

EILS Jean Monnet Paper Series

Jean Monnet Chair

European Union and Global Sustainable Development Through Law European and International Law of Sustainable Development (EILS)

Jean Monnet Paper No. 3/22

Combating Illegal, Unreported and Unregulated Fishing within the Regime Complex for Ocean Fisheries

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Georg-August University of Göttingen Germany 2022

EILS Jean Monnet Paper Series

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Suggested Citation:

Siebrecht, Sven. Combating Illegal, Unreported and Unregulated Fishing within the Regime Complex for Ocean Fisheries. (August 2022). Jean Monnet Papers No. 3/22, EILS Jean Monnet Chair for European Union and Global Sustainable Development Through Law, Erasmus Program of the European Union and Georg-August University of Göttingen. Available at: https://www.uni-goettingen.de/de/jean+monnet+papers/594986.html

Combating Illegal, Unreported and Unregulated Fishing within the Regime Complex for Ocean Fisheries

Sven Siebrecht*

Abstract

Due to its broad economic, ecological and social consequences, illegal, unreported and unregulated (IUU) fishing has become a major issue of international ocean governance that has received extensive consideration in law- and policy-making. However, scattered across a vast array of overlapping national, regional and international measures operated within various legal regimes, the effectiveness of the present legal framework against IUU fishing has not remained uncontested. Against the backdrop of regime pluralism and fragmentation, this article attempts to track back its evolution and reconstruct the seemingly opaque width of measures against IUU fishing as a multi-level approach and product of normative cross-fertilization between legal regimes.

Keywords

IUU Fishing, Ocean Fisheries, Regime Complexity, Regime Interaction, Fragmentation

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1. Introduction

For a long time, the sea has been viewed as an inexhaustible food resource. In his famous dissertation "Mare Liberum" the Dutch jurist $Hugo\ Grotius\ proclaimed$ the

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freedom of the sea as a result of its seeming infinity.¹ *Grotius* viewed the sea as a common good, destined for all men to be used for navigation and fisheries.² 400 years later, humanity has reached the boundaries of the then seemingly infinite sea. 88 per cent of the ocean fish stocks have been projected to collapse by 2050.³ Although the Grotian thought of a free sea is still of legal relevance in modern days,⁴ the overexploitation of marine resources has also led to a growing level of international ocean governance aiming at the conservation of marine life.⁵ One particularly pressing issue in this context is the prevention and combating of illegal, unreported and unregulated (IUU) fishing.

In order to locate the issue of IUU fishing within the system of international ocean governance, firstly, the international regime complex for ocean fisheries will be outlined (B.). On this basis, the issue of IUU fishing will be defined and scrutinized in terms of scope and consequences (C.). Subsequently, the existing legal measures combating IUU fishing on the international, regional and national level will be analyzed (D.). This will then lead to the consideration of IUU fishing not only as a regulatory issue but also as a challenge for regime interaction (E.), before ending with a short summary of the findings (F.).

2. Fishing under International Law

The regulation of ocean fisheries presents itself as an intersectional challenge: Firstly, the consumption of fish and fisheries products is deeply rooted within numerous societies all across the globe. As a major source of protein and fatty acids, fish and fisheries products are crucial to food and nutrition security throughout large parts of the global south. At the same time, they contribute to the cultural identity of many

¹ H. Grotius, *Mare Liberum* (1609); for more on Hugo Grotius, see P. Haggenmacher, 'Hugo Grotius (1583–1645)', in B. Fassbender & A. Peters (eds), *The Oxford Handbook of the History of International Law* (2012), 1098 and M. C. W. Pinto, 'Hugo Grotius and the Law of the Sea', in L. del Castillo (eds), *Law of the Sea, From Grotius to the International Tribunal for the Law of the Sea: Liber Amicorum Judge Hugo Caminos* (2015), 18.

² H. Grotius, *The Freedom of the Seas*, transl. (1916), 28: "[...] the sea is common to all, because it is so limitless that it cannot become a possession of any one, and because it is adapted for the use of all, whether we consider it from the point of view of navigation or of fisheries." This idea was by no means undisputed. Other authors like J. Selden, *Mare Clausum* (1635) and W. Welwod, *An Abridgement of all Sea-Lawes* (1613) opposed the Grotian thought of a free sea and argued for the sovereignty of the sea instead. For further information on the theory of the sovereignty of the sea, see T. Scovazzi, 'The Origin of the Theory of Sovereignty of the Sea', in L. del Castillo (eds), *Law of the Sea, From Grotius to the International Tribunal for the Law of the Sea: Liber Amicorum Judge Hugo Caminos* (2015), 48.

³ C. Costello *et al.*, 'Global Fishery Prospects under Contrasting Management Regimes', 113 *Proceedings of the National Academy of Sciences of the United States of America* (2016) 18, 5125, 5128; B. Worm *et al.*, 'Impacts of Biodiversity Loss on Ocean Ecosystem Services', 314 *Science* (2006) 5800, 787 even project the collapse of all ocean fish stocks by 2048.

⁴ Art. 87 (1) and 116 LOSC.

⁵ D. Freestone, 'Fisheries, High Seas', in A. Peters & R. Wolfrum (eds), *Max Planck Encyclopedia of Public International Law*, para. 1 (last visited 14 January 2022).

individuals. Secondly, fish and fisheries products belong to the most traded food commodities in the world.⁶ The rising value of the global fisheries market drives up the economic relevance of the fisheries sector and fosters international competition, thus increasing its political relevance. Thirdly, fish stocks play a central role within marine ecosystems which are key to the conservation of nature and climate. Scientific research has shown that healthy marine ecosystems do not only preserve biodiversity but also decelerate climate change by effectively binding carbon dioxide.⁷

All of these social, economic and ecological circumstances require a balanced consideration in the process of international law- and policy-making. From a scholarly perspective, international fisheries law hence presents itself as a highly complex and dynamic subfield of international law.

2.1. Tragedy of the Commons

Starting point for the analysis of the international regime complex for ocean fisheries is the limited availability of maritime resources. The overexploitation of ocean fish stocks is paradigmatic for an economic phenomenon that has been described by *Garrett Hardin* as "tragedy of the commons". Commons are areas or resources located outside of any national jurisdiction. In the absence of national jurisdiction, unregulated commons provide open access to everyone. However, open and unregulated access also enables individual users to overly benefit themselves whilst spreading out any negative effects resulting from the overuse across the entirety of users. *William Forster Lloyd*, who first brought up the underlying idea of the "tragedy of the commons", illustrated this issue using cattle farming on public grassland:

"If a person puts more cattle into his own field, the amount of the subsistence which they consume is all deducted from that which was at the command, of his original stock; and if, before, there was no more than a sufficiency of pasture, he reaps no benefit from the additional cattle, what is gained in one way being lost in another. But if he puts more cattle on a common, the food which they consume forms a deduction which is shared between all the cattle, as well that of others as his own, in proportion to their number, and only a small part of it is taken from his own cattle." 10

⁶ C. Bellmann, A. Tipping & U. R. Sumaila, 'Global Trade in Fish and Fishery Products: An Overview', 69 *Marine Policy* (2016), 181, 181.

⁷ N. Gruber *et al.*, 'The oceanic sink for anthropogenic CO2 from 1994 to 2007', 363 *Science* (2019) 6432, 1193.

⁸ G. Hardin, 'The Tragedy of the Commons', 162 Science (1968) 3859, 1243.

⁹ J. L. Dunoff, 'Reconciling International Trade With Preservation Of The Global Commons: Can We Prosper And Protect?', 49 *Washington and Lee Law Review* (1992) 4, 1407, 1408; E. A. Clancy, 'The Tragedy of the Global Commons', 5 *Indiana Journal of Global Legal Studies* (1999) 2, 601, 603.

¹⁰ W. F. Lloyd, 'W. F. Lloyd on the Checks to Population', 6 *Population and Development Review* (1980) 3, 473, 483.

According to *Hardin* and *Lloyd*, users of commons will – driven by their economic self-interest – independently aim at maximizing their own benefits and thereby collectively cause depletion of the respective commons, resulting in a tragedy.

Fortunately, this tragedy is not inevitable. There are two main solution attempts to overcome the "tragedy of the commons": Firstly, commons can be distributed amongst their users. ¹¹ Thereby, the negative effects of overuse are limited to only the benefited users. ¹² At the same time, however, this inevitably leads to the abandonment of open access as property rights are established within the process of distribution. ¹³ Secondly, use restrictions can be imposed whilst upholding open access. ¹⁴ Albeit this preserves the open access nature of the commons, users have to agree to the installation of a control entity supervising the adherence to restrictions. ¹⁵

As already touched upon above, the overexploitation of ocean fish stocks is a modern-day paradigm of the "tragedy of the commons". The prevailing Grotian shibboleth of the freedom of the sea has led to international competition for fisheries, thus causing a ruthless depletion of maritime fish stocks. Yet, unlike public grassland, the ocean can hardly be distributed through privatization. Certainly, the introduction of property rights on the high seas would contradict the now codified international customary law that these are not subject to appropriation. International fisheries law therefore always has to be viewed in the light of global commons governance, as an attempt to overcome the "tragedy of the commons" by establishing use restrictions in the sense of the second solution. In

2.2. Regime Complex for Ocean Fisheries

The catching, processing and trading of fish is subject to a broad variety of legal instruments and institutions under international law. Until today, there is no single mechanism providing a comprehensive regulation of ocean fisheries. Instead, international fisheries law is based on various legal regimes¹⁸, thus depicting a

¹¹ A. Serdy, The New Entrants Problem in International Fisheries Law (2016), 11.

