EEZ-adjacent distant-water fishing as a global security challenge: An international law perspective





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The European Centre of Excellence for Countering Hybrid Threats

tel. +358 400 253800 | www.hybridcoe.fi

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Foreword

In today's global competition, conserving natural resources is a top priority for states, not only for their national security but also for their economic prosperity. In this context, the harvesting of living resources such as fish is a predominantly economic activity of coastal states in the exercise of their sovereign rights within the limits of their Exclusive Economic Zone (EEZ). In addition, although relevant international law also provides the framework that determines rights and responsibilities in fishing on the high seas or at the limits of high seas and the adjacent EEZ of another coastal state, there are still some gaps that are exploitable by malicious actors that have instrumentalized so-called Distant-Water Fishing (DWF). In this context, a large fishing fleet from one country or more can be engaged in exhaustive and quite often illegal, unreported and unregulated (IUU) fishing activity on the high seas adjacent to the EEZ of another coastal state, or sometimes violating sovereign rights by entering the EEZ of the latter with the vessels' Automatic Identification System in silent mode. This hybrid threat activity poses a serious national security threat to a developing coastal state, directly linked to its resource and economic security. In the long run, such large-scale IUU fishing can also have dramatic consequences for the broader ocean ecosystem, directly affecting many coastal states globally, whose economies rely upon fishing activity.

List of abbreviations

CCRF - Code of Conduct for Responsible Fisheries

CMM - conservation and management measure

CNCP - cooperating non-contracting party

CPPS - Permanent Commission for the South Pacific

DWF - distant-water fishing

DWFN - distant-water fishing nation

EEZ - exclusive economic zone

FAO - United Nations Food and Agriculture Organization

IATTC - Inter-American Tropical Tuna Commission

IPOA-IUU – International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

ITLOS - International Tribunal for the Law of the Sea

IUU fishing - illegal, unreported and unregulated fishing

MSY - maximum sustainable yield

PSMA - Port State Measures Agreement

RFMA - regional fisheries management arrangement

RFMO - regional fisheries management organisation

SPRFMO – South Pacific Regional Fisheries Management Organisation

SRFC - Sub-Regional Fisheries Commission

TAC – total allowable catch

UNCLOS - United Nations Convention on the Law of the Sea

UNFSA – Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks

VMS - vessel monitoring system

WCPFC - Western and Central Pacific Fisheries Commission

Abstract

This Hybrid CoE Working Paper uses the current tensions between China and Latin American coastal states to analyze the global security challenges posed by distant-water fishing (DWF) in high seas areas adjacent to the exclusive economic zone (EEZ) from the perspective of international fisheries law. It first provides an overview of the factual and political background, after which it discusses to what extent such large-scale fishing operations can be assessed through a security lens - highlighting the growing literature on illegal, unreported and unregulated (IUU) fishing as a maritime security issue. Thereafter, the main part of this paper examines the role and function of the applicable frameworks of international fisheries law. On the one hand, it delves into the substantive requirements imposed by international fisheries law in relation to high seas fisheries in areas adjacent to EEZs off the western coast of Latin America, including the governance framework of the South Pacific Regional Fisheries Management Organisation (SPRFMO). On the other hand, the analysis explores the applicable legal framework for fisheries law enforcement activities both on the high seas and in the EEZ, with a particular focus on the challenges and restrictions that coastal states face with regard to the EEZ-adjacent activities of DWF fleets.

International law provides the framework for the distribution of rights and responsibilities between the states to which a fishing vessel is registered (the flag state), the states near whose EEZ the vessels are fishing (the coastal state), the states in whose ports the fish are unloaded (the port state) and any other interested states. However, fishing on the

high seas just outside a coastal state's EEZ is generally legal under international law and the primary responsibility for ensuring that vessels are not engaged in IUU fishing lies with the flag state. Accordingly, in instances where the flag state is unable or unwilling to fulfil this responsibility, the relevant regional fisheries management organisation (RFMO), in this case SPRFMO, has an important role to play in implementing relevant international legal obligations. However, as SPRFMO has yet to adopt detailed conservation and management measures (CMMs), such as catch limits, for the main target species of the Chinese DWF, the assessment of the legality of the activities of the Chinese DWF off the coast of Latin America is not straightforward, but depends on a full assessment of the factual evidence and circumstances of the individual case. This paper concludes that while international law does have an important role in establishing the framework for the regulation and enforcement of EEZ-adjacent high seas fisheries, this role should be enhanced through the strengthening of RFMO regulations and cooperation between RFMO members and other actors, such as NGOs, in enforcing these regulations.

1. Introduction

Recent media reporting has drawn attention to the fishing activities of distant-water fishing (DWF) vessels off the Pacific coast of Latin America.1 Large numbers of foreign vessels, primarily Chinese, but also Spanish, South Korean and Taiwanese, have been identified as spending hundreds of thousands of hours harvesting living resources just outside the Exclusive Economic Zones (EEZs) of developing coastal states, such as Ecuador and Argentina.2 According to reports from NGOs, there is also evidence that some vessels are turning off their automatic transponders at certain times and potentially engaging in clandestine illegal fishing within the EEZs of coastal states, which may extend up to 200 nautical miles (nm) from the baselines.3 Against this background, certain DWF fleets have been accused of illegal, unreported and unregulated (IUU) fishing, which threatens the environmental and resource security of coastal states and the wider region through the depletion of species, affecting the functioning of dependent ecosystems, as well as the destruction of important habitats by harmful fishing practices. In addition, overharvesting of target and non-target species can lead to the collapse of fisheries, in turn threatening food security as well as the economic security of the coastal state. Given the political sensitivity of foreign fisheries within national jurisdiction, the current situation off the coast of Latin America also has

the potential, as has been seen in the past, to trigger serious inter-state disputes, even leading to violent confrontation.⁴ According to an analysis of media sources between 1974 and 2016, there has been an increase in conflicts over fisheries in recent times.⁵

This paper uses the example of the current tensions between China and Latin American coastal states to analyze the global security challenges posed by DWF in EEZ-adjacent high seas areas from the perspective of international law. It first provides an overview of the factual and political background, followed by a discussion of whether such large-scale fishing operations can be assessed through a maritime security lens. Thereafter, the main part of the paper examines the role and function of the applicable frameworks of international fisheries law. On the one hand, this analysis sketches the substantive requirements imposed by international fisheries law in relation to high seas fisheries in areas adjacent to EEZs, including the governance framework of the South Pacific Regional Fisheries Management Organisation (SPRFMO). On the other hand, it explores the applicable legal framework for fisheries law enforcement activities both on the high seas and in the EEZ, with a particular focus on the challenges and restrictions that coastal states face with regard to the multitude of foreign fishing vessels located just outside their EEZs.

¹ See e.g., Dan Collyns, "It's Terrifying': Can Anyone Stop China's Vast Armada of Fishing Boats?', *The Guardian*, 25 August, 2020, https://www.theguardian.com/environment/2020/aug/25/can-anyone-stop-china-vast-armada-of-fishing-boats-galapagos-ecuador.

² Ibid

³ Marla Valentine, 'Now You See Me, Now You Don't: Vanishing Vessels along Argentina's Waters'. Oceana, June 2021, https://doi.org/10.5281/zenodo.4893397.

⁴ For examples of such disputes, see Robin R. Churchill, 'Fisheries Disputes (2018)', in *Max Planck Encyclopedia* of *International Procedural Law*, ed. Hélène Ruiz Fabri (Oxford: Oxford University Press, 2021).

⁵ Jessica Spijkers et al., 'Global Patterns of Fisheries Conflict: Forty Years of Data', *Global Environmental Change*, Volume 57, (2019): 1–9, https://doi.org/10.1016/j.gloenvcha.2019.05.005.

2. Factual and political background

The waters off the Pacific coast of Latin America hold rich fisheries resources, including commercially important species of squid, as well as rare and vulnerable marine ecosystems and habitats. Since at least 2016, these fisheries resources have attracted the DWF fleets of several countries, with Chinese vessels making up the largest proportion.⁶

According to Global Fishing Watch, in 2020 there were 615 vessels operating in the squid fishing grounds off the west coast of Latin America, of which 95% were Chinese. In the area just outside the Ecuadorian EEZ surrounding the Galapagos Islands alone, there were reportedly five months in 2019 in which over 200 Chinese vessels were harvesting living resources. The intensity of Chinese fishing activity off the Galapagos increased in 2020, with close to 350 Chinese vessels fishing in the area in July and August. These vessels are

fishing for a variety of species, and are believed to engage in harmful fishing practices such as bottom trawling and the use of bright lights at night to attract squid.¹⁰ One of the main target species is the jumbo flying squid or Humboldt squid, the second largest fishery managed by SPRFMO, but of which there is insufficient knowledge concerning the stock status and exploitation rate.¹¹

These Chinese vessels make up part of the approximately 3000-vessel strong Chinese DWF fleet. China's DWF fleet is of great national significance, allowing China to meet its growing domestic protein needs without having to rely exclusively on its depleted EEZ fish stocks. China has made the expansion of DWF a national priority, and is funding the necessary global infrastructure through the Belt and Road Initiative.

