]

In case States manage to overfish under the banner of MSR, the tribunals and courts will not be able to hold them liable or even responsible, given the defense arguments of these countries, for IUU fishing, leaving the practice unpunished. If there is no liability for IUU fishing by any State because it is considered as MSR, the issue with IUU fishing and liability or simply responsibility of flag States will not be effective and the core objective of the BBNJ negotiations, and future treaty, will not be met.

---

[160] Ibid

[161] Ibid, Article 1(5) draft text, p. 3

[162] KENNET LEARY, David, *International Law and the Genetic Resources of the Deep Sea* [Martinus Nijhoff, 2007], p. 189

[163] KIRCHNER-FEIS, Iris, KIRCHNER, Andree, 'Genetic Resources of the Sea' in ATTARD, David J., FITZMAURICE, Malgosia, MARTINEZ GUTIERREZ, Norman A. *The IMLI Manual on International Maritime Law: Volume I: The Law of the Sea* (OSAIL, 2014), p. 377

[164] Ibid

It has to be mentioned that some countries, during the negotiations of the BBNJ mentioned that '[they] should keep in mind not to […] create new obstacles to fishing or fisheries'[165] and further that 'this means that biodiversity conservation in ABNJ must be achieved without the BBNJ treaty itself exerting any *direct* control over shipping or fishing activities.'[166] The second sentence must be read in the context of overarching issues present in those negotiations. It is directly linked with the previous part of this thesis, where, if the treaty does not have any *direct* control over fishing activities and their regulations by States, the IUU fishing issue will never end.

As mentioned by the delegate of Malawi, the future BBNJ treaty 'must end governments' grabs in the high seas.'[167] However, a critique that comes to mind when reading the future agreement is that it will probably legitimate IUU fishing through the MSR, as long as States can justify their absolute need to (over)fish with the objective of MSR and conservation and sustainable use of the marine biodiversity in the high seas, under the cover of the BBNJ provisions. Thus, this will keep flag States from being responsible or liable in case the vessels flying their flags did not comply with the provisions of the future new BBNJ treaty.

4.1.2 Issues raised by the BBNJ draft text

The striking point in the draft is the absence of MSR definition, while this expression is repeated 9 times in the draft. This constitutes a serious threat to the marine biodiversity, as neither the treaties nor the courts have, in the past, defined 'marine scientific research' or set criteria to better regulate it. Indeed, the LOSC does not mention any definition for MSR, nor does it set any criteria. However, as mentioned by T. Stephens and D. R. Rothwell, the tribunals and courts are also reluctant to provide any definition, which could be applied to this word.[168] It is indeed the case with the ICJ who refused to give a definition of this term, and who preferred 'to focus on the elements comprising "for the purpose of scientific research,"' and where the Court only provided 'guidance to an appreciation of the interpretation of the term MSR under the LOSC.'[169] The document supplied by the UN[170] sets several definitions, but none of them were unanimously accepted and thus remained only in the records, without being transposed in the

[165] Iceland on application of MGR provisions, Working Group on MGRs, 8/ 23/19; DE SANTO, Elizabeth M., MENDENHALL, Elizabeth, NYMAN, Elizabeth, TILLER, Rachel, 'Stuck in the middle with you (and not much time left): The third intergovernmental conference on biodiversity beyond national jurisdiction' [2020] *Marine Policy*, p. 2-3

[166] Ibid, p. 7

[167] Ibid, p. 1

[168] Supra 32, p. 561

[169] Ibid, p. 562

[170] Marine Scientific Research – A revised guide to the implementation of the relevant provisions of the United Nations Convention on the Law of the Sea 2010

LOSC to be adopted and implemented. T. Stephens and D. R. Rothwell explain that if there is no definition of MSR in the LOSC, it is because 'it was considered that the provisions in Part XIII adequately gave meaning to the concept.'[171]

The future development of the law of the sea showed that a definition would have been needed as technology to fish and conduct research is rapidly evolving. Indeed, in the ICJ case *Whaling in the Antarctic*, the Court did not give any definition, and instead only pinpointed some criteria that could be applied to the definition of MSR. This was pointed out in the dissenting opinion of Judge Yusuf, who held that the program lead by Japan was considered by the Court as 'scientific research' but 'without a definition of the words "scientific research"'[172]

Applied to the future BBNJ agreement, this raises the same issue, as without any definition, the countries party to the treaty are free to have their own definition and, with a good argumentation, are able to conduct IUU fishing in the high seas, under the cover of MSR.