¹² *Ibid*.

¹³ *Ibid*.

¹⁴ *Ibid*.

¹⁵ H. G. Knight, Managing the Sea's Living Resources: Legal and Political Aspects of High Seas Fisheries (1977), 47.

¹⁶ Art. 89 LOSC; Serdy, supra note 11, 11.

¹⁷ For global commons governance, see E. Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (1990) as well as M. B. Pillai & G. Ganapathy-Doré, *Global Commons: Issues, Concerns and Strategies* (2020).

¹⁸ Following M. A. Young, *Trading Fish, Saving Fish* (2011), 19 legal regimes refer to "set[s] of laws, processes and institutions that have evolved by addressing a particular problem or function".

superordinate regime complex¹⁹. These legal regimes are located first and foremost within the international law of the sea, but also touch upon international environmental law and international trade law.²⁰

2.2.1. International Law of the Sea

The major part of international fisheries law is located within the international law of the sea.²¹ Numerous fisheries-related instruments have been adopted under the auspices of the United Nations (UN), the Food and Agriculture Organization of the United Nations (FAO), the International Maritime Organization (IMO) and other institutions on the international and regional level. Yet, for the purpose of this paper, two legal regimes stand out: The UN Law of Sea Regime and the FAO Fisheries Management Regime.

2.2.1.1. UN Law of the Sea Regime

The UN Law of the Sea Regime, established through the 1982 United Nations Convention on the Law of the Sea (LOSC)²² and supplemented by the 1995 United Nations Fish Stocks Agreement (FSA)²³, forms the overarching framework for ocean fisheries. According to its function as an "umbrella convention"²⁴, the LOSC has been called a "constitution for the oceans"²⁵. It attempts to provide a comprehensive codification of the former mainly customary law of the sea, spanning inter alia navigation, resource exploitation, scientific research, maritime technology and dispute settlement.²⁶ As an implementation agreement, the FSA supplements the LOSC by providing additional regulations concerning particularly vulnerable fish stocks and

¹⁹ Building upon the definition by K. Raustiala & D. G. Victor, 'The Regime Complex for Plant Genetic Resources', 58 *International Organization* (2004) 2, 277, 279 regime complexes refer to arrays of partially overlapping and nonhierarchical legal regimes. See also L. Wisken & C. Kreuder-Sonnen, 'Norm Collisions in the Regime Complex for Ocean Governance: Power or Legitimacy?', in S. Trevisanut, N. Giannopoulos & R. R. Holst (eds), *Regime Interaction in Ocean Governance* (2020), 124.

²⁰ A. Proelss & K. J. Houghton, 'Protecting Marine Species', in R. Rayfuse (ed), *Research Handbook on International Marine Environmental Law* (2015), 229, 230 convincingly speak of a "cross-sectoral and multifaceted regime connecting the law of the sea, with international environmental and economic law".

²¹ For a general introduction to international fisheries law, see R. Wolfrum, 'Die Fischerei auf Hoher See', 38 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* (1978), 659.

²² United Nations Convention on the Law of the Sea, 10 December 1982, 1833 UNTS 396.

²³ United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 4 August 1995, 2167 UNTS 3.

²⁴ F. R. Jacur, 'Formalism and Law-Making in Treaty-Based Ocean Governance: Limits and Challenges', in S. Trevisanut, N. Giannopoulos & R. R. Holst (eds), *Regime Interaction in Ocean Governance* (2020), 156, 171.

²⁵ See e.g. the remarks by the President of the Third United Nations Conference on the Law of the Sea T. T. B. Koh, 'A Constitution for the Oceans' (1982), available at https://www.un.org/Depts/los/convention_agreements/texts/koh_english.pdf (last visited 14 January 2022).

²⁶ T. Treves, 'Law of the Sea', in A. Peters & R. Wolfrum (eds), *Max Planck Encyclopedia of Public International Law*, para 11 f. (last visited 14 January 2022).

species. Although the LOSC and the FSA are closely interrelated, they are separate instruments and do not require membership to the respective other.²⁷ Regarding the exploitation of marine living resources, the UN Law of the Sea Regime generally attempts to reconcile the goals of efficient utilization and conservation.²⁸ In the specific context of fisheries, two regulatory aspects are of particular importance: the definition of maritime zones and the establishment of species-specific rules.

2.2.1.1.1. Maritime Zones

Under the LOSC, the sea is divided into five major maritime zones with relevance for marine fisheries:²⁹ the internal waters³⁰, the territorial sea³¹, the exclusive economic zone (EEZ)³², the continental shelf³³ and the high seas³⁴. In essence, these zones reflect a graduated concept of State sovereignty over the sea.

Within the internal waters landwards of a coastal State's baseline and the territorial seas stretching twelve nautical miles seawards, a coastal State enjoys full sovereignty and therefore exercises jurisdiction.³⁵ As a result, the exploitation of fish stocks in this area is subject to national legislation and only limited by the general obligation to protect and preserve the marine environment.³⁶

Further seawards, within the EEZ extending up to 200 nautical miles (and on the continental shelf thereunder³⁷), a coastal State enjoys limited sovereign rights. It holds sovereign rights for the purpose of direct or indirect exploration and exploitation of natural resources within the EEZ, including fish stocks.³⁸ However, these sovereign rights are flanked by duties to conserve marine living resources and promote optimum utilization.³⁹ Conservation duties include the determination of the total allowable catch (TAC)⁴⁰ and the maintenance of harvested species populations at a maximum

²⁷ J. Harrison, Saving the Oceans Through Law (2017), 175.

²⁸ See also the preamble of the LOSC.

²⁹ The contiguous zone (Art. 33 LOSC) and the area (Art. 133 ff. LOSC) are two additional maritime zones defined by the LOSC. These are however less relevant in the context of fisheries.

³⁰ Art. 8 LOSC.

³¹ Art. 2 ff. LOSC.

³² Art. 55 ff. LOSC.

³³ Art. 76 ff. LOSC.

³⁴ Art. 86 ff. LOSC.

³⁵ Young, *supra* note 18, 34 f.; N. Matz-Lück & J. Fuchs, 'Marine Living Resources', in D. R. Rothwell *et al.* (eds), *The Oxford Handbook of the Law of the Sea* (2015), 491, 498.

³⁶ Art. 192 LOSC.

³⁷ For an in-depth analysis of the legal particularities of the continental shelf, see P.-T. Stoll, 'Continental Shelf', in A. Peters & R. Wolfrum (eds), *Max Planck Encyclopedia of Public International Law* (last visited 14 January 2022).

³⁸ Art. 56 (1) (a) LOSC.

³⁹ Art. 61 f. LOSC.

⁴⁰ Art. 61 (1) LOSC.

sustainable yield (MSY)⁴¹. Utilization duties oblige a coastal State to give access to the EEZ to other States in case the TAC cannot be harvested.⁴² When doing so, the LOSC provides for a list of conservation measures that a coastal State can relate to in order to ensure fulfilment of its conservation duties, including the licensing of fishermen and fishing vessels and the determination of catch quotas.⁴³ In this regard, a coastal State is also primarily responsible for compliance and enforcement.⁴⁴ Historically, the EEZ was (at least partly) thought to expand State control over fish stocks and thereby limit the Grotian concept of free fishing. Through the LOSC's zonal approach nearly 40 per cent of the former high seas have been transformed into EEZs.⁴⁵ As a result, it is estimated that 95 per cent of all commercially exploitable fish stocks are now found within the EEZs.⁴⁶

Lastly, on the high seas beyond the EEZ the concept of freedom of fishing generally continues to exist.⁴⁷ However the LOSC and the FSA limit this freedom by entrenching extensive duties to cooperate in establishing conservation measures.⁴⁸ In practice, this cooperation is mainly realized through regional fishing management organizations (RFMOs).⁴⁹ RFMOs are established through regional agreements under international law and fulfill a management and monitoring role in particular regions or regarding particular species.⁵⁰ Today, almost all areas of the high seas are supervised by RFMOs.⁵¹ Having said this, not much is left of the Grotian idea of free fishing.

2.2.1.1.2. Species-specific Rules

In addition to the definition of maritime zones, the UN Law of the Sea Regime establishes specific rules for certain fish stocks and species. More specifically, the LOSC contains rules for shared stocks⁵², straddling stocks⁵³, highly migratory

⁴¹ Art. 61 (3) LOSC.

⁴² Art. 62 (2) LOSC.

⁴³ Art. 62 (4) LOSC.

⁴⁴ Art. 73 LOSC.