- 6 Tabitha Mallory and Ian Ralby, 'Evolution of the fleet: a closer look at the Chinese fishing vessels off the Galapagos', CIMSEC, 19 October 2020, https://cimsec.org/evolution-of-the-fleet-a-closer-look-at-the-chinese-fishing-vessels-off-the-galapagos/.
- 7 Global Fishing Watch, 'Analysis of the Southeast Pacific Distant Water Squid Fleet', July 2021, https://globalfishingwatch.org/wp-content/uploads/GFW-2021-FA-SQUID2020-EN-1.pdf, 6.
- 8 Global Fishing Watch, 'Analysis of the Southeast Pacific Distant Water Squid Fleet', 6.
- 9 Ibid
- 10 Lisa McKinnon Munde, 'The Great Fishing Competition', War on the Rocks, 17 August, 2020, https://warontherocks.com/2020/08/the-great-fishing-competition/; Christopher Pala, 'China's Monster Fishing Fleet', Foreign Policy, 30 November, 2020, https://foreignpolicy.com/2020/11/30/china-beijing-fishing-africa-north-korea-south-china-sea/.
- 11 See SPRFMO Commission, 'CMM 18–2020 Conservation and Management Measure on the Management of the Jumbo Flying Squid Fishery', https://www.sprfmo.int/assets/Fisheries/Conservation-and-Management-Measures/2020-CMMs/CMM-18–2020-Squid-31Mar20.pdf.
- 12 Huihui Shen and Shuolin Huang, 'China's policies and practice on combatting IUU in distant water fisheries', Aquaculture and Fisheries, Volume 6, Issue 1, (2021): 27–34, 29, https://doi.org/10.1016/j.aaf.2020.03.002.
- 13 Jinkai Yu and Qingchao Han, 'Exploring the management policy of distant water fisheries in China: Evolution, challenges and prospects', *Fisheries Research*, Volume 236, (April 2021): 1–10, 1, https://doi.org/10.1016/j.fishres.2020.105849.
- 14 Shen/Huang, 'China's policies and practice on combatting IUU in distant water fisheries', 32. See also Whitley Saumweber and Ty Loft, 'Distant-water Fishing along China's Maritime Silk Road', Stephenson Ocean Security, 31 July, 2020, https://ocean.csis.org/commentary/distant-water-fishing-along-china-s-maritime-silk-road/.

Rather than returning to port to land their catch, many of these fishing vessels rely on transhipment, meaning that their catch is collected by refrigerated cargo vessels which then offload the fish in port.15 This practice allows fishing vessels to remain at sea for extended periods, frequently avoiding the need to enter ports in Latin America at all. As discussed further below, port visits are an important means of discouraging and catching the perpetrators of IUU fishing, as the national authorities of the port state are able to inspect the vessel and its catch. Transhipment also allows the origins of fish caught to be obscured, again helping to evade the detection of IUU fishing.¹⁶ There have also been reports that some fishing vessels have been turning off their automatic transponders at the edge of EEZs and then 'disappearing' for extended periods.¹⁷ This has led some to suggest that these vessels are avoiding detection for fishing illegally within the EEZ.18

There are concerns that the large-scale fishing activity off the coast of Latin America is threatening the marine environment, including that of the Galapagos Islands. A high-profile incident that occurred in August 2017 involved the arrest of a Chinese reefer vessel (Fu Yuan Yu Leng 999) by Ecuador while it was transiting through the Galapagos Marine Reserve with 300 tons of shark carcasses and fins on board, including endangered species.¹⁹ The vessel had aroused the suspicions of the local authorities because it did not comply with the mandatory reporting system in place. Although it was concluded that the cargo had been fished in the high seas in close proximity to the Galapagos Marine Reserve rather than in Ecuador's waters, the crew were convicted under the Ecuadorian Comprehensive Criminal Code - which prohibits the transport of catch of threatened species - and ultimately received sentences ranging from one to three years in prison.²⁰ The vessel was

- 15 Miller et al., 'Identifying Global Patterns of Transshipment Behavior', Frontiers in Marine Science, Volume 5 (2018): 1, https://doi.org/10.3389/fmars.2018.00240.
- 16 Miller et al., 'Identifying Global Patterns of Transshipment Behavior', 1.
- 17 'Now you see me, now you don't: Vanishing vessels along Argentina's waters', Oceana, June, 2021, https://usa.oceana.org/wp-content/uploads/sites/4/2021/06/oceana_argentina_mini_report_finalupdated.pdf.
- 18 'Now you see me, now you don't: Vanishing vessels along Argentina's waters'; Santiago Previde, 'South America Overlooks Chinese Illegal Fishing at Its Own Peril', *The National Interest*, 4 November, 2021, https://nationalinterest.org/print/feature/south-america-overlooks-chinese-illegal-fishing-its-own-peril-195731; Mervyn Piesse, 'The Chinese Distant Water Fishing Fleet and Illegal, Unreported and Unregulated Fishing', Future Directions International, 13 October, 2020, https://apo.org.au/node/308865.
- 19 JJ Alava et al., 'Massive Chinese Fleet Jeopardizes Threatened Shark Species around the Galápagos Marine Reserve and Waters off Ecuador: Implications for National and International Fisheries Policy', Int J Fisheries Sci Res. (2017): 1001.
- 20 'Ecuador Keeps Close Watch on Chinese Fishing Fleet off Galapagos', The Maritime Executive, 30 July, 2020, https://www.maritime-executive.com/article/ecuador-keeps-close-watch-on-chinese-fishing-fleet-off-galapagos. Note that Ecuador considers a large part of the waters of the Galapagos Archipelago as (archipelagic) internal waters on the basis of a system of straight baselines. See e.g., Vanessa Arellano Rodríguez, 'Submarine Cables and the Marine Environment: Bringing the First Submarine Cable to the Galapagos', Ocean Development & International Law, Volume 52 (2021): 274–296, 211–212, with further references. If correct, this would mean that the general prohibition of imprisonment for EEZ fisheries offences under Article 73(3) UNCLOS does not apply. This position is, however, contested. See further 'Baselines under the International Law of the Sea, Final Report', (International Law Association, 2018): 31–32, 45, http://www.ila-hq.org/images/ILA/DraftReports/DraftReport Baselines.pdf.

confiscated and incorporated into the Ecuadorian navy.²¹

In its 2021 report on the status of World Heritage Properties, the UNESCO World Heritage Centre raised concerns "regarding reported fishing activities by a large number of foreign vessels from diverse nationalities in close proximity" to the Galapagos Islands.²² The Centre concluded that "IUU fishing in and around the property continues to represent a significant threat to its [Outstanding Universal Value], as was evidenced by the presence of a large fishing fleet from other State Parties in close proximity to the property in mid-2020".23 The extensive foreign DWF activities also contributed to Ecuador's decision to establish a new marine protected area - including a partial no-take zone - to the north of the Galapagos archipelago in 2021.24

The governments of Colombia, Ecuador, Peru and Chile have been united in their protests against this intensive fishing activity just outside their EEZs.²⁵ In October 2017, the Permanent Commission for the South Pacific (CPPS) - a regional intergovernmental organization tasked with the coordination of the maritime policies of its member states Chile, Colombia, Ecuador and Peru – issued a declaration expressing its concerns regarding possible IUU fishing activities by foreign DWF fleets in EEZ-adjacent high seas areas off the Pacific coast of Latin America.26 Among the issues highlighted in the Declaration were the sovereign rights of coastal states in their EEZs, the responsibility of flag states²⁷ in the prevention of IUU fishing, and the need for the competent regional fisheries management organizations (RFMOs) to investigate any incidents of IUU fishing and to adopt sanctions in accordance

- 21 'Most of the sharks found on the ship Fu Yuan Yu Leng 999 inhabited the waters surrounding Galapagos, study reveals', *Ecuador Times*, 3 August, 2021, https://www.ecuadortimes.net/most-of-the-sharks-found-on-the-ship-fu-yuan-yu-leng-999-inhabited-the-waters-surrounding-galapagos-study-reveals/.
- 22 'State of conservation of properties inscribed on the World Heritage List', UNESCO, 4 June, 2021, https://unes-doc.unesco.org/ark:/48223/pf0000379178.
- 23 'State of conservation of properties inscribed on the World Heritage List'.
- 24 'Ecuador expands Galapagos Marine Reserve', Deutsche Welle, 15 January, 2022, https://www.dw.com/en/ecuador-expands-galapagos-marine-reserve/a-60436043.
- 25 See e.g. Michael Sinclair, 'The national security imperative to tackle illegal, unreported, and unregulated fishing', *Brookings*, 25 January, 2021, https://www.brookings.edu/blog/order-from-chaos/2021/01/25/the-national-security-imperative-to-tackle-illegal-unreported-and-unregulated-fishing/.
- 26 'Declaración de la Comisión Permanente del Pacífico Sur sobre posibles actividades de pesca ilegal, no declarada y no reglamentada', Comisión Permanente del Pacífico Sur, 19 October, 2017, http://cpps.dyndns.info/cpps-docs-web/publicaciones/declaraciones-cpps/Declaraci%C3%B3n%20de%20la%20CPPS%20sobre%20posibles%20actividades%20de%20pesca%20INDNR.pdf.
- 27 Flag states are states that grant their nationality to ships (Article 91(1) UNCLOS). They have jurisdiction over ships flying their flag, which is in principle exclusive on the high seas (Article 92(1) UNCLOS). As a corollary of these rights, the flag state has a set of obligations, including the general obligation to "effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag" (Article 94(1) UNCLOS). As discussed in sections 4.2 and 5.2 below, there are also flag state obligations with respect to fisheries.