Another point to raise when reading the draft of the BBNJ negotiations, is Article 7(b) stating the objective of the future treaty to '[b]uild the capacity of […] States Parties […] to [collect] [access] and utilize marine genetic resources of areas beyond national jurisdiction;].' At a global level, this is an honorable goal, and a great symbol of cooperation between developed and developing countries. However, when taking a closer look at those developing States, 'in particular least developed countries, landlocked developing countries, geographically disadvantaged States, small island developing States, coastal African States and developing middle-income countries' it can be determined that countries entering in those categories are general flag States countries, and particularly flags of convenience States. It is for example the case, as previously mentioned, of Mongolia (landlocked State), Panama (developing country),[173] or Liberia (developing country).[174]

If no definition of MSR is given in the BBNJ treaty, States will continue to illegally fish and will be able to justify in the name of MSR, and cover it under the umbrella of the BBNJ treaty.

4.2 Potential suggestions for an efficacious treaty

As previously mentioned, the new BBNJ treaty does not seem to take an efficacious path towards the conservation and sustainable use of the marine genetic resources, allowing flag States to avoid liability when one of the vessels flying their flag is engaged in IUU fishing justified by MSR. However, there are other solutions to implement effective control and liability over

[171] Supra 32, p. 562

[172] Supra 63, Dissenting Opinion of Judge YUSUF, para. 5, p. 162

[173] https://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf [last accessed 09.10.2021], p. 146

[174] Ibid

flag States engaged in IUU fishing. These ideas are only suggestions and require, of course, full cooperation of all States around the world.

4.2.1 Solutions already implemented

An encouraging paper[175] from the Organization for Economic Co-operation and Development (OECD) shows that most of the OECD countries have improved their stance towards IUU fishing in the past years. While there are still some gaps to fill, the authors of the paper appear hopeful that it is only a matter of time before IUU fishing is effectively addressed. Indeed, a part of this paper is named 'Uneven use of port State measures still allow IUU harvests to enter the global market but loopholes are being closed.'[176] As pointed out, 'enforcement of regulation at sea is expensive,'[177] leading countries to implement more efficient port States control measures. Those port States control measures allow a decrease in IUU fishing because 'when IUU vessels are denied port access or seek to avoid more effective and frequent controls, they are forced to increase fuel use and navigation time in search of non-compliant ports (so-called "ports of convenience") to offload their IUU harvest.'[178] This measure has been completed by the FAO's international legal binding agreement in 2009 called *Agreement on Port State Measure to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*.[179] However, this agreement sets minimum standards to avoid IUU fishing by setting 'sufficient capacity to conduct inspection'[180] on suspected IUU fishing vessels, which is, in practice, complicated to effectively set in countries where receiving IUU fishing is financially more beneficial than applying those measures.

Another tool used worldwide is the blacklisting of vessels flying certain flags. Many States have a list of countries where a vessel flying their flag cannot enter their national ports without undergoing a series of port control measures. It is for example the case with Norway and its Norwegian Black List[181] where several vessels are blacklisted only for Norway, in addition to those listed by the international fisheries organizations. However, the only consequence of being blacklisted is a '[r]efusal of a license to fish/transship in the Norwegian Economic Zone

---

[175] HUTNICZAK, B., C. DELPEUCH and A. LEROY (2019), "Closing Gaps in National Regulations Against IUU Fishing", *OECD FOOD, Agriculture and Fisheries Papers*, No. 120, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9b86ba08-en> [last accessed 10.10.2021]

[176] Ibid, p. 28

[177] Ibid

[178] Ibid

[179] Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (the Port State Measures Agreement or PSMA), FAO 2009

[180] Supra 176, p. 29

[181] <https://www.fiskeridir.no/English/Fisheries/Norwegian-Black-List> [last accessed 10.10.2021]

and the Fishery Zone around Jan Mayen,'[182] which, according to the formulation, does not apply to fishing vessels in the high seas.

As mentioned by H. Österblom *et al.*[183] 'as a consequence of extensive diplomatic pressure directed at flag and port States associated with IUU fishing, combined with new policy tools (including vessel blacklists, and novel forms of collaboration, IUU fishing has been substantially reduced.' One of the effective forms of collaboration mentioned by the authors is the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)[184] where several MPAs have been settled in the high seas around the Antarctica. However, as mentioned several times by the scholars, there is still the issue of vessels IUU fishing under the flag of a State not party to the RFMOs, against whom no action can be taken, as it is not bound by an international legally binding agreement.

Of course, several treaties have already been implemented in order to fight IUU fishing in the high seas, such as the Fish Stock Agreement,[185] the Port State Agreement,[186] the IPOA-IUU[187] and the Compliance Agreement.[188] The Fish Stock Agreement is based on the Code of Conduct for Responsible Fisheries,[189] which refers to the LOSC in its mandatory provisions. However, Article 1(1.1) starts with '[t]his Code is voluntary' which seems quite problematic as even with hard law some countries do not respect sustainable fishing in the high seas, so if the Code is voluntary, it is a compelling reason to implement and become party to it. The same Code repeats in Article 8(8.2.7) what the LOSC states in Article 94 regarding flag State jurisdiction, which comes back to the issue of FOCs. However, according to the FAO's website, the Code 'continues to be a reference framework for national and international efforts' since its adoption, almost 30 years ago. This 'reference framework' can be named in the Hawaiian case, where the State has settled some MPAs even stricter than standardized by the international community, through the creation of Fish Replenishment Areas.[190] These Fish Replenishment Areas could be implemented in the high seas, in order to create safe zones for fish reproduction and conservation, however, the main issue with this solution would be the financial and legal means allocated by