⁴⁵ A. V. Lowe, 'Reflections on the Waters: Changing Conceptions of Property Rights in the Law of the Sea', 1 *International Journal of Estuarine and Coastal Law* (1986) 1, 1, 4; D. R. Rothwell & T. Stephens, *International Law of the Sea*, 2nd ed. (2016), 308.

⁴⁶ UNCED, Agenda 21, 1992, para. 17.70, available at https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf (last visited 14 January 2022).

⁴⁷ Art. 87 (1) and 116 LOSC.

⁴⁸ Art. 117 f. LOSC, Art. 8 FSA.

⁴⁹ Young, *supra* note 18, 35, 39.

⁵⁰ For RFMOs, see R. Rayfuse, 'Regional Fishing Management Organizations', in D. R. Rothwell *et al.* (eds), *The Oxford Handbook of the Law of the Sea* (2015), 439.

⁵¹ See S. Cullis-Suzuki & D. Pauly, 'Failing the High Seas: A Global Evaluation of Regional Fisheries Management Organizations', 34 *Marine Policy* (2010), 1036, 1037.

⁵² Art. 63 (1) LOSC.

⁵³ Art. 63 (2) LOSC.

species⁵⁴, marine mammals⁵⁵, anadromous stocks,⁵⁶ catadromous species⁵⁷ and sedentary species⁵⁸ that oblige coastal States and distant water fishing States to cooperate in conservation matters. Building upon this approach, the FSA sets out general principles for the conservation and management of straddling stocks and highly migratory species on the high seas and within EEZs.⁵⁹ In this context, the FSA also introduces concepts of international environmental law into the UN Law of the Sea Regime, including first and foremost the precautionary approach.⁶⁰

Presumably the most controversial issue regarding the species-specific approach of the UN Law of the Sea Regime is the exploitation of marine mammals, particularly through whaling. Although the LOSC excludes marine mammals from the duty to promote optimum utilization,⁶¹ it does not prohibit the exploitation of marine mammals per se. Instead, it only enables coastal States and RFMOs to prohibit, limit or regulate the exploitation of marine mammals more strictly. In regard to whaling, numerous States have taken prohibition measures, many under the binding obligation of the International Convention for the Regulation of Whaling (ICRW). Nevertheless, since the Japanese withdrawal from the ICRW in 2019, whaling remains an issue that reveals the conflicting interests behind the international regulation of ocean fisheries.

2.2.1.2. FAO Fisheries Management Regime

Within the framework provided by the UN Law of the Sea Regime, a broad spectrum of legal instruments is operated by the FAO. Although these instruments are widely aligned with the LOSC and FSA, they are not part of the UN Law of the Sea Regime. Due to the institutional independence of the FAO and its autonomous legal approach, they instead form an own legal regime that specifically focusses on the management and conservation of ocean fisheries: the FAO Fisheries Management Regime. Unlike the UN Law of the Sea Regime, the FAO Fisheries Management Regime is not limited to binding agreements, but focusses primarily on voluntary instruments, including

⁵⁴ Art. 64 LOSC.

⁵⁵ Art. 65 LOSC.

⁵⁶ Art. 66 LOSC.

⁵⁷ Art. 67 LOSC.

⁵⁸ Art. 68, 77 (4) LOSC.

⁵⁹ Art. 5 FSA.

⁶⁰ Art. 6 FSA; Proelss & Houghton, *supra* note 20, 240 therefore aptly describe the FSA as "a missing link between the law of the sea and international environmental law." See also Harrison, *supra* note 27, 176. For the precautionary approach in international fisheries law, see F. González-Laxe, 'The Precautionary Principle in Fisheries Management', 29 *Marine Policy* (2005), 496.

⁶¹ J. Harrison & E. Morgera, 'Article 65', in A. Proelss (ed), *The United Nations Convention on the Law of the Sea: A Commentary* (2017), 519, 523, para. 8.

inter alia a code of conduct⁶², international plans of action⁶³ and guidelines⁶⁴. As a result, the FAO Fisheries Management Regime is far more responsive in addressing emerging issues related to the governance of ocean fisheries, including IUU fishing.⁶⁵

2.2.2. International Environmental Law

From the perspective of international environmental law, numerous legal regimes relate to ocean fisheries in one way or the other. For the purpose of this paper, the CITES Regime established through the 1973 Convention on International Trade in Endangered Species (CITES)⁶⁶ is particularly interesting.⁶⁷ CITES is a legally binding instrument that addresses the trade of endangered species. In regards to ocean fisheries, CITES significantly wins in importance as the definition of trade under CITES is not limited to export, re-export and import but it also includes the introduction of endangered species from the sea, as long as the respective marine environment is not under the jurisdiction of any State.⁶⁸ Against the backdrop of the LOSC, the latter can undoubtedly be affirmed for the high seas and denied for a coastal State's territorial sea. However, the establishment of EEZs posed the question whether sovereign rights in the sense of the LOSC equal State jurisdiction in the sense of CITES. In 2007, the conference of the parties to CITES agreed to define jurisdiction as the presence of sovereignty or sovereign rights of a State consistent with international law, thereby propelling an interlinkage of CITES and the LOSC.⁶⁹ As a result, however, CITES now covers fishing for export, re-export and import from all marine zones while fishing for national consumption is limited to catch from the high seas.⁷⁰ The protection of endangered species under CITES follows a graduated concept. Species are divided into three levels of protection represented by the appendices to the

⁶² FAO Code of Conduct for Responsible Fisheries, 1995, available at http://www.fao.org/fishery/code/en (last visited 14 January 2022).

⁶³ FAO International Plan of Action for the Management of Fishing Capacity, 1999; FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries, 1999; FAO International Plan of Action for the Conservation and Management of Sharks, 1999; FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, 2001; all available at http://www.fao.org/fishery/code/ipoa/en (last visited 14 January 2022).

⁶⁴ FAO Voluntary Guidelines for Flag State Performance, 2014, available at http://www.fao.org/3/i4577t.pdf (last visited 14 January 2022); FAO Voluntary Guidelines for Catch Documentation Schemes, 2017, available at http://www.fao.org/_3/i8076en/I8076EN.pdf (last visited 14 January 2022); FAO Voluntary Guidelines on the Marking of Fishing Gear, 2018, available at http://www.fao.org/3/ca3546t/ca3546t.pdf (last visited 14 January 2022).

⁶⁵ See section D. below.

⁶⁶ Convention on International Trade in Endangered Species of Wild Flora and Fauna, 3 March 1973, 993 UNTS 243.

⁶⁷ Other relevant legal instruments in this context are inter alia the Convention on Biological Diversity, 5 June 1992, 1760 UNTS 79 and the Convention on the Conservation of Migratory Species of Wild Animals, 23 June 1979, 1651 UNTS 333.

⁶⁸ Young, supra note 18, 57.

⁶⁹ CITES Res. Conf. 14.6 (2007), available at https://cites.org/eng/res/14/14-06R16.php (last visited 14 January 2022).

⁷⁰ Young, *supra* note 18, 57, 146.

convention:⁷¹ Appendix I includes species threatened with extinction, Appendix II includes species likely to become threatened with extinction and Appendix III includes species in need for prevention of unsustainable or illegal exploitation. As an example, all whale species are currently listed under Appendix I of CITES and therefore only exceptionally permitted for trade under set conditions.⁷²

2.2.3. International Trade Law

Fish and fisheries products belong to the most traded commodities in the world. Accordingly, the international regulation of ocean fisheries is closely linked to international trade law, especially in the shape of the World Trade Organization (WTO) Regime. In relation to the subject dealt with in this paper, the multilateral 1994 General Agreement on Tariffs and Trade (GATT)⁷³ is of particular interest.⁷⁴ The GATT is the core agreement of the WTO Regime established through the 1994 Marrakesh Agreement⁷⁵. The GATT does not directly address ocean fisheries. However, it sets boundaries to any measures affecting international trade, including such in fish and fisheries products. For example, the GATT requires equal treatment of imported and national products⁷⁶, minimization of formalities and documentation requirements⁷⁷ and refrainment from trade restrictions other than duties, taxes or other charges⁷⁸.⁷⁹ This contrasts various measures that a State may be obliged to adopt in order to fulfil its conservation duties under the LOSC or other relevant international agreements. Some of the exceptions contained in the GATT are coined to promote conformity between trade and conservation.⁸⁰ Nevertheless, the underlying conflict of interest between free trade and marine conservation has become increasingly evident in various cases brought before the WTO's dispute settlement mechanism.81

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The emergence of international ocean governance has not only led to an increase in the

⁷² Harrison & Morgera, *supra* note 61, 525, para. 15; Young, *supra* note 18, 58.

⁷¹ Art. III-V CITES.

⁷³ General Agreement on Tariffs and Trade, 15 April 1994, 1867 UNTS 187.

⁷⁴ Other relevant legal instruments in this context are inter alia the Agreement on Technical Barriers to Trade, 15 April 1994, 1868 UNTS 120, the Agreement on the Application of Sanitary and Phytosanitary Measures, 15 April 1994, 1867 UNTS 493 and the Agreement on Subsidies and Countervailing Measure, 15 April 1994, 1869 UNTS 14.