with the applicable conservation and management measures (CMMs).28 In November 2020, the four states issued a joint declaration reacting to the "presence of a large fleet of foreign-flagged vessels that has carried out fishing activities in recent months in international waters, close to our waters".²⁹ The four states committed to taking joint and coordinated measures to respond to the threat of IUU fishing in the region.³⁰ The navies and coast guards of these states and other Latin American states have been actively involved in efforts to protect the EEZs from IUU fishing.³¹ There have been instances of violent confrontation, such as in 2016 when the Argentinian coast guard fired at and sank a Chinese vessel found fishing illegally in Argentina's waters.32

In response to widespread criticism and concern over its DWF fleet's squid fisheries, China introduced a seasonal squid fishing moratorium in the high seas areas west of the Galapagos Islands in 2020.33 That same year, Ecuador and China also started a dialogue on DWF, during which China "reiterated its willingness to respect international agreements and maintain control over its vessels to ensure that they do not engage in [IUU] fishing activities".34 Overall, Ecuador's concerns over China's DWF activities apparently did not outweigh the economic importance of good diplomatic relations with China, which is evidenced by the current negotiations towards a bilateral free trade agreement.35

- 28 'Declaración de la Comisión Permanente del Pacífico Sur sobre posibles actividades de pesca ilegal, no declarada y no reglamentada'.
- 29 'Declaración Conjunta respecto a la pesca de naves extranjeras en las zonas adyacentes a las aguas bajo jurisdicción nacional de cada país', Ministerio de Relaciones Exteriores, 3 November 2020, https://minrel.gob.cl/noticias-anteriores/declaracion-conjunta-respecto-a-la-pesca-de-naves-extranjeras-en-las.
- 30 'Declaración Conjunta respecto a la pesca de naves extranjeras en las zonas adyacentes a las aguas bajo jurisdicción nacional de cada país'.
- 31 McKinnon Munde, 'The Great Fishing Competition'.
- 32 Diego Laje and Catherine E Shoichet, 'Argentina sinks Chinese vessel, cites illegal fishing', CNN, 16 March, 2016, https://edition.cnn.com/2016/03/15/americas/argentina-chinese-fishing-vessel/index.html.
- 33 Lu Yameng, 'China to carry out fishing moratorium on high seas to conserve squid resources', *Global Times*, 29 June, 2021, https://www.globaltimes.cn/page/202106/1227436.shtml; Linda Lew and Laura Zhou, 'China bans squid catch in some overseas waters with overfishing in spotlight'. *South China Morning Post*, 5 August 2020, https://www.scmp.com/news/china/diplomacy/article/3096038/china-bans-squid-catch-some-over-seas-waters-overfishing?fbclid=lwAR0EnmlX7ynpPZdtaDdFehjuNHyjGRC29EjQUQR4PE4RCgARA6GOisuFgfg.
- 34 'Ecuador y China mantuvieron nuevo encuentro bilateral sobre pesca', Cancillería del Ecuador, 29 December 2020, https://www.cancilleria.gob.ec/china/2021/03/12/ecuador-y-china-mantuvieron-nuevo-encuentro-bilateral-sobre-pesca/ (translation by the authors).
- 35 'Presidente Lasso informó sobre los importantes resultados de las reuniones mantenidas en China, Cancillería del Ecuador', 5 February, 2022, https://www.cancilleria.gob.ec/china/2022/02/18/presidente-lasso-informo-sobre-los-importantes-resultados-de-las-reuniones-mantenidas-en-china/.

3. IUU fishing as an international maritime security threat

The concept of IUU fishing did not originate in a maritime security context, but was developed in the context of fisheries conservation and management.³⁶ The most commonly used definition of IUU fishing may be found in the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU),³⁷ a non-binding³⁸ but influential instrument adopted by the FAO in the framework of its Code of Conduct for Responsible Fisheries (CCRF).³⁹ The IPOA-IUU was not conceived as a binding legal framework but as a "comprehensive toolbox, in that it is a full range of tools that are available for use in a number of different situations to combat IUU fishing".40 The IPOA-IUU contains a detailed definition of IUU fishing that is divided into three categories (illegal fishing, unreported fishing, and unregulated fishing), which - for reasons of space cannot be described here in detail.41

Importantly, IUU fishing must not be equated with illegal fishing given that not all fishing activities falling into the category of unregulated fishing necessarily involve a contravention of law (all illegal fishing is IUU fishing, but not all IUU fishing is illegal).⁴² In addition, the classification of an activity as IUU fishing does not render it unlawful because the IPOA-IUU is non-binding and does not provide for such a legal effect. However, various treaties – including the 2009 Port State Measures Agreement (PSMA)⁴³ and the legal frameworks of some RFMOs – provide for legal effects with respect to instances of IUU fishing (usually using their own definitions of that concept).

The classification of IUU fishing as a maritime security threat is a relatively recent phenomenon.⁴⁴ According to Klein's definition of maritime security as an inclusive interest common to all states, "it is not only a range of military

- 36 William R. Edeson, 'The International Plan of Action on Illegal Unreported and Unregulated Fishing: The Legal Context of a Non-Legally Binding Instrument', *The International Journal of Marine and Coastal Law*, Volume 16, Issue 4 (2011): 603–623, http://dx.doi.org/10.1163/157180801X00243.
- 37 'International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing', Food and Agriculture Organization of the United Nations, 2001, http://www.fao.org/fishery/ipoa-iuu/en.
- 38 See Para. 4 IPOA-IUU.
- 39 'Code of Conduct for Responsible Fisheries', Food and Agriculture Organization of the United Nations, 31 October, 1995, http://www.fao.org/DOCREP/005/v9878e/v9878e00.htm.
- 40 'Illegal, Unreported and Unregulated (IUU) fishing', Food and Agriculture Organization of the United Nations, https://www.fao.org/iuu-fishing/international-framework/ipoa-iuu/en/.
- 41 See Para. 3 IPOA-IUU. For an analysis of the definition, see Jens T. Theilen, 'What's in a Name? The Illegality of Illegal, Unreported and Unregulated Fishing', *The International Journal of Marine and Coastal Law*, Volume 28, (2013): 533–550, http://dx.doi.org/10.1163/15718085–12341284; Mercedes Rosello, *IUU Fishing as a Flag State Accountability Paradigm: Between Effectiveness and Legitimacy* (Leiden: Brill, 2021), 19–28.
- 42 Cf. Rosello, *IUU Fishing as a Flag State Accountability Paradigm*, 23, with further references. Contra: Theilen, 'What's in a Name?', 543.
- 43 'Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing', Food and Agriculture Organization of the United Nations, 22 November, 2009, https://www.fao.org/3/i1644t/i1644t.pdf.
- 44 For an in-depth discussion, see Mercedes Rosello, 'Illegal, Unreported and Unregulated (IUU) Fishing as a Maritime Security Concern', in *Global Challenges in Maritime Security: An Introduction*, ed. Lisa Otto (Cham: Springer, 2020), 33–47; Richard Barnes and Mercedes Rosello, 'Fisheries and Maritime Security: Understanding and Enhancing the Connection', in *Maritime Security and the Law of the Sea: Help or Hindrance?*, ed. Malcolm D. Evans and Sofia Galani (Cheltenham: Edward Elgar Publishing, 2020), 48–82.

activities that may pose a threat to the security of the coastal state [...] but also includes fishing activities, wilful and serious pollution, and research or survey activities".⁴⁵ However, the focus has frequently been placed on the threats to environmental, food and resource security posed by IUU fishing – and the resulting challenges to the coastal state's ability to project power in its maritime domain through regulation and enforcement.

In this conceptual framework, the flag state of the vessels engaged in IUU fishing can be perceived as neglecting its legal responsibility to prevent IUU fishing through an effective exercise of flag state jurisdiction, or as intentionally challenging the coastal state's sovereign rights through its fisheries policy (e.g., in the context of a maritime delimitation dispute or based on claims to historic fishing rights).

China's use of parts of its fishing fleet as a 'maritime militia' in order to project power and assert territorial and maritime claims in the South China Sea and East China Sea is a notable example of the latter.46 That said, within the contemporary literature that views IUU fishing through a maritime security lens, global maritime power projection by flag states through DWF fleets (potentially) involved in IUU fishing (without an additional function as 'maritime militia') is an understudied issue that has only received more widespread attention in recent years.47 In this context, the phenomenon of China's recent practice - including off the Pacific coast of Latin America - has increasingly been described as a national security threat of international importance, particularly by the United States.48

- 45 Natalie Klein, Maritime Security and the Law of the Sea (Oxford: Oxford University Press, 2011), 9.
- 46 See e.g., Andrew S. Erickson and Conor M. Kennedy, *China's Maritime Militia* (Arlington, VA: CNA Corporation, 2016); Conor M. Kennedy and Andrew S. Erickson, *China Maritime Report No. 1: China's Third Sea Force, The People's Armed Forces Maritime Militia: Tethered to the PLA* (Newport, RI: U.S. Naval War College, China Maritime Studies Institute, 2017). For a legal analysis, see James Kraska and Michael Monti, 'The Law of Naval Warfare and China's Maritime Militia', *International Law Studies*, Volume 91 (2015): 450–467.
- 47 James M. Landreth, 'The Strategic Significance of the Chinese Fishing Fleet', *Military Review* (May-June 2021), 32–42; Andrés González Martín, 'The Chinese fishing army: a threat to Latin America', CEEEP 2021, https://ceeep.mil.pe/wp-content/uploads/2021/03/CEEEP-2021-The-Chinese-fishing-army.pdf.
- 48 USCG, Illegal, Unreported, and Unregulated Fishing Strategic Outlook (Washington, D.C.: United States Coast Guard, 2020): 'leading global maritime security threat', 'pervasive, far-reaching security threat', 'national security threat with destabilizing effects on vulnerable coastal States'; Marc Zlomek, 'Election 2020: Prioritizing Illegal, Unreported, and Unregulated Fishing as a Threat to International Security', The Fletcher Forum of World Affairs, 2020, http://www.fletcherforum.org/home/2020/10/30/election-2020-prioritizing-illegal-unreported-and-unregulated-fishing-as-a-threat-to-international-security. See also Sinclair, 'The national security imperative to tackle illegal, unreported, and unregulated fishing'.