[182] Ibid

[183] ÖSTERBLOM, Henrik, BODIN, Örjan, PRESS, Anthony J., SUMAILA, U. Rashid, 'The High Seas and IUU Fishing' in SMITH, Hance D., SUAREZ DE VIVERO, Juan Luis, AGARDY, Tundi S., *Routledge Handbook of Ocean Resources and Management* [Routledge, 2015], p. 234

[184] Convention on the Conservation of Antarctic Marine Living Resources 1982

[185] Supra 147

[186] Supra 179

[187] Supra 19

[188] Supra 146

[189] Code of Conduct for Responsible Fisheries 1995

[190] ROSSITER Jaime Speed, LEVINE, Arielle, 'What makes a "successful" marine protected area? The unique context of Hawaii's fish replenishment areas' (2014) 44 Marine Policy

countries for surveillance of these areas and, if not closely watched on, give more opportunities for IUU fishermen to fish there.

The EU, in a Joint Communication[191] stated its long-term objective to make the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean 'a success'[192] That objective by the institution is to designate MPAs and to include them in the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention).[193] Indeed, in Article 3 of Annex V, the text states that the Commission should take measures to protect the marine environment, such as programs 'for the control of the human activities' and give some examples on the possible methods in doing so. The effective control of the area by the EU will be done through close cooperation with the European Space Agency (ESA) to monitor and understand climate change.[194]

One of the methods to protect the marine environment and particularly from IUU fishing is to 'develop means, consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites related to particular species or habitats.'[195] Ideally, these areas, especially in the Arctic Ocean, should mirror the ones already implemented in Hawaii (as previously mentioned in this part). Some countries have already implemented it, such as France, with its national park of Port-Cros, in the Mediterranean Sea. This national park is divided is several areas, with some zones totally forbidden to human activities or presence. Indeed, the Island of Bagaud is classified as a 'wilderness terrestrial area' where landing is prohibited. Some maritime zones are also totally free of recreational fishing, in order to better conserve the marine environment. The national park, on the Porquerolles Island also regulates the type of species that can be fished. For example, as mentioned, this example, as well as the Hawaiian one, is located within the territorial waters, and as such only submitted to the national jurisdiction of the coastal State, allowing for a better surveillance of these areas, unlike the high seas where an effective surveillance is much more complex, and almost infeasible.

Another solution already implemented by countries, both in the great south and the great north is the creation of councils. Indeed, in the south there is the existence of the abovementioned

---

[191] *A Stronger EU Engagement for a Peaceful, Sustainable and Prosperous Arctic*, Join Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 13.10.2021 <https://eeas.europa.eu/sites/default/files/2_en_act_part1_v7.pdf> [last accessed 23.10.2021]

[192] Ibid, p. 7

[193] Convention for the Protection of the Marine Environment of the North-East Atlantic 1992

[194] Supra 191, p. 8

[195] Ibid, Annex V, Article 3(1)(b)(ii)

CCAMLR that is both a convention and a council where 26 countries[196] are actively advocating and acting for the conservation of marine resources in the Antarctic Ocean, including the high seas. Found much higher in the north, the Arctic Council, in which the Arctic States[197] are working to cooperate 'for a sustainable Arctic Ocean.'[198] This council created, in collaboration with the IMO, the Polar Code,[199] designed to better regulate pollution, shipping and fishing (and more generally environmental protection) in the Arctic. However, once more, these councils have to face third States flagged vessels, which are not bound by the conventions and agreements, and therefore do not respect the legally binding instruments into force in those regions.

4.2.2 Potential solutions to be implemented

An idea proposed by D. Leary is the implementation of a Code of conduct regarding marine research. Indeed, the proposed code would apply to hydrothermal winds, but could also be analogically applied to MSR on marine ecosystems and their living organisms. However, the author explains, even though the idea of a code of conduct seems appealing, there will still be some gaps that only national laws could fill.[200] There must be national environmental laws strongly implemented to create a legally binding obligation towards marine scientists when researching on the marine environment. However, as previously explained, some countries do not have such national environmental laws at all and struggle to comply with the application of international environmental standards; other countries use MSR to hide potential IUU fishing acts, so are acting with the knowledge of such acts in the high seas, and under their jurisdiction.