⁷⁵ Agreement Establishing the World Trade Organization, 15 April 1994, 1867 UNTS 154.

⁷⁶ Art. III GATT.

⁷⁷ Art. VIII GATT.

⁷⁸ Art. XI GATT.

⁷⁹ M. A. Palma, M. Samenyi & W. Edeson, *Promoting Sustainable Fisheries* (2010) 82.

⁸⁰ Especially Art. XI:2 (c) and XX (g) GATT.

⁸¹ See exemplarily P.-T. Stoll & S. Vöneky, 'The Swordfish Case: Law of the Sea v. Trade', 62 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* (2002), 21 as well as K. Auld, 'Trade Measures to Prevent Illegal Fishing and the WTO: An Analysis of the Settled Faroe Islands Dispute', 17 *World Trade Review* (2018) 4, 665.

conservation of marine environments but also involuntarily promoted the issue of IUU fishing which has evolved into one of the major issues of international ocean governance over the past decades.⁸² When IUU fishing activities peaked in the mid-1990s due to a growing demand for fish and fisheries products, an overcapacity of the world's fishing fleet and an increase in sea-related regulations, the necessity for specific legal instruments targeting IUU fishing became obvious.⁸³ As a legal term, however, IUU fishing only drew scholarly attention through the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)⁸⁴.⁸⁵

3.1. Definition

The acronym "IUU" aims at comprising all varieties of fishing in violation of or without regard to international, regional and national regulations and standards for ocean fisheries. Semantically, IUU fishing can be classified between "fish poaching" and "fisheries crime". As the first international legal instrument to explicitly address IUU fishing, the IPOA-IUU provides a comprehensive definition of IUU fishing activities that has been cited or adopted by other relevant international and regional instruments. Se

3.1.1. Illegal Fishing

Illegal fishing broadly refers to any fishing in violation of national, regional or international laws. In detail, illegal fishing encompasses three kinds of fishing activities: firstly, fishing conducted in violation of national law within waters under national jurisdiction;⁸⁹ secondly, fishing conducted by vessels flying flags of RFMO member States in violation of binding RFMO conservation and management measures or relevant provisions of international law;⁹⁰ and thirdly, fishing conducted by vessels

⁸² See SG Rep. 54/429, UN Doc A/54/429, 30 September 1999, 42: "[T]he prevalence of illegal, unregulated and unreported (IUU) fishing on the high seas, in contravention of conservation and management measures adopted by subregional and regional fisheries management organizations and arrangements, is considered to be one of the most severe problems currently affecting world fisheries."

⁸³ D. J. Agnew *et al.*, 'Estimating the Worldwide Extent of Illegal Fishing', 4 *PLoS One* (2009) 2, 1, 5.

⁸⁴ FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, 2001, available at http://www.fao.org/fishery/ipoa-iuu/en (last visited 14 January 2022).

⁸⁵ Palma, Samenyi & Edeson, supra note 79, 4.

⁸⁶ Ibid., 37

⁸⁷ For a critical analysis of the term "fisheries crime", see K. Y. Page & A. J. Ortiz, 'What's in a Name: The Importance of Distinguishing between "Fisheries Crime" and IUU Fishing', in M. H. Nordquist, J. N. Moore & R. Long (eds), *Cooperation and Engagement in the Asia-Pacific Region* (2019), 433.

⁸⁸ See K.-H. Wang, 'Combating IUU: The Driving Force behind Development of International Fisheries Law?', in M. H. Nordquist, J. N. Moore & R. Long (eds), *Cooperation and Engagement in the Asia-Pacific* Region (2019), 417, 423. These instruments include inter alia the PSMA and the European Council Regulation (EC) No. 1005/2008 (IUU Regulation).

⁸⁹ Para. 3.1.1 IPOA-IUU.

⁹⁰ Para. 3.1.2 IPOA-IUU.

flying flags of RFMO member States in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant RFMO.⁹¹ The presumably most common case of illegal fishing is fishing in a foreign EEZ without a compulsory authorization.

3.1.2. Unreported Fishing

Unreported fishing mainly addresses a subset of illegal fishing.⁹² This subset can be further divided into two kinds of fishing activities: on the one hand, any fishing conducted which has not been reported or has been misreported to the relevant national authority in violation of national law;⁹³ and on the other hand, fishing conducted by any vessel in the area of competence of a relevant RFMO which has not been reported or has been misreported in violation of RFMO reporting procedures.⁹⁴ A practical example for unreported fishing is the underreporting of catch volume from a foreign EEZ.

3.1.3. Unregulated Fishing

At last, unlike illegal and unreported fishing, unregulated fishing is not aimed at the violation of present regulations but at a lack of regulations governing a particular area, fish stock, or vessel. Unregulated fishing addresses two kinds of fishing activities: firstly, fishing conducted by vessels without nationality, by vessels flying the flag of a RFMO non-member State, or by any other fishing entity in the area of application of a relevant RFMO in violation of RFMO conservation and management measures; and secondly, fishing conducted in areas or for fish stocks in relation to which there are no applicable conservation or management measures and in violation of State responsibilities for the conservation of living marine resources under international law. One example of unregulated fishing is the strategic overfishing of high seas fish stocks in areas that do not fall into the competence of RFMOs.

3.2. Scope and Consequences

Like the regulation of ocean fisheries constitutes an intersectional challenge, IUU fishing similarly presents itself as a complex issue with broad economic, ecological and social consequences. It is estimated that around 20 per cent of the overall annual fish catch results from IUU fishing activities, amounting to 23 billion USD in market

⁹¹ Para. 3.1.3 IPOA-IUU.

⁹² See Palma, Samenyi & Edeson, supra note 79, 48.

⁹³ Para. 3.2.1 IPOA-IUU.

⁹⁴ Para. 3.2.2 IPOA-IUU.

⁹⁵ Palma, Samenyi & Edeson, supra note 79, 48.

⁹⁶ Para. 3.3.1 IPOA-IUU.

⁹⁷ Para. 3.3.2 IPOA-IUU.

value. No In some areas of the world, particularly in developing coastal States, the amount of IUU catch is presumed to be even higher. However, IUU fishing does not only cause economic losses, thus negatively affecting the fisheries market. Furthermore, it poses a major threat to sustainable fisheries. The LOSC promotes the reconciliation of optimum utilization and conservation. This is inter alia achieved through the determination of TACs and the assurance of a MSY. Notwithstanding, the successful maintenance of a MSY is highly dependent on reliable catch data and therefore hardly achievable in the presence of IUU fishing activities. As a result, IUU fishing almost automatically causes overfishing of the affected fisheries. Due to the strong dependance of artisanal fishing communities on small scale fisheries, this also threatens food security in many developing countries. Lastly, IUU fishing also constitutes a security issue as it is closely associated with other forms of transnational organized crime, including human, animal, drug and arms trafficking. However, IUU fishing constitutes a security issue as it is closely associated with other forms of transnational organized crime, including human, animal, drug and arms trafficking.

4. Combating IUU Fishing Through Law

With IUU fishing becoming a major issue of international ocean governance, it received extensive consideration in international law- and policy-making. In 2015, the General Assembly of the United Nations (UNGA) adopted the 2030 Agenda for Sustainable Development which lists the "end [of] overfishing, illegal, unreported and unregulated fishing and destructive fishing practices" by 2020 as a Sustainable Development Goal (SDG). Although a broad range of measures has been adopted since the emerge of IUU fishing in the mid-1990s, this ambitious goal has eventually been missed. IUU fishing remains a global challenge in need of further efforts. However, the international, regional and national measures taken thus far already constitute an impressive system that embodies, without implying flawless coherence, a clear multi-level approach.

4.1. International Measures

On the international level, several instruments of the UN Law of the Sea Regime and the FAO Fisheries Management Regime directly or indirectly target IUU fishing

⁹⁸ Agnew et al., supra note 83, 4.

⁹⁹ See MRAG, Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries (2015), 54.

¹⁰⁰ See GA Res. 73/125, UN Doc A/RES/73/125, 11 December 2018, para. 74: "Emphasizes once again its serious concern that illegal, unreported and unregulated fishing remains one of the greatest threats to fish stocks and marine ecosystems and continues to have serious and major implications for the conservation and management of ocean resources [...]".

¹⁰¹ On the security implications of IUU fishing, see M. Rosello, 'Illegal, Unreported and Unregulated (IUU) Fishing as a Maritime Security Concern', in L. Otto (ed), *Global Challenges in Maritime Security* (2020), 33.

¹⁰² GA Res. 70/1, UN Doc A/RES/70/1, 25 September 2015, Target 14.4.

¹⁰³ See also the recent Working Document COFI/2020/7 of the FAO Committee on Fisheries, available at http://www.fao.org/3/ne710en/ne710en.pdf (last visited 14 January 2022).

activities. For the purpose of this paper, these instruments are distinguished by their binding effect. However, the distinction between binding "hard law" and voluntary "soft law" must not anticipate the regulatory success or failure of an instrument. International instruments, binding and voluntary alike, set out the general conditions and standards for combating and preventing IUU fishing.