4. The legal regime for EEZ-adjacent fisheries

International fisheries law comprises a multi-layered regime of binding and non-binding instruments of varying geographical and substantive scope, membership and content – all of which lay down rights and obligations of states and other entities (e.g., RFMOs) with respect to the conservation and management of marine capture fisheries.⁴⁹ The legal regime applicable to EEZ-adjacent high seas fisheries is particularly complex, which renders an abstract description of this regime difficult.⁵⁰ Against this background, the current analysis focuses on the most important instruments for the present purposes, taking the Chinese squid fisheries off the Pacific coast of Latin America as a case study.

For this purpose, this section briefly sketches the relevant substantive requirements imposed by the 1982 United Nations Convention on the Law of the Sea (UNCLOS)⁵¹ and the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA),⁵² taking into account that not all relevant states are parties to both of these treaties. Thereafter, it takes a closer look at the legal framework of SPRFMO as the competent RFMO with respect to the

mentioned squid fisheries. In so doing, this section briefly addresses the requirements for a classification of the Chinese DWF fleet's activities as IUU fishing under the IPOA-IUU without, however, providing an in-depth assessment of the available evidence.

4.1 EEZ-adjacent DWF from a coastal state perspective

In their EEZs, coastal states have sovereign rights "for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living", including fisheries.53 As concretized by Articles 61 and 62 UNCLOS, these sovereign rights include the jurisdiction to prescribe laws and regulations concerning the conservation and management of fisheries in the EEZ. In return, Article 61 UNCLOS imposes conservation and management obligations on the coastal state and Article 62(2) UNCLOS obliges it to grant other states access to the surplus (if any) of the allowable catch. The extent of the coastal state's EEZ fisheries jurisdiction has been addressed in a number of - sometimes contentious - decisions of international courts and tribunals, a discussion of which is beyond the scope of this paper.54 In the context of

- 49 For an overview, see Valentin J. Schatz and Arron Honniball, 'International Fisheries Law (2019)', in Oxford Bibliographies in International Law, ed. Antony Carty (Oxford: Oxford University Press, 2020).
- 50 For general treatises, see e.g., Francisco Orrego Vicuña, *The Changing International Law of High Seas Fisheries* (Cambridge: Cambridge University Press, 1999); Yoshinobu Takei, *Filling Regulatory Gaps in High Seas Fisheries: Discrete High Seas Fish Stocks, Deep-sea Fisheries and Vulnerable Marine Ecosystems* (Leiden: Manchester University Press, 2013).
- 51 United Nations Convention on the Law of the Sea (10 December 1982) 1833 UNTS 3.
- 52 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (4 December 1995) 2167 UNTS 3.
- 53 Article 56(1) UNCLOS.
- 54 For an overview, see Camille Goodman, 'Striking the Right Balance?: Applying the Jurisprudence of International Tribunals to Coastal State Innovations in International Fisheries Governance', *Marine Policy*, Volume 84 (2017): 293–299, http://dx.doi.org/10.1016/j.marpol.2017.06.016.

EEZ-adjacent fisheries, both the geographical and subject-matter scope of the coastal state's prescriptive jurisdiction are important.

With respect to geographical scope, the coastal state's prescriptive EEZ fisheries jurisdiction is limited to its EEZ. In this respect, the wording of Article 56(1)(a) UNCLOS ('[i]n the [EEZ], the coastal state has [...] sovereign rights') in conjunction with the definition and spatial extent of the EEZ stated in Articles 55 and 57 UNCLOS is clear. Coastal states lack EEZ-related jurisdiction to prescribe laws and regulations with respect to the fishing activities of foreign vessels in EEZ-adjacent high seas areas - even where straddling or highly migratory fish stocks within the meaning of Articles 63(2) and 64 UNCLOS, respectively, are concerned. That said, some categories of EEZ-adjacent fishing activity may call the clarity of this distinction (inside vs. outside of EEZ) into doubt. For example, a supply vessel might hover just outside the EEZ to receive transhipments from vessels fishing illegally in the EEZ, forming part of a joint operation. Alternatively, a vessel's fishing gear (e.g., long-line, net, drifting fish aggregating device (FAD)) might be used in a fashion that results in the gear drifting into the EEZ in order to catch or attract fish that is later brought on board on the high seas. To what extent coastal states might be able to claim prescriptive jurisdiction over vessels located just outside the EEZ in such situations invoking concepts such as the doctrine of

constructive presence – remains an open question.⁵⁵

In terms of subject matter, coastal states may, for example, have an interest in requiring unlicensed foreign fishing vessels to notify entry into or transit through their EEZs, require such vessels to stow their fishing gear while in the EEZ, prove that any catch found on board does not originate from the EEZ, or provide near real-time vessel monitoring system (VMS) data. However, as mere transit as such cannot be classified as 'fishing' or 'fishing-related',56 the extent of prescriptive coastal state jurisdiction over vessels in transit through the EEZ is a legally intricate matter in light of the due regard obligation of coastal states under Article 58(3) UNCLOS vis-à-vis the freedom of navigation of flag states in the EEZ under Article 58(1) UNCLOS. It is beyond the scope of this paper to provide an in-depth analysis of the legality of the various requirements that coastal states have enacted in their fisheries laws and regulations. However, it should be noted that Goodman has shown in a comprehensive study of state practice that at least a certain degree of coastal state jurisdiction with respect to transiting fishing vessels has become recognized, which may be evidence of a shift towards a jurisdictional presumption in favour of the coastal state.⁵⁷ Support for this emergent principle may also be found in China's reformed Rules on Distant Water Fishing of 2020, Article 32 of which requires Chinese fishing vessels

⁵⁵ Compare Simone Vezzani, *Jurisdiction in International Fisheries Law: Evolving Trends and New Challenges* (Milan: Wolters Kluwer, 2020).

⁵⁶ Valentin J. Schatz, 'Combating Illegal Fishing in the Exclusive Economic Zone – Flag State Obligations in the Context of the Primary Responsibility of the Coastal State' *Goettingen Journal of International Law*, Volume 7, Issue 2 (2016): 383–414, 390, http://dx.doi.org/10.3249/1868–1581–7–2-schatz.

⁵⁷ Camille Goodman, Coastal State Jurisdiction over Living Resources in the Exclusive Economic Zone (Oxford: Oxford University Press, 2021), 176–217.

to store their catches, stow their gear, and notify the coastal state in advance in accordance with relevant regulations.⁵⁸

It may be concluded that the geographical scope of the coastal state's prescriptive fisheries jurisdiction in the EEZ is relatively inflexible, whereas its substantive scope has proved to be more flexible and open to expansive development through state practice, thereby improving the jurisdictional situation of the coastal state. Whenever foreign vessels fish in the EEZ in violation of laws and regulations that the coastal state has adopted in accordance with its prescriptive jurisdiction, these fishing activities constitute illegal fishing under Para. 3.1.1 IPOA-IUU. From the coastal state exceeds its jurisdiction, its laws and regulations are not opposable to (the vessels of) other states.

4.2 EEZ-adjacent DWF from a flag state perspective

EEZ-adjacent high seas fisheries are governed by Part VII of UNCLOS. Under Articles 87(1) (e) UNCLOS all (flag) states enjoy freedom of fishing on the high seas, which is, however, qualified to the extent that it is subject to various conservation and management obligations. Crucially, the right of all states to permit their nationals to fish on the high seas under Article 116 UNCLOS is subject to their treaty obligations (including, for example, the UNFSA or the constitutive instruments of RFMOs),61 the 'rights and duties as well as the interests of coastal states' provided for, inter alia, in Article 63(2) UNCLOS (straddling stocks) and Article 64 UNCLOS (highly migratory stocks),62 and the provisions of Section 2 in Part VII of UNCLOS.63 Articles 63(2) and 64 UNCLOS contain obligations of states fishing for straddling or highly migratory fish stocks to cooperate in the conservation and management of these stocks, either directly or – as is common practice today - through RFMOs.64

While it is beyond the scope of this paper to describe the regime of high seas fisheries in detail, 65 a brief overview of the key obligations is in order. Article 117 UNCLOS establishes a duty of all states "to take, or to cooperate with other states in taking, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas".66 Article 118 UNCLOS contains an obliga-

- 58 Goodman, Coastal State Jurisdiction, 205.
- 59 Schatz, 'Combating Illegal Fishing', 385.
- 60 Compare Article 62(4) in conjunction with Article 73(1) UNCLOS ('laws and regulations adopted by [the coastal State] in conformity with this Convention').
- 61 Article 116(a) UNCLOS.
- 62 Article 116(b) UNCLOS.
- 63 Article 116(c) UNCLOS. See further Rosemary Rayfuse, 'Article 116', in *United Nations Convention on the Law of the Sea (UNCLOS): A Commentary*, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017).
- 64 See further James Harrison and Elisa Morgera, 'Article 64', in *United Nations Convention on the Law of the Sea (UNCLOS): A Commentary*, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017)
- 65 See the references supra note 50.
- 66 See further Rosemary Rayfuse, 'Article 117', in *United Nations Convention on the Law of the Sea (UNCLOS):*A Commentary, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017).