To fight IUU fishing, several authors advocate for the strengthening of the international legal instruments. T. Koivurova and R. Caddel consider that there is a need to 'prescribe a clear set of procedures and objectives by which to promote conservation tools.'[201] The authors add that the main issue in conserving the natural resources of the high seas are 'the lack of a regional overarching set of unified global principles and guiding practices.' C. Voigt advocates for the strengthening of legal instruments, but also 'governance changes,

---

[196] <https://www.ccamlr.org/en/organisation/members> [last accessed 10.10.2021]

[197] Supra 11

[198] <https://arctic-council.org/explore/topics/ocean/> [last accessed 10.10.2021]

[199] International Code for Ships Operating in Polar Waters (Polar Code) 2017

[200] LEARY, David, *International Law and the Genetic Resources of the Deep Sea*, [Martinus Nijhoff, 2007], p. 197

[201] KOIVUROVA, Timo, CADDEL Richard, *Symposium on Governing High Seas Biodiversity – Managing Biodiversity beyond National Jurisdiction in the Changing Arctic*, 2018, <https://core.ac.uk/reader/159767724> [last accessed 16.10.2021], p. 137

including the design of appropriate international and regional legal frameworks.'[202] She also refers to the existing international instruments that should be strengthened and 'streamlined into a global framework.' Those instruments are the ones present on the FAO's website[203] where, *inter alia*, the LOSC, the PSMA are mentioned and where the institution mentions that '[t]ogether, these instruments comprise a powerful suite of tools to combat IUU fishing, and IUU fishing can only be eliminated when States fulfill their responsibility under this framework.'[204]

However, the issue arising from the previous statements seem to be the one of enforcement by States. Indeed, States are legally bound by their international legal engagements, however, no international or regional court has jurisdiction to effectively implement those engagements. Indeed, as previously mentioned, when one of the States is considered not having fulfilled its international engagements, the court can only condemn it for damages, but the environmental damage is difficult to assess with regard to monetary compensation. In addition, there is no guarantee that the State will not reiterate its actions (or non-action, as it might be the case for example in IUU fishing with States not exercising 'effective jurisdiction' as per Article 94 of the LOSC) and will comply with the measures within a reasonable timeframe.

Another point to add to potential solutions would be the physical policing of vessels in the high seas, but as mentioned by N. Klein, the practicality of it is near being impossible, as she mentions it in the EEZ,[205] which is a smaller area than the high seas where no State has jurisdiction over these areas, only on the vessels flying its flag. Such physical policing would require the full cooperation of flag States over their vessels, which seems quite hard to implement, as previously mentioned, particularly regarding the issue of the FOCs.

Another option is to trigger the liability of flag States regarding the breach of due diligence. As Article 232 of the LOSC states, '[s]tates shall be liable for damage or loss attributable to them' and that they 'shall provide for recourse in their courts of actions in respect of such damage or loss.' This liability shall be implemented through courts and tribunals with stronger powers and jurisdiction than the current ones. However, if such a court or tribunal would come to exist, the risk is the absence of consent from States to be bound in such a way that notch their national sovereignty. The ideal solution (but realistically highly complicated) would be to combine Articles 217 (enforcement by flag States), 232 (liability of States arising from enforcement

---

[202] VOIGT, Christina, *Oceans, IUU Fishing and Climate Change: Implications for International Law*, International Community Law Review, 2020, p. 8

[203] <https://www.fao.org/iuu-fishing/international-framework/en/> [last accessed 16.10.2021]

[204] Ibid

[205] KLEIN Natalie, 'Law Enforcement Activities' in *Maritime Security and the Law of the Sea*, [Oxford, 2012], p. 97

measures) and 235 (responsibility and liability) of the LOSC to make flag States liable for damage to the marine environment, in breach of their due diligence principle, especially with regards to IUU fishing by vessels flying their flags.

On the compensation part, following a possible liability held against a State, the question on how to compensate IUU fishing remains a tough one. Indeed, several funds have been established in relation to marine pollution.[206] However, those funds are directed at the definition of marine pollution contained in Article 1 LOSC and do not encompass 'marine pollution' as including IUU fishing in the high seas. Indeed, the creation of a compensation fund would mean that States agree to pay a certain amount of money to the said fund to compensate IUU fishing. From this idea, several questions arise: how is the damage caused by IUU fishing calculated? Is it based on the market price of the amount of fish sold or on the global environmental damage it caused (including the end of the chain, such as paying damages to the populations relying on fishing)? How can it be ensured that FOC States will agree and participate in this fund? These questions seem to have no definite answer, as the IUU fishing issue is a problem embracing many components. However, these questions are of an importance and need to be answered as quickly as possible by the international community, as the oceans are being increasingly depleted of their fish, aggravated by global warming which causes the Arctic ice to melt and incentivized fishing vessels to head up north to fish in the Arctic high seas.