4.1.1. Legally Binding Instruments ("Hard Law")

The four most relevant legally binding international instruments in regard to IUU fishing are the LOSC, the FSA, the 1993 FAO Compliance Agreement (CA)¹⁰⁴ and the 2009 FAO Port State Measures Agreement (PSMA)¹⁰⁵.

4.1.1.1. UN Convention on the Law of the Sea

Although IUU fishing is not explicitly addressed in the LOSC, the LOSC formulates some general principles of the law of the sea that are reiterated and specified by other international instruments. One particularly important principle is flag State responsibility. In the specific context of IUU fishing, flag State responsibility refers to the obligation of a State to control the fishing activities of vessels flying its flag in order to ensure compliance to conservation and management measures adopted by coastal States and RFMOs. In Flag State responsibility reflects the established doctrine under international law that there has to be a "genuine link" between a vessel and its registry State. This "genuine link" traditionally manifests in the exercise of

¹⁰⁴ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, 14 November 1993, 2221 UNTS 91.

¹⁰⁵ Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, 22 November 2009, 55 ILM 1159.

¹⁰⁶ J.-H. Paik, 'Special Address: IUU Fishing and the International Tribunal for the Law of the Sea', in H. N. Scheiber, N. Oral & M.-S. Kwon (eds), *Ocean Law Debates: The 50-Year Legacy and Emerging Issues for the Years Ahead* (2018), 266, 274: "Indeed, strengthening of flag State responsibility in respect of IUU fishing represents one of the most significant developments of international fisheries law during the past two decades."

¹⁰⁷ See FAO, Technical Guidelines for Responsible Fisheries No. 9: Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (2002), 20 ff. For a general introduction to flag State responsibility in international fisheries law, see Y. Takei, 'Assessing Flag State Performance in Legal Terms: Clarifications of the Margin of Discretion', 28 International Journal of Marine and Coastal Law (2013) 1, 97 as well as C. J. Goodman, 'Flag State Responsibility in International Fisheries Law – Effective Fact, Creative Fiction, or Further Work Required?', 23 Australian and New Zealand Maritime Law Journal (2009) 2, 157 and T. Zwinge, 'Duties of Flag States to Implement and Enforce International Standards and Regulations – And Measures to Counter their Failure to Do So', 10 Journal of International Business and Law (2011) 2, 297. For an extensive analysis of flag State responsibility in the context of IUU fishing, see G. Handl, 'Flag State Responsibility for Illegal, Unreported and Unregulated Fishing in Foreign EEZs', 44 Environmental Policy and Law (2014) 1/2, 158 and V. J. Schatz, 'Combating Illegal Fishing in the Exclusive Economic Zone – Flag State Obligations in the Context of the Primary Responsibility of the Coastal State', 7 Goettingen Journal of International Law (2016) 2, 383.

¹⁰⁸ Art. 91 (1) LOSC. See also *The M/V* "*SAIGA*" (*No.* 2) *Case* (*Saint Vincent and the Grenadines v. Guinea*), ITLOS, *Case No.* 2, Judgment, 1 July 1999, paras. 75 ff.; *The M/V* "*Virginia G*" *Case* (*Panama v. Guinea-Bissau*), ITLOS, *Case No.* 19, Judgment, 14 April 2014, paras. 102 ff.

jurisdiction and control in administrative, technical and social matters.¹⁰⁹ In 2015, however, the International Tribunal for the Law of the Sea (ITLOS) clarified that flag State responsibility also encompasses a due diligence obligation to prevent IUU fishing which even stretches into the EEZs of coastal States. 110 On first sight, this may appear as a contrast to the primary responsibility of coastal States for compliance and enforcement within their EEZs.111 However, taking into account that many coastal States, especially in the global south, are unable to guarantee monitoring, control and surveillance of their EEZs, a secondary responsibility of flag States becomes all the more important in combating IUU fishing. Given that the LOSC explicitly only provides a sporadic regulation of flag State responsibility that does not target IUU fishing, 112 the ITLOS has noticeably fleshed out the concept of flag State responsibility. The extensive interpretation of the LOSC by the ITLOS has established parallel flag and coastal State responsibility within EEZs and significantly solidified flag State responsibility on the high seas. The significance of this finding is further increased by the fact that other instruments addressing flag State responsibility are either voluntary in nature or have not been received comparably well by States.¹¹³ However, some scholars have also remarked that the extent of the interpretation brought forward by the ITLOS excesses agreed limits of interpretation, thus constituting judicial development of the law.¹¹⁴

4.1.1.2. FAO Compliance Agreement

In 1993, when the CA was adopted as the first legally binding international instrument of the post-LOSC era, the concept of flag State responsibility was still highly underregulated concerning IUU fishing.¹¹⁵ The starting point for the negotiations of the CA was marked by the emerging issue of "reflagging" vessels into so-called "flags of convenience".¹¹⁶ This practice served and still serves to avoid compliance to

¹⁰⁹ Art. 58 (2), 94 LOSC.

¹¹⁰ Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC) (Request for Advisory Opinion submitted to the Tribunal), ITLOS, Case No. 21, Advisory Opinion, 2 April 2015, paras. 110 ff. For an extensive analysis by an ITLOS judge and former president, see Paik, *supra* note 106. For a scholarly critique, see V. J. Schatz, 'Fishing for Interpretation: The ITLOS Advisory Opinion on Flag State Responsibility for Illegal Fishing in the EEZ', 47 Ocean Development and International Law (2016) 4, 327 and J. Gao, 'The ITLOS Advisory Opinion for the SRFC', 14 Chinese Journal of International Law (2015) 4, 735.

¹¹¹ Art. 73 LOSC.

¹¹² See ITLOS, Case No. 21, supra note 110, Separate opinion of Judge Paik, para. 5.

¹¹³ These include the CA, the FSA and the IPOA-IUU.

¹¹⁴ V. J. Schatz, 'Die Rolle des Flaggenstaates bei der Bekämpfung illegaler Fischerei in der AWZ im Lichte der jüngeren internationalen Rechtsprechung', 28 *Zeitschrift für Umweltrecht* (2017), 345, 352; Schatz, *supra* note 110, 338 f.; Gao, *supra* note 110, 754 f.

¹¹⁵ For a detailed analysis of the CA, see W. Edeson, D. Freestone & E. Gudmundsdottir, *Legislating for Sustainable Fisheries: A Guide to Implementing the 1993 FAO Compliance Agreement and the 1995 UN Fish Stocks Agreement* (2001), 5 ff.

¹¹⁶ See FAO, Fisheries Report No. 722: Report of the Expert Consultation on Fishing Vessels Operating under Open Registries and Their Impact on Illegal, Unreported and Unregulated Fishing (2004), Appendix E.

conservation and management measures on the high seas by flying a flag of an "open registry" State that is non-compliant to its legal obligations under the LOSC or relevant RFMOs.¹¹⁷ While the LOSC clearly mandates coastal States to ensure compliance and enforcement within their EEZs, an effective conservation of high seas fisheries is highly dependent on the compliance of flag States, thus making high seas fish stocks especially vulnerable to IUU fishing. In order to address this issue, the CA establishes specific flag State measures, including the issuance of fishing authorizations¹¹⁸, the maintenance of vessel records¹¹⁹ and the exchange of information with other States and the FAO¹²⁰.¹²¹

4.1.1.3. UN Fish Stocks Agreement

Similar to the CA, the FSA seeks to level out weak spots of the LOSC.¹²² It ties in with the CA by establishing additional flag State obligations, including the marking of fishing vessels and fishing gear¹²³, the recording and reporting of fisheries data¹²⁴ and the verification of catch¹²⁵.¹²⁶ In its core, however, the FSA fleshes out the species-specific approach of the LOSC by providing additional regulations concerning the cooperative management and conservation of straddling stocks and highly migratory species. In order to achieve consistency concerning these goals, the FSA requires coastal and distant water fishing States to align conservation and management measures.¹²⁷ The FSA puts great emphasis on the role of RFMOs. While the basic foundation for regional cooperation is provided by the LOSC, the FSA sets out a normative framework for RMFOs that provides guidance for their establishment,¹²⁸ outlines their functions¹²⁹ and clarifies their enforcement competences¹³⁰.

¹¹⁷ On this issue, see D. D. Miller & U. R. Sumaila, 'Flag Use Behavior and IUU Activity within the International Fishing Fleet: Refining Definitions and Identifying Areas of Concern', 44 *Marine Policy* (2014), 204. The International Transport Workers' Federation (ITF) has declared 42 registries as "flags of convenience registries", including inter alia the German International Ship Register (GIS), available at https://www.itfglobal.org/en/sector/seafarers/flags-of-convenience (last visited 14 January 2022). ¹¹⁸ Art. III (2), (3), (4), (5) CA.

¹¹⁹ Art. IV CA.

¹²⁰ Art. V, VI CA.

¹²¹ Palma, Samenyi & Edeson, *supra* note 79, 60 f.; Edeson, Freestone & Gudmundsdottir, *supra* note 115, 5.