tion of all states to "cooperate with each other in the conservation and management of living resources in the areas of the high seas".⁶⁷ Article 119 UNCLOS provides more detailed standards for total allowable catches and other CMMs taken by states or RFMOs, including the obligation to "take measures which are designed, on the best scientific evidence available to the states concerned, to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield [MSY]".⁶⁸

The mentioned obligations to cooperate (Articles 63(2), 64, 117 and 118 UNCLOS) are further concretized and supplemented by the UNFSA, which aims "to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of [UNCLOS]".69 These two categories of fish stocks are by definition particularly relevant in the context of EEZ-adjacent fisheries as they straddle or migrate across EEZ boundaries with adjacent high seas areas and are thus particularly vulnerable to unilateral exploitation by irresponsible flag states. Arti-

cle 5 UNFSA contains various conservation and management principles. Among these, the obligation to "apply the precautionary approach" under Articles 5(c) and 6 UNFSA is particularly notable, but others are equally important in the present context: the obligations to "protect biodiversity in the marine environment" (Article 5(g) UNFSA) and to "take measures to prevent or eliminate overfishing and excess fishing capacity and to ensure that levels of fishing effort do not exceed those commensurate with the sustainable use of fishery resources" (Article 5(h) UNFSA) are relevant examples. While these obligations only directly bind States Parties to the UNFSA (i.e., Ecuador and Chile which both joined in 2016, but not China, Peru or Colombia), the constitutive treaties of relevant RFMOs often incorporate at least some of them. In the present context, Article 3 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (SPRFMO Convention)70 ensures that China and Peru (but not Colombia) are legally bound by the key UNFSA conservation and management principles despite not being States Parties to the UNFSA (although

67 See further Rosemary Rayfuse, 'Article 118', in *United Nations Convention on the Law of the Sea (UNCLOS):*A Commentary, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017).
68 See further Rosemary Rayfuse, 'Article 119' in *United Nations Convention on the Law of the Sea (UNCLOS):*A Commentary, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017).

70 See Articles 1(d) and 5 Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (14 November 2009) 2899 UNTS 211.

⁶⁹ Article 2 UNFSA. For discussion of the basic functioning of the UNFSA, see David A. Balton, 'Strengthening the Law of the Sea: The New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks', Ocean Development & International Law, Volume 27 (1995): 125–151, https://doi.org/10.1080/00908329609546078; André Tahindro, 'Conservation and Management of Transboundary Fish Stocks: Comments in Light of the Adoption of the 1995 Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks', Ocean Development & International Law, Volume 28, (1997): 1–58, https://doi.org/10.1080/00908329709546094; Satya N. Nandan and Michael Lodge, 'Some Suggestions Towards Better Implementation of the United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks of 1995', The International Journal of Marine and Coastal Law, Volume 20, (2005): 345–379, https://doi.org/10.1163/157180805775098540.

limited to the scope of the SPRFMO Convention, see 4.4 below).

Under Article 8 UNFSA and the following provisions of the UNFSA, RFMOs and regional fisheries management arrangements (RFMAs) are the main instruments in the implementation of the relevant obligation(s) to cooperate. Notably, pursuant to Article 8(3) UNFSA, where an RFMO or RFMA has the competence to establish [CMMs] for particular straddling fish stocks or highly migratory fish stocks, States fishing for the stocks on the high seas and relevant coastal States shall give effect to their duty to cooperate by becoming members of [the RFMO] or participants in [the RFMA], or by agreeing to apply the conservation and management measures established by [the RFMO] or RFMA]".

From the above, it follows that, in order to establish that China's DWF fleet is involved in IUU fishing under the IPOA-IUU based on breaches of conservation and management obligations applicable under UNCLOS or the UNFSA, it would be necessary to conduct an in-depth analysis of the specific obligation that might be breached, followed by an extensive analysis of the available factual evidence. Such an analysis is beyond the scope of the present paper. In the event that a violation of UNCLOS, UNFSA (or relevant domestic DWF laws and regulations

of China) can be shown, such fishing activities would constitute illegal fishing under Para. 3.1.3 IPOA-IUU ("in violation of national laws or international obligations, including those undertaken by cooperating states to a relevant [RFMO]") or the second limb of Para. 3.1.2 IPOA-IUU ("in contravention of [...] relevant provisions of the applicable international law").

4.3 The conservation and management framework of SPRFMO for squid fisheries in the Southeast Pacific

Most of the waters of the South Pacific, including most of the waters off the Pacific coast of Latin America, fall within the area of application of the SPRFMO Convention.72 The SPRFMO Convention Area delimits the geographical mandate of SPRFMO.73 The subject-matter mandate of SPRFMO is broad and covers all fish within the SPRFMO Convention Area, with some exceptions - most notably that of highly migratory species such as tuna.74 In the areas overlapping with the SPRFMO Convention Area, highly migratory species fall within the mandate of the Western and Central Pacific Fisheries Commission (WCPFC)75 and, as far as the Eastern Pacific is concerned, the Inter-American Tropical Tuna Commission (IATTC).76 As members of SPRFMO, China and other relevant distant-water fishing

⁷¹ See generally Rosemary Rayfuse, 'Regional Fisheries Management Organizations', in *The Oxford Handbook of the Law of the Sea*, ed. Donald R. Rothwell, Alex G. Oude Elferink, Karen N. Scott and Tim Stephens (Oxford: Oxford University Press, 2015), 439–462.

⁷² See Articles 1(d) and 5 SPRFMO Convention.

^{73 &#}x27;Illustrative Map of the SPRFMO Area', South Pacific Regional Fisheries Management Organization, https://www.sprfmo.int/about/illustrative-map-of-sprfmo-area-2/.

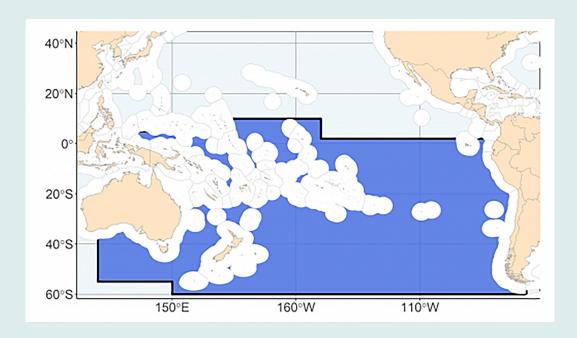
⁷⁴ See Articles 1(f) and 2 SPRFMO Convention.

⁷⁵ See Articles 1(f), 2 and 3 Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (5 September 2000) 2275 UNTS 43.

⁷⁶ See Articles I(1), II and III Convention for the Strengthening of the Inter-American Tropical Tuna Commission Established by the 1949 Conventions Between the United States of America and the Republic of Costa Rica (14 November 2003), https://www.iattc.org/PDFFiles/IATTC-Instruments/_English/IATTC_Antigua_Convention%20Jun%202003.pdf.

Figure 1: SPRFMO Convention Area

(Source: https://www.sprfmo.int/about/illustrative-map-of-sprfmo-area-2/)



nations (DWFNs), such as the Republic of Korea and Taiwan, are bound by the SPRFMO Convention and CMMs adopted by SPRFMO. Some of the most relevant Pacific coastal states in Latin America for the purposes of this paper are also SPRFMO members (Chile, Peru, Ecuador – but not Colombia).⁷⁷

In the present context, it is important to note that SPRFMO's mandate encompasses the jumbo flying squid (*Dosidicus gigas*), a main target species of the rapidly growing DWF fleet from China that operates in high seas areas off

the Pacific coast of Latin America.⁷⁸ However, it does not follow from SRFMO's broad species mandate that there are CMMs in place for all relevant species at all times. Despite the substantial and continuing increase in catches of this species since 1990, SPRFMO first adopted a CMM providing for specific rules concerning jumbo flying squid fishing in 2020.⁷⁹ This CMM, which entered into force on 1 January 2021, provides for basic licensing requirements,⁸⁰ data collection and reporting requirements,⁸¹ provisions on monitoring and control (including

^{77 &#}x27;Participation', South Pacific Regional Fisheries Management Organization, https://www.sprfmo.int/about/participation/.

^{78 &#}x27;7th Meeting of the Scientific Committee (2019)', South Pacific Regional Fisheries Management Organization, 2019, https://www.sprfmo.int/assets/2019-SC7/Meeting-Docs/SC7-SQ01-Squid-information-held-by-the-Secretariat.pdf; '8th Meeting of the Scientific Committee (2020)', South Pacific Regional Fisheries Management Organization, 2020, https://www.sprfmo.int/assets/2020-SC8/SC8-SQ01-rev1-clean-Squid-information-held-by-the-Secretariat.pdf.

⁷⁹ SPRFMO Commission, 'CMM 18–2020: Management of the Jumbo Flying Squid Fishery' (n 11). 80 Para. 2 CMM 18–2020.

⁸¹ Paras. 3-4 CMM 18-2020.

a VMS requirement),82 annual reporting requirements,83 and limited (5%) observer coverage.84 It does not currently contain a total allowable catch (TAC) or other measures or requirements (e.g., gear restrictions, limits on the use of supply vessels), but will be reviewed by SPRFMO in 2024.85 In other words, no SPRFMO CMM for jumbo flying squid was in place when the controversial Chinese DWF fleet activities off the Pacific coast of Latin America (particularly the Galapagos Islands) took place in 2019 and 2020.