A better implementation of the general principles of international law, such as the principle of due diligence, the good faith principle, the precautionary principle, and the other principles of environmental law written in the CBD would help countries to respect the international agreements they signed and ratified in the past, and make them willing to sign and ratify future agreements. In developed countries, the focus should be put on the implementation and the efficacious implementation of such environmental measures. Regarding to developing countries, a regional cooperation should be strengthened by regional agreements, and by trying to implement the global legislative instruments.
Supranational entities should implement backlisting of flag States involved in IUU fishing via vessels flying their flag, and trace the geographical origin of the fish and the origin of the vessel itself, in the manner as the EU already does.
The RFMOs should work to more effectively address States that are not part of the fisheries

[206] Among those can be cited the International Convention on Civil Liability for Oil Pollution Damage 1992, the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992, the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea 1996 and the International Convention on Civil Liability for Bunker Oil Pollution Damage 2001

agreements and try to implement mechanisms to avoid IUU fishing within the protected zones by vessels flying the flag of a State not party to the regional agreement.

The PSMA needs to increase its number of State parties[207] in order to better implement it world-wide. It is shown from the map made by the FAO on the parties to this agreement[208] that the developing countries as well as some FOC States and coastal States known for their fishing industry, such as China, are not part of this agreement, which prevents the whole international community to fight IUU fishing in the high seas.

Regarding marine scientific research and the BBNJ, a definition and criteria of 'marine scientific research' should be coined by the international community in order to prevent countries from exceeding the definition or abusing it as a means to overfish in the high seas. A unification of the scientific methods at the international level would enable the setting of standards on the methods used to track and study the fauna and flora of the high seas.

Finally, a point raised by the FAO is to raise awareness among the population of different countries.[209] Indeed, most of the consumers do not know where the fish they are eating come from, because of the usually quite vague description on the origin of the fish (such as 'North-Atlantic' for example). If fish consumers boycott fish coming from known IUU fishing areas, and report it to their national governments or higher institutions such as the EU, it seems more likely that the institutions would take measures to ban IUU fish from their market, and ban the importation of such fish.

On the US side, the idea of monitoring the ocean space to track IUU fishing vessels down from space is gaining ground among the policies that can be implemented. Indeed, according to an article in Defense One, the Defense Innovation Unit is calling for new innovations regarding satellite-mounted radar to fight a 'growing national-security problem,'[210] which, in reality is also an international security, environment, social and legal problem. As mentioned by the author of the article, the Synthetic Aperture Radar (SAR) favored by the US would allow a continuous surveillance, both at night and in cloudy weather. This solution, if ever implemented in the high seas, would allow a stronger monitoring of the high seas areas and through communication between States, allow rapid response from States to send their patrol fleet to control, and where necessary, arrest IUU vessels. Once the vessel is apprehended, the patrol vessel could transmit information to the flag State in order for it to take the necessary sanctions. In case a

[207] On the 18.10.2021, 69 States are parties to this agreement

[208] Available at <https://www.fao.org/port-state-measures/background/parties-psma/en/> [last accessed 18.10.2021]

[209] Available at <https://www.fao.org/port-state-measures/news-events/detail/en/c/1402538/> [last accessed 18.10.2021]

[210] TUCKER Patrick, 'Can We Spot Illegal Fishing Fleets from Space' Defense One <https://www.defense-one.com/technology/2021/08/can-we-spot-illegal-fishing-fleets-space/184300/> [last accessed 23.10.2021]

vessel is spotted at night, this SAR would allow tracking it until the port the vessel plans to land, and contact the port State for further controls, following the PSMA.

However, all those suggestions are complicated to set in practice as other actors, such as the fish industry lobbies are involved in the process as well as the economic aspect, where IUU fishing is generally more profitable than finding a more sustainable way and implementing environmental laws at the national, regional and international level. In addition, the space-tracking tool is a costly solution and not all countries would have the necessary finances to participate in that project (which is, for now, only a US national project), nor the will to participate.

5 Conclusion

The preceding research shows that there are a host of issues arising from gaps in IUU fishing on the high seas. Humanity as a whole would gain in closing those gaps, in order to ensure a more sustainable future for the high seas, and the global ecosystem. States are indeed responsible for IUU fishing in the high seas and are, in theory, liable for damage caused to the environment. However, a breach of the due diligence principle, as a basis for States' liability might be hard to set in practice because of the lack of surveillance on the high seas and the freedom of States to use them. As mentioned several times throughout this thesis, another issue arising from these gaps is the implementation of decisions by the courts within the national judicial system of countries plagued with corruption or with fragile judicial institutions.

Several solutions have been proposed, but they are easier to implement in theory than in practice, particularly because of the sovereignty of States, and their general unwillingness to cede it to the benefit of international institutions such as the United Nations.

However, there is also hope arising from the growing awareness of the global population, with regard to the issues of IUU fishing and the environmental damage it causes to the flora and fauna of the seas in general, as more and more activists are taking part to protests for the protection of the environment, and therefore against IUU fishing on the high seas.