¹²² For a detailed analysis of the FSA, see A. Tahindro, 'Sustainable Fisheries: The Legal Regime of the 1995 United Nations Fish Stocks Agreement and Its Contribution to Subsequent Developments Promoting Sustainable Fisheries', in M. H. Nordquist, J. N. Moore & R. Long (eds), *Legal Order in the World's Oceans: UN Convention on the Law of the Sea* (2018), 323.

¹²³ Art. 18 (d) FSA.

¹²⁴ Art. 18 (e) FSA.

¹²⁵ Art. 18 (f) FSA.

¹²⁶ Palma, Samenyi & Edeson, supra note 79, 61.

¹²⁷ Art. 7 FSA.

¹²⁸ Art. 9 FSA.

¹²⁹ Art. 10 FSA.

¹³⁰ Art. 21 ff. FSA.

4.1.1.4. FAO Port State Measures Agreement

The PSMA is the first legally binding instrument focusing solely on IUU fishing.¹³¹ While the LOSC puts coastal States in the center of its regulatory approach and the CA and FSA stress the responsibility of flag States and RFMOs, the PSMA chooses port States as a leverage point. This is not to say that port State responsibility has not been addressed in international fisheries law at all before the PSMA. On the contrary, already the FSA contained rudimentary port State measures. 132 These were, however, voluntary in nature. 133 Starting point for the negotiation of the PSMA were – similar to the issue of "flags of convenience" addressed by the CA134 - so-called "ports of convenience", which are non-compliant to their obligation to enforce conservation and management measures and thereby constitute a loophole for the introduction of fish and fisheries products from IUU fishing activities to the market. 135 Due to the fact that a denial of port access makes IUU fishing highly unprofitable, a harmonized enforcement of conservation and management measures by port States bears the potential to function as a relatively powerful, inexpensive and safe tool in the fight against IUU fishing. 136 The PSMA seeks to make use of this through the establishment of common procedures for the entry of vessels into ports, for the inspection of vessels in ports and for measures against vessels found to be involved in IUU fishing. 137 Port States that are parties to the PSMA are to designate ports to which vessels may request entry to and ensure that those ports have the capacity to carry out any inspections required under the PSMA.¹³⁸ In advance to granting entry to these ports, port States must require information from vessels requesting port entry, including information on the vessel and its catch.¹³⁹ If there is sufficient proof that a vessel is involved in IUU fishing, port entry shall be denied. 140 Additionally, if an inspection upon entry into the port brings forth inconsistencies, the use of the port shall also be denied. 141 As the most recent binding instrument affecting IUU fishing, the PSMA is paradigmatic for the regulatory expansion of State responsibilities in combating IUU fishing.

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¹³¹ The PSMA was predated by and is largely based on the voluntary FAO Model Scheme on Port State Measures to Combat Illegal, Unreported and Unregulated Fishing, 2005, available at http://www.fao.org/3/a0985t/A0985T.pdf (last visited 14 January 2022). For a detailed analysis of the PSMA, see E. J. Molenaar, 'Port State Jurisdiction to Combat IUU Fishing: The Port State Measures Agreement', in D. A. Russel & D. L. VanderZwaag (eds), *Recasting Transboundary Fisheries Management Arrangements in Light of Sustainability Principles* (2010), 369.

¹³² Art. 23 FSA.

¹³³ This is expressed by the use of "may" in Art. 23 (2), (3) FSA. See also E. Witbooi, 'Illegal, Unreported and Unregulated Fishing on the High Seas: The Port State Measures Agreement in Context', 29 *International Journal of Marine and Coastal Law* (2014) 2, 290, 296.

¹³⁴ See section D. I. 1. b. above.

¹³⁵ Molenaar, supra note 131, 373.

¹³⁶ Witbooi, supra note 133, 294.

¹³⁷ Palma, Samenyi & Edeson, *supra* note 79, 64.

¹³⁸ Art. 7 PSMA.

¹³⁹ Art. 8 PSMA.

¹⁴⁰ Art. 9 PSMA.

¹⁴¹ Art. 11 PSMA.

4.1.2. Voluntary Instruments ("Soft Law")

Primarily under the auspices of the FAO, numerous voluntary instruments touching upon IUU fishing have been adopted. In some cases, these instruments have laid the ground for subsequent binding instruments on the international or regional level. In other cases, they have remained a mere guiding light for States willing to holistically address IUU fishing. The most relevant voluntary international instruments are the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF) and the IPOA-IUU. However, also the 2014/2017/2018 FAO Voluntary Guidelines and the 2018 FAO Global Record should not remain unnoticed.

4.1.2.1. FAO Code of Conduct for Responsible Fisheries

The CCRF sets out general international principles and standards for the conservation, management and development of fisheries resources. He uniqueness of the CCRF lies within the idea to consolidate the approaches of different international instruments within one and thereby provide comprehensive guidance to a sustainable future for fisheries. Pursuant to this agenda, the CCRF is designed as an allencompassing framework for sustainable fisheries governance that is global in scope and addresses States, organizations and private individuals alike. This wide approach is also represented by the fact that the CCRF actively integrates the CA and other FAO instruments into its framework. The CCRF is to be interpreted and applied not only in conformity with the LOSC but also in a manner consistent with the CA and FSA as well as in the light of other international instruments. In the specific context of IUU fishing, the CCRF mainly reiterates measures introduced by the CA and FSA, including flag State measures. However, the main contribution of the CCRF to combating IUU fishing is to be seen in providing a breeding ground for the IPOA-IUU.

¹⁴² For the role of soft law instruments in international fisheries law, see W. Edeson, 'Closing the Gap: The Role of "Soft" International Instruments to Control Fishing', 20 *Australian Yearbook of International Law* (1999) 1, 83.

¹⁴³ Supra note 62.

¹⁴⁴ Supra note 64.

¹⁴⁵ FAO Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels, 2018, available at http://www.fao.org/global-record/en/ (last visited 14 January 2022).

¹⁴⁶ Art. 1.3 CCRF. For a detailed analysis of the CCRF, see T. Treves, 'The FAO Code of Conduct for Responsible Fisheries between Soft and Hard Law', in M. Lodge & M. H. Nordquist (eds), *Peaceful Order in the World's Oceans: Essays in Honor of Satya N. Nandan* (2014), 299.

¹⁴⁷ Art. 1.2 CCRF.

¹⁴⁸ Supra note 63.

¹⁴⁹ Art. 3 CCRF.

¹⁵⁰ Art. 8.2 CCRF.

¹⁵¹ Art. 8.3 CCRF.

4.1.2.2. FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

Elaborated within the framework of the CCRF, the IPOA-IUU is presumably the most important international instrument in combating IUU fishing. Due to its voluntary nature, the IPOA-IUU has been aptly considered a "comprehensive toolbox". 152 The tools provided for by the IPOA-IUU are categorized into all State¹⁵³, flag State¹⁵⁴, coastal State¹⁵⁵, port State¹⁵⁶ and internationally agreed market-related measures¹⁵⁷. Additionally, the IPOA-IUU stresses the role of RFMOs as regional cooperation platforms for combating IUU fishing. The uniqueness of the IPOA-IUU lies within its holistic approach to IUU fishing. All binding instruments bear a certain overemphasis on measures of a single kind: The LOSC focuses on coastal States, the CA on flag States, the FSA on RFMOs and the PSMA on port States. The IPOA-IUU, on the contrary, does not single out certain aspects of IUU fishing but addresses the issue as a global challenge in need of a coordinated response. Against the backdrop of the restrained reception of the CA and FSA, it can be said that the almost visionary character of the IPOA-IUU would not have gone through the negotiations of a binding instrument. Notwithstanding its voluntary nature, the IPOA-IUU today, 20 years later, still serves as a gold standard for combating IUU fishing.

4.1.2.3. Newer FAO Instruments

In the past years, the FAO has adopted three guidelines that spell out certain aspects of particular relevance for the implementation of the IPOA-IUU. In detail, these guidelines address the assessment of flag State performance¹⁵⁸, on catch documentation schemes¹⁵⁹ and on the marking of fishing gear¹⁶⁰. Additionally, the FAO has launched a global vessel record functioning as a single access point for information on vessels used for fishing and fishing-related activities.¹⁶¹

4.2. Regional Measures

On the regional level, RFMOs play a major role in combating IUU fishing through the implementation of international instruments and the harmonization of national

¹⁵² FAO, supra note 107, xiii.

¹⁵³ Paras. 10 ff. IPOA-IUU.

¹⁵⁴ Paras. 34 ff. IPOA-IUU.

¹⁵⁵ Para. 51 IPOA-IUU.

¹⁵⁶ Paras. 52 ff. IPOA-IUU.

¹⁵⁷ Paras. 65 ff. IPOA-IUU.

¹⁵⁸ Supra note 64. For a detailed analysis, see K. Erikstein & J. Swan, 'Voluntary Guidelines for Flag State Performance: A New Tool to Conquer IUU Fishing', 29 International Journal of Marine and Coastal Law (2014) 1, 116.