In 2021, Ecuador proposed a ban on transshipments at sea of jumbo flying squid (which was previously excluded from the relevant CMM) and a limit on any transshipment of those species to ports,⁸⁶ but temporarily withdrew the proposal after opposition by other members.⁸⁷ A similar proposal in 2022 suffered the same fate.⁸⁸ At the 2022 meeting, further proposals regarding the jumbo flying squid fishery were

introduced, but not adopted. Ecuador introduced a proposal that would have gradually increased observer coverage to 100% on vessels larger than 15 m until 2028. 99 An EU proposal would have introduced fishing effort limits for the major squid fleets (China, Taiwan and Republic of Korea) as well as a call for members with smaller fleets not to expand their effort. 90 A Chinese proposal would equally have contained effort limits but would have been more liberal, also with respect to the expansion of fleets by developing states with a history of fishing for squid. 91

The lack of catch limitations and other restrictive measures applicable to jumbo flying squid means that the Chinese fishing operations as such do not contravene SPRFMO's legal framework unless the monitoring, data collection and reporting requirements are not complied with. Accordingly, they cannot be

- 82 Paras, 5-7 CMM 18-2020.
- 83 Paras. 8-9 CMM 18-2020.
- 84 Para. 10 CMM 18-2020.
- 85 Para. 13 CMM 18-2020.
- 86 9th Meeting of the SPRFMO Commission (2021), Ecuador: COMM 9 Prop 10_rev1, South Pacific Regional Fisheries Management Organization, 2021, http://www.sprfmo.int/assets/0-2021-Annual-Meeting/COMM9/COMM9-Prop10-rev1-CV-ECU-Proposal-to-Amend-CMM12-2020-Transhipment.pdf.
- 87 SPRFMO Commission, COMM9-REPORT (2021), South Pacific Regional Fisheries Management Organization, 2021, https://www.sprfmo.int/assets/0-2021-Annual-Meeting/Reports/COMM9-Report-Adopted.pdf, paras 107-118
- 88 10th Meeting of the SPRFMO Commission (2022), Ecuador: COMM 10 Prop 01, South Pacific Regional Fisheries Management Organization, 2022, http://www.sprfmo.int/assets/2022-Annual-Meeting/01-COMM10/COMM10-Prop01-Proposal-to-Amend-CMM-12-Transhipment-EC-CV.pdf.
- 89 10th Meeting of the SPRFMO Commission (2022), Ecuador: COMM 10 Prop 03, South Pacific Regional Fisheries Management Organization, 2022: https://www.sprfmo.int/assets/2022-Annual-Meeting/01-COMM10/COMM10-Prop03-Proposal-to-Amend-CMM-18-2020-Squid-EC-CV.pdf.
- 90 10th Meeting of the SPRFMO Commission (2022), European Union: COMM 10 Prop 05, South Pacific Regional Fisheries Management Organization, 2022: https://www.sprfmo.int/assets/2022-Annual-Meeting/01-COMM10/COMM10-Prop05-Proposal-to-Amend-CMM-18-Squid-EU-CV.pdf.
- 91 10th Meeting of the SPRFMO Commission (2022), China; COMM 10 Prop 04, South Pacific Regional Fisheries Management Organization, 2022, https://www.sprfmo.int/assets/2022-Annual-Meeting/01-COMM10/COMM10-Prop04-Proposal-to-Amend-CMM18-Squid-CN-CV.pdf.

applicable international law"),⁹² or Para. 3.1.3 IPOA-IUU with respect to China's DWF fisheries laws and regulations or international obligations undertaken by China ("in violation of national laws or international obligations, including those undertaken by cooperating states to a relevant [RFMO]").

⁹² An alternative but less persuasive argument would be that, in the absence of *substantive* requirements in the applicable SPRFMO CMM, these fishing operations could be regarded as unregulated fishing under Para. 3.3.2 IPOA-IUU (fishing 'for fish stocks in relation to which there are no applicable [CMMs] and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law'). Note, however, that Para. 3.4 IPOA-IUU clarifies that 'certain unregulated fishing may take place in a manner which is not in violation of applicable international law'.

5. Enforcement measures concerning EEZ-adjacent IUU fishing

The presence of DWF fleets in EEZ-adjacent high seas areas runs the risk of illicit incursions into the EEZ and of harmful fishing practices that violate applicable international law or the domestic law of the flag state - and which affect the fisheries and marine environment in the EEZ. This chapter first explores the limited measures available to coastal states to exercise EEZ-related enforcement jurisdiction against foreign fishing vessels fishing just outside - or illicitly inside - their EEZ. Thereafter, it outlines the rights and responsibilities of flag states to ensure that their vessels do not contravene any applicable obligations, before finally discussing the opportunities available to non-flag states (including the relevant coastal states) to take enforcement action against a fishing vessel in EEZ-adjacent high seas areas.

5.1 Limits of coastal state enforcement jurisdiction

The coastal state's sovereign rights in its EEZ under Article 56(1)(a) UNCLOS also entail the jurisdiction to enforce fisheries laws and regulations adopted in line with the coastal

state's prescriptive fisheries jurisdiction.⁹³ These enforcement powers are concretized and qualified by Article 73 UNCLOS.⁹⁴ Under Article 73(1) UNCLOS, the coastal state may, in the exercise of its sovereign rights, "take such measures, including boarding, inspection, arrest and judicial proceedings, as may be necessary to ensure compliance with the laws and regulations adopted by it in conformity with [UNCLOS]".

Three important conclusions can be drawn from this provision. First, coastal states have broad enforcement powers that are - in principle – discretionary in terms of the category of enforcement action that is taken.95 Second, enforcement measures (including penalties) must nonetheless be "necessary to ensure compliance with the laws and regulations" adopted by the coastal states and simultaneously "reasonable", which - according to jurisprudence - implies a requirement of proportionality that may in some circumstances rule out strict enforcement measures with a highly deterrent character.96 Moreover, imprisonment or any other form of corporal punishment is prohibited in the context of EEZ fisheries law enforcement unless the respective states have agreed

- 93 The M/V 'Virginia G' Case (Panama/Guinea-Bissau), Judgment, 14 April 2014, 2014 ITLOS Reports 4, para. 211. The coastal State's prescriptive jurisdiction with respect to the adoption of enforcement procedures is mentioned in Article 62(4)(k) UNCLOS.
- 94 See generally James Harrison, 'Article 73', in *United Nations Convention on the Law of the Sea (UNCLOS): A Commentary*, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017).
- 95 Ibid., paras. 5 and 18. See also Camille Goodman, 'Rights, Obligations, Prohibitions: A Practical Guide to Understanding Judicial Decisions on Coastal State Jurisdiction over Living Resources in the Exclusive Economic Zone', The International Journal of Marine and Coastal Law, Volume 33 (2018): 558–584, 573–575.
- 96 See *The M/V 'Virginia G' Case (Panama/Guinea-Bissau)*, Judgment, 14 April 2014, 2014 ITLOS Reports 4, paras. 266–271. For a discussion, see James Harrison, 'Safeguards against Excessive Enforcement Measures in the Exclusive Economic Zone: Law and Practice', in *Jurisdiction over Ships: Post-UNCLOS Developments in the Law of the Sea*, ed. Henrik Ringbom (Leiden: Brill, 2015), 217–248; Schatz, 'Combating Illegal Fishing', 392–395; James Harrison, 'Patrolling the Boundaries of Coastal State Enforcement Powers: The Interpretation and Application of UNCLOS Safeguards Relating to the Arrest of Foreign-flagged Ships', *L'Observateur des Nations Unies*, Volume 42 (2017): 117–143; Goodman, 'Rights, Obligations, Prohibitions'.

otherwise.⁹⁷ A further significant constraint results from the obligation to promptly release arrested vessels and crews upon the posting of reasonable bond or other security.98 Flag states can ensure coastal state compliance with this obligation via the prompt release procedure under Article 292 UNCLOS - and jurisprudence has so far imposed relatively strict requirements on the reasonableness of the bond or other security.99 Finally, it must be noted that further, unwritten principles of maritime law enforcement apply in addition to those mentioned in Article 73 UNCLOS - such as the requirement that such operations are conducted by clearly marked and identifiable government vessels on government service with duly authorised and identifiable officials on board.100

Third, and particularly important in the present context, enforcement is only permissible with respect to laws and regulations adopted "in conformity with [UNCLOS]".¹⁰¹ Thus, even if a coastal state exercised prescriptive jurisdiction over fisheries straddling or migrating through

their EEZ boundaries and extended its laws to the adjacent high seas areas (i.e., beyond what is permitted under Article 56(1)(a) UNCLOS), any enforcement measures in respect of violations of the coastal state's laws and regulations through conduct of foreign vessels on the high seas are not covered by Article 73(1) UNCLOS. In other words, such enforcement measures are unlawful because Article 73(1) UNCLOS permits coastal states only to exercise enforcement jurisdiction in relation to violations of its fisheries laws to the extent that these laws were prescribed in accordance with its jurisdiction in the EEZ - which does not extend to the high seas (although some scope for enforcement jurisdiction might remain with respect to special situations such as fishing gear floating into the EEZ - as mentioned earlier). 102 This legal situation renders traditional at sea enforcement against fishing vessels intruding into EEZs rather difficult. If foreign vessels are reasonably suspected to have been involved in illegal fishing in the EEZ, the coastal state enjoys the right