Table of reference

Treaties and declarations

- Agreement between the Government of Iceland, the Government of Norway and the Government of the Russian Federation concerning certain aspects of cooperation in the area of fisheries 1999
- Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 1995
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (the Port State Measures Agreement or PSMA), FAO 2009
- Agreement to Prevent Unregulated Fisheries in the Central Arctic Ocean (the Arctic Agreement) 2018
- Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993
- Code of Conduct for Responsible Fisheries 1995
- Commission Implementing Decision of 26 November 2013 identifying the third countries that the Commission considers as non-cooperating third countries pursuant to Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, [2013] OJ C346/2
- Convention on Biological Diversity 1993
- Convention on the Conservation of Antarctic Marine Living Resources 1982
- Convention for the Protection of the Marine Environment of the North-East Atlantic 1992
- Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999, [2008] OJ L286/1
- Declaration of the United Nations Conference on the Human Environment 1972
- Geneva Convention on the High Seas 1958, superseded by the LOS Convention
- International Convention for regulating the police of the North Sea fisheries outside territorial waters 1882 – expired in 1976
- International Code for Ships Operating in Polar Waters (Polar Code) 2017

- International Convention on Civil Liability for Bunker Oil Pollution Damage 2001
- International Convention on Civil Liability for Oil Pollution Damage 1992
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 199
- International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea 1996
- Statute of the International Court of Justice 1945
- United Nations Convention on the Law of the Sea 1982
- Vienna Convention on the Law of Treaties 1969
- World Charter for Nature 1982

Draft texts

- Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (General Assembly resolution 72/249)
- International Law Commission, Draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries 2001

National laws

- *Coastal Fisheries Protection Act*, R.S.C., 1985, c. C-33 <https://laws-lois.justice.gc.ca/eng/acts/C-33/FullText.html>
- *Lov om forvaltning av viltlevande marine ressursar (havressurslova)*, LOV-2008-06-06-37

Case law

- *Award between the United States and the United Kingdom, Relating to the Rights of Jurisdiction of United States in the Bering's Sea and the Preservation of Fur Seals* (*United States v. United Kingdom)*, Decision of 15 August 1893, RIAA XXVIII
- *Corfu Channel case, Judgement of April 9th, 1949, I.C.J. Reports* 1949, p. 4
- *Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom), Award of the Permanent Court of Arbitration, 18 March 2015, case n° 2011-03*

- *Fisheries Jurisdiction (United Kingdom v. Iceland), Merits, Judgment, I.C.J. Reports 1974*, p. 3
- *Lake Lanoux Arbitration (France v. Spain)*, Arbitral Tribunal, November 16th 1957
- *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226
- *M/V "SAIGA" (No. 2) (Saint Vincent and the Grenadines v. Guinea), Judgement, ITLOS Reports* 1999, p. 10
- *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgement, I.C.J. Reports 2010*, p. 14
- *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, 2 April 2015, ITLOS Reports 2015*, p. 4
- *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011*, p. 10
- *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Award on Jurisdiction and Admissibility, Decision of 4 August 2000*, RIAA XXIII, 1, 42
- *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999*, p. 280
- *The South China Sea Arbitration (The Republic of Philippines v. The People's Republic of China), Award of the Permanent Court of Arbitration, 16 July 2016, case n° 2013-19*
- *Trail Smelter Arbitration (United States v. Canada), Report of International Arbitral Awards, 1938 and 1941, Volume III*

Secondary sources

- *A Stronger EU Engagement for a Peaceful, Sustainable and Prosperous Arctic*, Join Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 13.10.2021
- ANDERSON, H. Edwin, 'The nationality of ships and flags of convenience: Economics, politics, and alternatives' [1996], Tulane Maritime Law Journal
- BAIRD, Rachel, 'Illegal, Unreported and Unregulated Fishing: an Analysis of the Legal, Economic and Historical Factors relevant to its development and persistence' [2004] Melbourne Journal of International Law