¹⁵⁹ Supra note 64.

¹⁶⁰ Supra note 64.

¹⁶¹ *Supra* note 145.

measures. Additionally, the EU has advanced to an influential actor.

4.2.1. Regional Fishing Management Organizations

RFMOs function as regional or species-specific cooperation platforms for the conservation and management of ocean fisheries. The LOSC establishes a duty to cooperate regarding the conservation and management of certain stocks and species as well as the high seas in general. 162 This obligation is specified and fleshed out by other international instruments, including first and foremost the FSA163 but also the CA¹⁶⁴ and the CCRF¹⁶⁵. Established by agreements under international law, the main task for RFMOs used to lie within the adoption of conservation and management measures with a binding effect on their member States. 166 However, since the emerge of IUU fishing, the scope of RFMO measures has substantially broadened. Today, RFMOs play a major role in the monitoring, control and surveillance of high seas fisheries as well as the promotion and enforcement of compliance. ¹⁶⁷ In a way, RFMOs can thus be viewed as stewards of the high seas. Due to the diversity of RFMOs, the adopted measures are not uniform. Measures can but don't have to cover the full spectrum of the IPOA-IUU, including port access, port inspections, vessel lists, vessel monitoring systems, catch documentation schemes, vessel catch reporting, vessel authorization, vessel licensing, vessel marking requirements and market-related measures. 168 Just like international instruments, RFMOs are highly dependent on national implementation. Nevertheless, they provide a more approachable regulatory framework that is able to take into account regional peculiarities.

4.2.2. European Union

The EU is a party to all four major binding international instruments touching upon IUU fishing as well as to 14 RFMOs and is therefore obliged to implement measures combating IUU fishing in its role as a coastal, flag and port "State". Within the framework of the EU Common Fisheries Policy, EU law specifically addresses IUU fishing through the Council Regulation (EC) No. 1005/2008 (IUU Regulation) and

¹⁶² Art. 63 ff., 118 LOSC.

¹⁶³ Art. 8 ff., 21 ff. FSA.

¹⁶⁴ Art. 5 CA.

¹⁶⁵ Art. 6.12, 7.1.3, 7.1.4, 8.1.4, 10.3.3 CCRF.

¹⁶⁶ Palma, Samenyi & Edeson, supra note 79, 204.

¹⁶⁷ Erikstein & Swan, supra note 158, 129.

¹⁶⁸ See J. Swan, 'Illegal, Unreported, and Unregulated Fishing: Are RFMOs Effectively Addressing the Problem?', 34 *Ocean Yearbook* (2020) 1, 299, 310.

¹⁶⁹ Evidently, the EU is no State but a (partly) constitutionalized supranational organization. However, as a party to various agreements in the context of international fisheries law, the EU fulfils the role of a coastal, flag and port State.

¹⁷⁰ Council Regulation (EC) No. 1005/2008, OJ 2008 L 286/1. For a detailed analysis, see M. Tsamenyi *et al.*, 'The European Council Regulation on Illegal, Unreported and Unregulated Fishing: An International Fisheries Law Perspective', 25 *International Journal of Marine and Coastal Law* (2010) 1, 5; see also X. P.

the implementing Commission Regulation (EC) No. 1010/2009¹⁷¹. The IUU Regulation is heralded as an effective mechanism to drive reforms in global fisheries management through the EU's influence as a major market participant.¹⁷² In fact, it implements an impressive breadth of measures introduced by binding and voluntary international instruments, including port access control¹⁷³, port inspections¹⁷⁴, catch documentations¹⁷⁵ and IUU vessel lists¹⁷⁶.

In its core, however, the IUU Regulation establishes a system of trade-related access conditionality in which the access of fish and fisheries products to the common market of the EU is dependent on the extent to which the State of origin is involved in IUU fishing.¹⁷⁷ This system of access conditionality is realized through a carding scheme that distinguishes "yellow cards" (formal warning), red cards" (identification as non-cooperating) and "green cards" (successful reforms).¹⁷⁸ As soon as a State falls short of its international obligations as a coastal, flag, port or market State to take action against IUU fishing, the European Commission initiates an informal dialogue to address these shortcomings.¹⁷⁹ If this dialogue is successful, a formal warning and subsequent identification as non-cooperating is avoided.¹⁸⁰ However, if the dialogue is unsuccessful, a pre-identifying formal warning¹⁸¹, a "yellow card", is issued by the European Commission.¹⁸² This warning includes a list of all shortcomings of the respective State in regard to IUU fishing.¹⁸³ Additionally, it starts a formal dialogue in which the suspected IUU origin State is required to formulate an official response and provide a plan of action to address the listed shortcomings.¹⁸⁴ If sufficient assurances

Rafols, 'The EU's global leadership in the fight against illegal, unreported, and unregulated fishing', in M. Campins Eritja (ed), *The European Union and Global Environmental Protection: Transforming Influence into Action* (2021), 73.

¹⁷¹ Commission Regulation (EC) No. 1010/2009, OJ 2009 L 280/5.

¹⁷² EUMOFA, *The EU Fish Market* (2020), 19: "The EU trade of fisheries and aquaculture products, which comprises both imports and exports with third countries, totalled EUR 33,37 billion and 8,55 million tonnes in 2019, making the EU the second largest trader of these products in the world after China." The European Commission claims that more than 50 States have improved their system to fight IUU fishing due to the effect of the IUU Regulation, see the factsheet available at https://ec.europa.eu/fisheries/cfp/illegal_fishing_en (last visited 14 January 2022).

¹⁷³ Art. 4 ff. IUU Regulation.

¹⁷⁴ Art. 9 ff. IUU Regulation.

¹⁷⁵ Art. 12 ff. IUU Regulation.

¹⁷⁶ Art. 27 ff. IUU Regulation.

¹⁷⁷ Tsamenyi et al., supra note 169, 6.

¹⁷⁸ The carding scheme applied by the European Commission is not explicitly set out in the IUU Regulation. However, it can be viewed as an implementation of Art. 31-36 and 38 IUU Regulation regarding the identification of non-cooperating third States.

¹⁷⁹ This informal dialogue takes place as a "mutual assistant request" pursuant to Art. 51 (1) IUU Regulation. See G. Hosch, *Trade Measures to Combat IUU Fishing: Comparative Analysis of Unilateral and Multilateral Approaches* (2016), 32.

¹⁸⁰ *Ihid*

¹⁸¹ Art. 32 IUU Regulation.

¹⁸² Hosch, *supra* note 178, 32.

¹⁸³ *Ibid*.

¹⁸⁴ *Ibid*.

for the adoption of reforms are given within this formal dialogue, the "yellow card" is lifted by a "green card". ¹⁸⁵ Otherwise, the third State is formally identified as non-cooperating through the issuance of a "red card" and a trade ban on fish and fisheries products from vessels flying this State's flag is established. ¹⁸⁶ This trade ban is only lifted, when the identified State can provide sufficient proof for successful reforms. ¹⁸⁷ In this case, a "green card" is issued.

The sanction-based regulatory approach of the IUU Regulation belongs to the first of its kind. ¹⁸⁸ On the one hand, it has proven its effectiveness in initiating national reforms in non-compliant States. For example, Guinea, upon the first States to be formally issued a "red card" in 2014, was issued a "green card" in 2016. ¹⁸⁹ On the other hand, however, trade-related measures significantly constrain market access, which bears challenges regarding the compatibility with international trade law. ¹⁹⁰

4.3. National Measures

National measures mainly serve for an implementation of international and regional standards. Coastal State, flag State, port State and market State measures require an effective implementation into national law that ensures compliance, enforcement and prosecution. With regard to the member States of the EU, the IUU Regulation has direct effect, thus providing for a comprehensive implementation. But also other regions have significantly progressed in implementing measures set out on the international and regional level.¹⁹¹ Nevertheless, accomplishing national implementation remains the ultimate challenge in combating IUU fishing.

5. IUU Fishing as Challenge for Regime Interaction

The above illustrates that the present legal framework against IUU fishing is a paradigm for fragmentation in international law.¹⁹² It is not only based upon a multitude of interlinked instruments from various legal regimes on the international,

¹⁸⁵ *Ibid*.

¹⁸⁶ *Ibid*.

¹⁸⁷ Art. 34 IUU Regulation.

¹⁸⁸ Some RFMOs, i.e. the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), have adopted similar trade-related measures. See Tsamenyi *et al.*, *supra* note 169, 30.

¹⁸⁹ See Council Implementing Decision (EU) 2014/170 of 24 March 2014, OJ 2014 L 91/43 and Council Implementing Decision (EU) 2016/1818 of 10 October 2016, OJ 2016 L 278/46. For an overview of the carding decisions, see the interactive map of IUU Watch, available at http://www.iuuwatch.eu/map-of-eu-carding-decisions/ (last visited 14 January 2022).