- 97 Article 73(3) UNCLOS. See further Harrison, 'Article 73', paras. 16–18.
- 98 Article 73(2) UNCLOS. See further ibid., paras. 12–15.
- 99 See further Tullio Treves, 'Article 292', in *United Nations Convention on the Law of the Sea (UNCLOS):*A Commentary, ed. Alexander Proelss (Munich/Oxford/Baden-Baden: C.H. Beck/Hart/Nomos, 2017).
- 100 The M/V 'Virginia G' Case (Panama/Guinea-Bissau), Judgment, 14 April 2014, 2014 ITLOS Reports 4, para. 342. For a detailed discussion, see Valentin J. Schatz, 'Marine Fisheries Law Enforcement Partnerships in Waters under National Jurisdiction: The Legal Framework for Inter-State Cooperation and Public-Private Partnerships with Non-governmental Organizations and Private Security Companies', Ocean Yearbook, Volume 32 (2018): 329–375, 351–366, https://doi.org/10.1163/22116001–03201014.
- 101 Article 73(1) UNCLOS.
- 102 Compare the situation at issue in *Fisheries Jurisdiction (Spain v. Canada)*, Judgment (Jurisdiction),
 4 December 1998, 1998 ICJ Reports 432, where Canada boarded and arrested the Spanish fishing vessel
 Estai on the high seas adjacent to its EEZ. The case was never decided on the merits. For commentary, see
 David Freestone, 'Canada/European Union: Canada and the EU Reach Agreement to Settle the *Estai* Dispute', *The International Journal of Marine and Coastal Law*, Volume 10 (1995): 397–411; Christopher C. Joyner and
 Alejandro Alvarez von Gustedt, 'The Turbot War of 1995: Lessons for the Law of the Sea', *The International Journal of Marine and Coastal Law*, Volume 11 (1996): 425–458, https://doi.org/10.1163/157180896X00267;
 Peter A. Curran and Ronán Long, 'Fishery Law, Unilateral Enforcement in International Waters: the Case of
 the 'Estai'', *Irish Journal of European Law*, Volume 5 (1996): 123–163.

of hot pursuit to the high seas (and foreign EEZs) under Article 111(2) UNCLOS. This right enables the coastal state to pursue the vessel from within its EEZ to the high seas or a foreign EEZ in order to arrest it and enforce its laws and regulations, subject to several conditions in Article 111 of UNCLOS. However, this right only permits them to take enforcement measures beyond their EEZ, not to enforce laws that they have prescribed beyond the EEZ without jurisdiction.¹⁰³

Against the background of the current legal situation under UNCLOS, EEZ-adjacent activities of DWF fleets pose considerable monitoring, control and enforcement challenges to coastal states - and particularly developing states with vast EEZs and limited coastguard and naval capacities such as Ecuador. The situation of coastal states in the context of EEZ fisheries law enforcement under UNCLOS is not, however, static. Rather, as shown below with respect to access to VMS data in the framework of SPRFMO, it can be improved both in law and in practice through separate agreements (e.g., fisheries access agreements)¹⁰⁴ or the legal framework of RFMOs (constitutive treaties or CMMs). Finally, it should be noted that the International Tribunal for the Law of the

Sea (ITLOS) found in its 2015 Advisory Opinion requested by the Sub-Regional Fisheries Commission (SRFC Advisory Opinion) that, in addition to the coastal state's primary enforcement responsibility regarding EEZ fisheries, flag states have a parallel obligation to ensure that their vessels are not involved in illegal fishing in the EEZ.¹⁰⁵

5.2 Flag state enforcement in EEZ-adjacent high seas areas

On the high seas, in most cases, the flag state has exclusive enforcement jurisdiction over its vessels.¹⁰⁶ In return for this privilege, the flag state has the duty to "effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag".107 ITLOS in its SRFC Advisory Opinion stated that this duty extends to the responsibility of the flag state to adopt the necessary administrative measures "to ensure that fishing vessels flying its flag are not involved in activities which will undermine the flag state's responsibilities [...] in respect of the conservation and management of living resources". 108 In the event of violations, ITLOS stated that the flag state must "investigate, and if appropriate, take any action necessary to remedy the

- 103 For a detailed discussion, see Goodman, Coastal State Jurisdiction, 295–337.
- 104 For a discussion of the reverse situation of strengthening flag State responsibility through fisheries access agreements, see Valentin J. Schatz, 'The Contribution of Fisheries Access Agreements to Flag State Responsibility', *Marine Policy*, Volume 84 (2017): 313–319, https://doi.org/10.1016/j.marpol.2017.06.022.
- 105 Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC) (Advisory Opinion) ITLOS Reports 2015, 4, paras. 111–140. For a discussion, see Valentin Schatz, 'Fishing for interpretation: The ITLOS advisory opinion on flag state responsibility for illegal fishing in the EEZ', Ocean Development & International Law, Volume 47 (2016): 327–345, http://dx.doi.org/10.1080/00908320.2016.1229939.
- 106 Article 92(1) UNCLOS.
- 107 Article 94(1) UNCLOS.
- 108 Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC), Advisory Opinion, supra note 105, para. 119.

situation".¹⁰⁹ It is important to note, however, that these are obligations of 'due diligence'. As ITLOS explained, "[t]his means that this is not an obligation of the flag state to achieve compliance by [its] fishing vessels in each case".¹¹⁰ As long as the flag state has taken all necessary measures to ensure compliance and prevent IUU fishing by its vessels, the fact that some of its vessels engage in IUU fishing in practice would not mean that the flag state has failed to meet its obligations.

Pursuant to the UNFSA, the flag state has the duty to ensure that its fishing vessels comply with the CMMs adopted by RFMOs for straddling and highly migratory fish stocks.¹¹¹ This includes the duties to enforce these measures wherever the violation occurs, to investigate any alleged violation, to institute proceedings in respect of an alleged violation, and to ensure that a vessel that has committed a violation does not fish on the high seas until the sanctions imposed by the flag state have been complied with.¹¹² Similar obligations are contained in the constitutive treaties of SPRFMO¹¹³ and IATTC.¹¹⁴

DWF presents a significant challenge to this model of exclusive flag state jurisdiction. With thousands of vessels fishing all over the world, often at vast distances from their flag port, the flag state authorities are often unable or unwilling to ensure that each individual vessel is acting within the law at all times. In some cases, flag states may have deliberately weak enforcement practices in order to attract the business of more vessels to their registries.¹¹⁵ In other cases, the flag state may simply lack the resources to adequately enforce the applicable rules and regulations.¹¹⁶

Attempts have been made within the international law framework to rectify the "notorious failure on the part of flag states to effectively ensure their vessels comply with conservation and management measures". In 1993, the United Nations Food and Agriculture Organization Conference adopted the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement). The Agreement places on its parties the obligation to take the necessary

¹⁰⁹ Ibid.

¹¹⁰ Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC), Advisory Opinion, supra note 105, para. 129.

¹¹¹ Article 19(1) UNFSA.

¹¹² Ibid.

¹¹³ Article 25 SPRFMO Convention.

¹¹⁴ Article XVIII IATTC Convention.

¹¹⁵ Karine Erikstein and Judith Swan, 'Voluntary Guidelines for Flag State Performance: A New Tool to Conquer IUU Fishing', *The International Journal of Marine and Coastal Law*, Volume 29 (2014): 116–147, 120–121, https://doi.org/10.1163/15718085–12341311; Rosemary Rayfuse, *Non-Flag State Enforcement in High Seas Fisheries (Leiden: Martinus Nijhoff, 2004), 34.*

¹¹⁶ Erikstein/Swan, 'Voluntary Guidelines for Flag State Performance' 120–121.

¹¹⁷ Rayfuse, Non-Flag State Enforcement in High Seas Fisheries, 34.

¹¹⁸ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (24 November 1993) 2221 UNTS 91.

measures to ensure that fishing vessels flying its flag "do not engage in any activity that undermines the effectiveness of international conservation and management measures".119 It requires each party to authorize its vessels that seek to fish on the high seas, and only if satisfied that it is able to exercise effectively its flag state responsibilities in respect of that vessel.¹²⁰ The flag state must take enforcement measures in respect of its vessels that have contravened the FAO Compliance Agreement, including prosecution where appropriate, with applicable sanctions of sufficient gravity.¹²¹ While several major DWF states such as Japan, the Republic of Korea, and also the European Union are parties to the FAO Compliance Agreement, China is not. Membership of the Agreement remains low after nearly 30 years, with only 45 parties.

The UNFSA further elaborates the duties of flag states under UNCLOS to enforce high seas CMMs with respect to their vessels. It has yet to reach the near-universal status of UNCLOS, with only 91 parties. China signed the UNFSA in 1996 but has never become a party. Despite the UNFSA's many important innovations,

flag state performance is still lacking and the state of marine fishery resources continues to decline.¹²² Additional, non-binding instruments such as the CCRF, IPOA-IUU and the FAO Voluntary Guidelines on Flag State Performance¹²³ provide further detail on the duties of flag states, including the duty to take enforcement measures against its fishing vessels which have contravened CMMs.¹²⁴ The Introduction to the IPOA-IUU acknowledges that "[e]xisting international instruments addressing IUU fishing have not been effective due to a lack of political will, priority, capacity and resources to ratify or accede to and implement them".125 It provides that flag states "should ensure" that their fishing vessels "do not engage in or support IUU fishing".126 Flag states should also ensure that their fishing vessels, when fishing outside the flag state's EEZ, hold a valid authorization to fish.¹²⁷ The authorization to fish issued by the flag state may require the vessel to use a VMS or make reports to the flag state, including concerning its catch and transhipment.¹²⁸ The IPOA-IUU also provides that flag states should ensure that their transport and supply vessels

- 120 Ibid.
- 121 Ibid.