- BALTON, David A. 'Considering Future Arctic Fisheries' in NORDQUIST, Myron, NORTON MOORE, John, HEIDAR, Thomas, *Changes in the Arctic Environment and the Law of the Sea* (Nijhoff, 2010)
- BARBOZA, Julio, *The Environment, Risk and Liability in International Law* (Vol. 10, Leinden: BRILL, 2010)
- BRAY, Kevin, 'Illegal, Unreported, and Unregulated Fishing' in NORDQUIST, Myron and NORTON MOORE, John, *Current Fisheries Issues and the Food and Agriculture Organization of the United Nations* (Nijhoff, 2000)
- BOYLE, Alan, 'International Law and Liability for Catastrophic Environmental Damage' [2011] Proceedings of the Annual Meeting – American Society of International Law
- BOYLE, Allan (1985) 'Marine Pollution under the Law of the Sea Convention' [1985] The American Journal of International Law, p. 366
- CHIRCOP, Aldo, 'The Use of IMO Instruments for Marine Conservation on the High Seas' in BECKMAN, R.C. et al., *High Seas Governance: Gaps and Challenges*, (BRILL Nijhoff, 2018)
- CZYBULKA, Detlef, 'Article 192' in PROELß, Alexander, et al., *United Nations Convention on the Law of the Sea: A Commentary*, (München: Beck), 2017
- DE SANTO, Elizabeth M., MENDENHALL, Elizabeth, NYMAN, Elizabeth, TILLER, Rachel, 'Stuck in the middle with you (and not much time left): The third intergovernmental conference on biodiversity beyond national jurisdiction [2020] *Marine Policy*,
- Food and Agriculture Organization, 'Illegal, Unreported and Unregulated (IUU) fishing,' <http://www.fao.org/iuu-fishing/en/>
- FAO 'International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing' (2001),II. p. 2, <http://www.fao.org/3/y1224e/Y1224E.pdf>
- Food and Agriculture Organization of the United Nations 'The State of World Fisheries and Aquaculture 2020' <http://www.fao.org/state-of-fisheries-aquaculture>
- GOLDIE, L.F. E., 'Concepts of Strict and Absolute Liability and the Ranking of Liability in Terms of Relative Exposure to Risk' [1985] 16 Netherlands Yearbook of International Law 175
- GOODMAN, Camille, 'The Regime for Flag State Responsibility in International Fisheries Law – Effective Fact, Creative Fiction, or Further Work Required?' [2009] Australia & New Zealand Mar. L.J.

- HUTNICZACK, B., C. DELPEUCH and A. LEROY (2019), "Closing Gaps in National Regulations Against IUU Fishing", *OECD FOOD, Agriculture and Fisheries Papers*, No. 120, OECD Publishing, Paris
- Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (General Assembly resolution 72/249) <https://www.iucn.org/sites/dev/files/content/documents/iucn_comments_on_revised_bbnj_draft_text_february_2020.pdf>
- International Maritime Organization 'Illegal, Unreported, and Unregulated (IUU) Fishing' <https://www.imo.org/en/OurWork/IIIS/Pages/IUU-FISHING.aspx>
- KAYE, Stuart, *International Fisheries Management* (Kluwer Law International, 2000)
- KENNET LEARY, David, *International Law and the Genetic Resources of the Deep Sea* [Martinus Nijhoff, 2007]
- KIRCHNER-FEIS, Iris, KIRCHNER, Andree, 'Genetic Resources of the Sea' in ATTARD, David J., FITZMAURICE, Malgosia, MARTINEZ GUTIERREZ, Norman A. *The IMLI Manual on International Maritime Law: Volume I: The Law of the Sea* (OSAIL, 2014)
- KLEIN Natalie, 'Law Enforcement Activities' in *Maritime Security and the Law of the Sea*, [Oxford, 2012]
- KOIVUROVA, Timo, CADDEL Richard, *Symposium on Governing High Seas Biodiversity – Managing Biodiversity beyond National Jurisdiction in the Changing Arctic*, 2018
- KULESZA Joanna, *Due diligence in international law* [Brill, 2016]
- LEARY, David, *International Law and the Genetic Resources of the Deep Sea*, [Martinus Nijhoff, 2007]
- MAES, Franck, *Marine Resource Damage Assessment: Liability and Compensation for Environmental Damage*, Spinger, 2005
- Marine Scientific Research – A revised guide to the implementation of the relevant provisions of the United Nations Convention on the Law of the Sea 2010
- Merriam Webster Dictionary, <https://www.merriam-webster.com/dictionary/>
- MILLER, Dana, et al. 'Cutting a lifeline to maritime crime : marine insurance and IUU fishing' [2016] Frontiers in Ecology and the Environment