¹⁹⁰ See further on this issue M. A. Young, 'International Trade Law Compatibility of Market-related Measures to Combat Illegal, Unreported and Unregulated (IUU) Fishing', 69 *Marine Policy* (2016), 209. ¹⁹¹ See B. Hutniczak, C. Delpeuch & A. Leroy, 'Closing Gaps in National Regulations Against IUU Fishing', OECD Food, Agriculture and Fisheries Papers No. 120 (2019). For an illustrative overview of State performance regarding IUU fishing, see the IUU Fishing Index, available at https://iuufishingindex.net (last visited 14 January 2022).

¹⁹² For an introduction to fragmentation, see A. Peters, 'Fragmentation and Constitutionalization', in A. Orford & F. Hoffmann (eds), *The Oxford Handbook of the Theory of International Law* (2016), 1011, 1012 ff.

regional and national level but also requires cooperation of numerous institutions. However, the IUU system survives and thrives, thus serving as an example to show that fragmentation might not necessarily hinder successful global governance but might rather constitute a necessity of multilateral participation in a globalized world. Due to its high degree of fragmentation, the effectiveness of the IUU system poses a challenge for regime interaction. As a relatively new field of international law, regime interaction is subject to an ongoing scholarly debate. However, two superordinate dimensions of regime interaction can be carved out and identified within the IUU system: normative and institutional interaction.

5.1. Normative Interaction

Normative interaction is to be understood as the interlinkage of legal instruments.¹⁹⁷ As shown above, the IUU system is based on various instruments from different legal regimes, including but not limited to instruments from the UN Law of the Sea Regime and the FAO Fisheries Management Regime. This is also reflected by the respective legal instruments contributing to the IUU system. The LOSC, the FSA, the CCRF and the PSMA, for example, all provide multiple gateways to other legal regimes by using rules of reference and compatibility clauses.

5.1.1. Rules of Reference

Rules of reference seek to outsource law-making, thus ensuring flexible norm development across regime borders.¹⁹⁸ Acknowledging its fragmentary character as an "umbrella convention", the LOSC features numerous rules of reference. Supplemented by the FSA, it mandates States to complement the provided normative framework for the conservation of marine living resources through regional cooperation, thereby linking the UN Law of the Sea Regime to the regional legal regimes of RFMOs.¹⁹⁹ Additionally, by relating to "international minimum standards", the LOSC and FSA connect to the FAO Fisheries Management Regime.²⁰⁰ As "international minimum standards" are not defined in the LOSC and FSA, other

¹⁹³ For a critical assessment of fragmentation, see A. Peters, 'The Refinement of International Law: From Fragmentation to Regime Interaction and Politicization', 15 *International Journal of Constitutional Law* (2017) 3, 671.

¹⁹⁴ Regime interaction refers to situations in which norms and institutions of one legal regime are affected by thoser of another. See S. Trevisanut, N. Giannopoulos & R. R. Holst, 'Introduction: Regime Interaction in Ocean Governance', in S. Trevisanut, N. Giannopoulos & R. R. Holst (eds), *Regime Interaction in Ocean Governance* (2020), 1, 4.

¹⁹⁵ See representatively M. A. Young (ed), Regime Interaction in International Law: Facing Fragmentation (2012) and H. Gött, The Law of Interactions Between International Organizations (2021).

¹⁹⁶ See Trevisanut, Giannopoulos & Holst, supra note 193, 7 ff.

¹⁹⁷ Ibid.

¹⁹⁸ Jacur, *supra* note 24, 173.

¹⁹⁹ Ibid.

²⁰⁰ J. Harrison, Making the Law of the Sea (2011), 225.

instruments are required to fix such standards. Regarding responsible fisheries, the CCRF aims at filling this gap.²⁰¹ While this link between the UN Law of the Sea Regime and the FAO Management Regime still appears quite restrained in the LOSC that only requires a "taking into account"²⁰², it is significantly fleshed out in the FSA which obliges to "adopt and apply"²⁰³.²⁰⁴

5.1.2. Compatibility Clauses

Compatibility clauses address the relation of one legal instrument to another potentially overlapping or even conflicting legal instrument.²⁰⁵ As an example, the LOSC explicitly formulates the intention of an application in consistency with other conventions on the protection and preservation of the marine environment, thus providing an access point for CITES and other environmental law regimes.²⁰⁶ Similarly, the CCRF puts great emphasis on an interpretation and application in conformity with the LOSC and in consistency with the FSA.²⁰⁷ As shown by the PSMA concerning the IMO Regime, compatibility clauses can also be combined with rules of reference.²⁰⁸ In the overall context of normative regime interaction, rules of reference and compatibility clauses form a powerful tool for dynamic regime evolution.

5.2. Institutional Interaction

Institutional interaction is to be understood as the coordination of actions between institutions of different legal regimes. ²⁰⁹ Due to the large amount of actors involved in the regulation of fisheries, institutional interaction is also well established within the IUU system. In this regard, the FAO plays a special role. Firstly, cooperation between the FAO and RFMOs is particularly important as these are key for an effective implementation of the FAO instruments. However, the FAO is also involved in numerous communication routines on the international level. The FAO and the UNGA, two main actors in combating IUU fishing on the international level, have a long history of coordinating their efforts. ²¹⁰ This is expressed by the 1946 Agreement between the United Nations and the Food and Agriculture Organization of the United

²⁰¹ Art. 61 (3), 119 (1) (a) LOSC, Art. 5 (b), 10 (c) FSA.

²⁰² Art. 61 (3), 119 (1) (a) LOSC.

²⁰³ Art. 10 (c) FSA.

²⁰⁴ Harrison, supra note 199, 225.

²⁰⁵ See Trevisanut, Giannopoulos & Holst, *supra* note 193, 7 ff.

²⁰⁶ Art. 237 LOSC. See also *The South China Sea Arbitration (The Republic of Philippines v. The People's Republic of China)*, PCA, Case No. 2013-19, Award, 12 July 2016, para. 942.

²⁰⁷ Art. 3.1, 3.2 (a) CCRF.

²⁰⁸ Art. 4 (4) PSMA.

²⁰⁹ See S. Trevisanut, N. Giannopoulos & R. R. Holst, 'Conclusion: Proposing a Three-Fold Approach to Regime Interaction in Ocean Governance', in S. Trevisanut, N. Giannopoulos & R. R. Holst (eds), *Regime Interaction in Ocean Governance* (2020), 222, 228.

²¹⁰ Harrison, *supra* note 199, 235.

Nations²¹¹ that inter alia provides for reciprocal representation and the exchange of information and documents.²¹² Seeking to strengthen cooperation in the protection of endangered fish species, the FAO has also entered into a Memorandum of Understanding (MOU) with CITES.²¹³ Recently, more and more actors have been integrated into the IUU system. The International Labour Organization (ILO) joined the Joint FAO/IMO Ad Hoc Working Group on IUU Fishing and Related Matters, thus installing a labour-oriented trilogue between the FAO, IMO and ILO.²¹⁴ Furthermore, there are still ongoing negotiations with the WTO regarding the adoption of an agreement that obligates States to prohibit the subsidization of fishing industries involved in IUU fishing.²¹⁵

6. Conclusion

At first glance, the international system to combat IUU fishing appears opaque. Fragmented horizontally and vertically alike, it is scattered across a vast array of overlapping national, regional and international instruments operated within various legal regimes. At a second glance, broad normative and institutional interaction has yet enabled coordinated action against IUU fishing. The development of a holistic response against IUU fishing, including specific coastal, flag, port and market State measures, is the product of a process of normative cross-fertilization between legal regimes: While the UN Law of the Sea Regime set out the general legal framework in which the issue of IUU fishing emerged, the FAO Fisheries Management Regime and various regional regimes have developed a viable response through reciprocal exchange and coordination. In this regard, especially voluntary instruments like the CCRF and the IPOA-IUU have served to crystallize international support for new standards and measures that can be applied in combating IUU fishing. Even though a broad margin for further improvement remains and the integration of a comprehensive fisheries protection system including broad IUU fishing measures into the LOSC seems desirable, good progress has been made. Like port State responsibility has been developed from a rudimentary idea in the FSA to a mature regulatory system in the PSMA, other aspects of combating IUU fishing are meanwhile refined by the FAO, RFMOs and also the EU.²¹⁶ Against this backdrop, it might be Stated that the last

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²¹¹ See the Protocol Concerning the Entry into Force of the Agreement between the United Nations and the Food and Agriculture Organization of the United Nations, 3 February 1947, 1 UNTS 207.

²¹² Harrison, supra note 199, 235.

²¹³ See Young, supra note 18, 154 ff.

²¹⁴ FAO, The State of World Fisheries and Aquacultures (2020), 113.

²¹⁵ See also R. A. Tsangalis, 'Fisheries Subsidies under the Trans-Pacific Partnership: Towards Positive Outcomes for Global Fisheries Sustainability and Regime Interaction under International Law', 17 *Melbourne Journal of International Law* (2016) 2, 445.

²¹⁶ This has again been stressed in the context of the European Green Deal: "The Commission will also take a zero tolerance approach to illegal, unreported and unregulated fishing." See the respective Communication of the European Commission of 11 December 2019, COM(2019) 640 final, 14, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640 (last visited 14 January 2022).

battle against IUU fishing has not yet been fought.

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