- NANDAN, Satya, ‘Panel I Introductory Remarks: Overview of Changes in the Arctic Environment and the Law of the Sea’ in NORDQUIST, Myron, NORTON MOORE, John, HEIDAR, Thomas, *Changes in the Arctic Environment and the Law of the Sea* (Nijhoff, 2010)
- NORDQUIST, Myron & University of Virginia Center for Oceans Law Policy, *United Nations Convention on the Law of the Sea, 1982: a Commentary, Vol. III,: Articles 86 to 132 and Documentary Annexes: Vol. Vol. 3* (Martinus Nijhoff, 1995)
- OUDE ELFERINK, Alex, MOLENAAR, Erik and ROTHWELL, Donald, ‘The Regional Implementation of the Law of the Sea and the Polar Regions’ in OUDE ELFERINK, Alex, MOLENAAR, Erik and ROTHWELL, Donald, *The Law of the Sea and the Polar Regions – Interactions between Global and Regional Regimes* (Nijhoff, 2013)
- ÖSTERBLOM, Henrik, BODIN, Örjan, PRESS, Anthony J., SUMAILA, U. Rashid, ‘The High Seas and IUU Fishing’ in SMITH, Hance D., SUAREZ DE VIVERO, Juan Luis, AGARDY, Tundi S., *Routledge Handbook of Ocean Resources and Management* [Routledge, 2015]
- PETROSSIAN, Gohar, SOSNOWSKI, Monique, MILLER, Dana, ROUZBAHANI, Diba, ‘Flag for sale: An empirical assessment of flag of convenience desirability to foreign vessels’ [2020] Marine Policy
- PROELß, Alexander, et al., *United Nations Convention on the Law of the Sea: A Commentary*, (München: Beck), 2017
- PROSSER, William L., and KEETON W. Page, *Prosser and Keeton on the Law of Torts* (5th ed., Minn: West publishing, 1984)
- RAYFUSE, Rosemary, ‘Article 116’ in PROELß, Alexander, et al., *United Nations Convention on the Law of the Sea: A Commentary*, (München: Beck), 2017
- RAYFUSE, Rosemary, ‘The Anthropocene, Autopoiesis and the Disingenuousness of the Genuine Link: Addressing Enforcement Gaps in the Legal Regime for Areas Beyond National Jurisdiction’ in MOLENAAR, Erik and OUDE ELFERINK, Alex *The International Legal Regime of Areas Beyond National Jurisdiction: Current and Future Developments* (Nijhoff, 2010)
- ROSELLO, Mercedes ‘Cooperation and unregulated fishing: interactions between customary international law, and the European Union IUU fishing regulation’ [2017] Marine Policy

- ROSSITER Jaime Speed, LEVINE, Arielle, 'What makes a "successful" marine protected area? The unique context of Hawaii's fish replenishment areas' (2014) 44 Marine Policy
- ROTHWELL, Donald, STEPHENS, Tim, *The International Law of the Sea* (2nd ed., Oxford: Hart., 2016)
- SANDS Philippe and PEEL Jacqueline, with FABRA Adrianna ad MACKENZIE Ruth *Principles of International Environmental Law* (3rd edition, Cambridge University Press, 2012)
- SDG Knowledge Hub 'Environmental Laws Impeded by Lack of Enforcement, First-ever Global Assessment Finds' <https://sdg.iisd.org/news/environmental-laws-impeded-by-lack-of-enforcement-first-ever-global-assessment-finds/>
- SILBER, Gregory, ADAMS, Jeffrey, 'Vessel Operations in the Arctic, 2015–2017' [2019] Frontiers in Marine Science, Table 2 <https://www.frontiersin.org/articles/10.3389/fmars.2019.00573/full>
- STEPHENS, Tim, 'Article 235' in PROELß, Alexander, et al., *United Nations Convention on the Law of the Sea: A Commentary*, (München: Beck), 2017
- SUCHARITKUL, Somping, 'State Responsibility And International Liability Under International Law' [1996] Loyola of Los Angeles International And Comparative Law Journal
- TANAKA, Yoshifumi, *The International Law of the Sea* (3rd ed., Cambridge University Press, 2019)
- TUCKER Patrick, 'Can We Spot Illegal Fishing Fleets from Space' [2021] Defense One
- VOIGT, Christina, *Oceans, IUU Fishing and Climate Change: Implications for International Law*, International Community Law Review, 2020
- VANDERZWAAG, David, *Canada and Marine Environmental Protection – Charting a Legal Course Towards Sustainable Development* (Kluwer Law International, 1995)
- WARNER, Robin 'Conservation and Management of Marine Living Resources beyond National Jurisdiction: Filling the Gaps' in BECKMAN Robert C., MCCREATH, Milicent, ROACH, J. Ashley, SUN Zhen (BRILL, 2018)
- WARNER, Robin, University of Wollongong, *Protecting the Ocean Beyond National Jurisdiction: Strengthening the International Law Framework* (BRILL, 2009)

Websites

- https://app.uio.no/ub/ujur/oversatte-lover/data/lov-20080606-037-eng.pdf
- http://www.fao.org/fishery/topic/166304/en
- https://www.merriam-webster.com/dictionary/environment
- https://stats.oecd.org/glossary/detail.asp?ID=4236
- https://www.itfglobal.org/en/sector/seafarers/flags-of-convenience
- https://www.iucn.org/downloads/10_principles_for_high_seas_governance___final.pdf
- https://research.rabobank.com/far/en/sectors/animal-protein/world-seafood-trade-map.html
- http://www.iuuwatch.eu/2017/12/eu-arctic-partners-agree-prevent-unregulated-fishing-high-seas/
- https://www.transparency.org/en/cpi/2020/index/rus
- https://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf
- https://www.fiskeridir.no/English/Fisheries/Norwegian-Black-List
- https://www.ccamlr.org/en/organisation/members
- https://arctic-council.org/explore/topics/ocean/
- https://www.fao.org/iuu-fishing/international-framework/en/
- https://www.fao.org/port-state-measures/background/parties-psma/en/
- https://www.fao.org/port-state-measures/news-events/detail/en/c/1402538/