- 125 IPOA-IUU, Para. 1.
- 126 IPOA-IUU, Para. 34.
- 127 IPOA-IUU, Para. 45.
- 128 IPOA-IUU, Para. 47.

¹¹⁹ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (24 November 1993) 2221 UNTS 91, Article III.

^{122 &#}x27;The State of World Fisheries and Aquaculture: Sustainability in Action', Food and Agriculture Organization of the United Nations, 2020, https://www.fao.org/3/ca9229en/ca9229en.pdf, 7; Natalie S. Klein, 'Strengthening Flag State Performance in Compliance and Enforcement', in Strengthening International Fisheries Law in an Era of Changing Oceans, ed. Richard Caddell and Erik J. Molenaar (Oxford: Hart Publishing, 2019), 351–372.

^{123 &#}x27;Voluntary Guidelines for Flag State Performance', Food and Agriculture Organization of the United Nations, 2015, https://www.fao.org/3/14577T/i4577t.pdf.

^{124 &#}x27;Code of Conduct for Responsible Fisheries', Food and Agriculture Organization of the United Nations, 31 October, 1995, http://www.fao.org/tempref/docrep/fao/005/v9878e/v9878e00.pdf, Article 8.2.7.

do not trans-ship fish from vessels engaged in IUU fishing.¹²⁹ The 2015 Voluntary Guidelines on Flag State Performance "seek to prevent, deter and eliminate [IUU] fishing... through the effective implementation of flag state responsibilities".¹³⁰ The Guidelines set out, for example, performance assessment criteria to assist flag states in the performance of their duties¹³¹ and advice for cooperation between flag and coastal states.¹³²

At least on paper, China is taking its responsibilities with respect to its DWF fleet seriously. Its previously mentioned Rules on Distant-Water Fishing of 2020 have the goal of achieving conservation and sustainable use of marine living resources.¹³³ The Rules require fishing companies to apply for a permit before undertaking DWF, and provide that vessels found to have been involved in IUU fishing will be prevented from DWF for at least three years.¹³⁴ The Rules also provide for catch reporting, vessel inspection, and the installation of VMS to allow the Chinese authorities to verify the conduct of the vessels.¹³⁵ Also entering into force in 2020, the Rules on Monitoring the Location of Distant-Water Fishing Vessels require all DWF

vessels to send their location to the Chinese authorities on an hourly basis using either VMS or an automatic identification system (AIS).¹³⁶ On their return to China, all DWF vessels must report their catch data to the port authorities at designated fishing ports.¹³⁷ For vessels with a good compliance record, financial incentives and subsidies may be provided, and conversely vessels that have engaged in IUU fishing stand to lose applicable subsidies.¹³⁸

The impact of these new rules remains to be seen in practice, although in the past decade there have been reports of the Chinese authorities not penalizing IUU vessels.139 If used to their full potential by China, tools such as VMS combined with strict enforcement in the event of recorded irregularities may serve to prevent instances of clandestine illegal fishing within the EEZ. However, flag state enforcement even at its most effective is only relevant when a vessel is in breach of a law or regulation. Vessels fishing outside the EEZ of the coastal state and in compliance with the applicable RFMO regulations and other international law (such as UNCLOS and the UNFSA if applicable), even in large numbers, are not acting illegally and are

- 129 IPOA-IUU, Para. 48.
- 130 'Voluntary Guidelines for Flag State Performance', Para 1.
- 131 'Voluntary Guidelines for Flag State Performance', Paras. 6–38.
- 132 'Voluntary Guidelines for Flag State Performance', Paras. 39–43.
- 133 Nengye Liu, 'China's Regulation of its Distant Water Fishing Fleets', *The International Journal of Marine and Coastal Law*, Volume 36, Issue 1,l (2021): 165–175, 170, https://doi.org/10.1163/15718085-BJA10018. See also, Jin-Kai Yu and Han-Xiao Wang, 'Evolution of distant water fisheries policies in China: Overview, characteristics and proposals', *Ocean & Coastal Management*, Volume 207, (2021) https://doi.org/10.1016/j.ocecoaman.2021.105592.
- 134 Liu, 'China's Regulation of its Distant Water Fishing Fleets', 171.
- 135 Ibid.
- 136 Liu, 'China's Regulation of its Distant Water Fishing Fleets', 173.
- 137 Liu, 'China's Regulation of its Distant Water Fishing Fleets', 174.
- 138 Shen/Huang, 'China's policies and practice on combatting IUU in distant water fisheries', 31.
- 139 Shen/Huang, 'China's policies and practice on combatting IUU in distant water fisheries', 29.

not liable to enforcement by their flag state unless they are in breach of domestic fisheries law.

Overall, flag states have clear obligations to take enforcement action to prevent, or sanction vessels involved in, IUU fishing. The effectiveness of flag state enforcement in practice depends on numerous factors including the flag state's willingness to implement its obligations, and its possession of the resources necessary to do so. The current state of IUU fishing around the world suggests that in many cases flag state enforcement is not up to the task of protecting the sustainability of global marine living resources. The recent Rules adopted by China are a promising step towards the fulfilment of its flag state obligations. However, with such a large fleet it remains to be seen whether the Chinese authorities, even if willing, will be able to ensure that their vessels are not engaging in IUU fishing. While the primacy of flag state jurisdiction on the high seas is not at risk, increasingly, other non-flag state forms of enforcement on the high seas are being relied upon to supplement the flag state's role.140

5.3 Non-flag state enforcement in EEZ-adjacent high seas areas

While flag states generally have exclusive (enforcement) jurisdiction over their vessels on the high seas, there are certain exceptions to this principle. These exceptions fall into two categories, the first being the situations in which a non-flag state has the right to take enforcement action against a vessel on the high seas, and the second when a non-flag state has the right to take enforcement action against a vessel for infractions committed on the high seas, after the vessel has continued to coastal waters or port. Non-flag state enforcement plays an important role in filling some of the gaps left by the widespread failure of many flag states to fulfil their enforcement obligations.¹⁴¹

5.3.1 At-sea enforcement by non-flag states

The circumstances in which a non-flag state may undertake at-sea enforcement on the high seas are limited, in order to preserve the freedom of the high seas. Non-flag states may undertake at-sea enforcement against any vessel with the consent of the flag state. Lack consent may come in the form of membership of a treaty that provides for one of the specific exceptions to the exclusivity of flag state jurisdiction, or may be given on an ad hoc basis at any time. UNCLOS provides for at-sea non-flag state enforcement on the high seas in certain situations such as piracy, the design of the seas in the seas fishing.

The UNFSA provides for a regime for nonflag state enforcement on the high seas in areas covered by an RFMO.¹⁴⁵ Duly authorized inspectors of a state party to the RFMO may

- 140 Michele Kuruc, 'Monitoring, Control and Surveillance Tools to Detect IUU Fishing and Related Activities', in Law, Technology and Science for Oceans in Globalisation: IUU Fishing, Oil Pollution, Bioprospecting, Outer Continental Shelf, ed. Davor Vidas (Leiden, Boston: Martinus Nijhoff, 2010), 101, 102–103.
- 141 Rayfuse, Non-Flag State Enforcement in High Seas Fisheries, 51.
- 142 Rayfuse, Non-Flag State Enforcement in High Seas Fisheries, 61.
- 143 This is confirmed by Article 92(1) UNCLOS. See also Rayfuse, *Non-Flag State Enforcement in High Seas Fisheries*, 61.
- 144 Article 105 UNCLOS.
- 145 Article 21 UNFSA.

board and inspect vessels flagged to a member state of the UNFSA (not necessarily also a member of the RFMO).146 The difficulty in the case of Chinese DWF on the high seas near the EEZs of Latin American coastal states is that China is not a party to the UNFSA and therefore not subject to this system of nonflag state enforcement. Considering the relatively low membership of the UNFSA, and the somewhat controversial nature of the at-sea inspection system at the time of the adoption of the Agreement,147 it seems unlikely that these provisions could be considered to be customary international law and therefore binding on China. However, SPRFMO itself has adopted an at-sea boarding and inspection procedure that duplicates the UNFSA system, and thereby brings China within the operation of the UNFSA system.¹⁴⁸ This means that another member of SPRFMO, including Ecuador or Peru (but not Colombia), may inspect a Chinese vessel whilst operating in the SPRFMO Convention Area to verify compliance with SPRFMO CMMs.149 On discovering clear grounds for believing that the vessel has violated CMMs, the inspecting state

is to secure evidence and promptly notify the flag state.¹⁵⁰ The flag state has an obligation to respond to this notification within three working days and must either investigate and take enforcement action itself or authorize the inspecting state to investigate.¹⁵¹ If the inspecting state is authorized to investigate the alleged violation, it is to communicate its results to the flag state, which must then take enforcement action or authorize the inspecting state to take enforcement action as specified by the flag state. If the flag state fails to investigate or authorize investigation, and there are clear grounds for believing that the vessel has committed a serious violation, the inspecting state has powers to secure evidence and to require the master of the vessel to assist in investigating the alleged violation, including by bringing the vessel to port.¹⁵² The inspecting state must observe certain safeguards regarding the wellbeing of the crew and interference with operations or the catch, and must only take action proportionate to the seriousness of the violation.153

- 146 Article 21(1) UNFSA.
- 147 See Erik J Molenaar, 'Non-Participation in the Fish Stocks Agreement: Status and Reasons', *The International Journal of Marine and Coastal Law*, Volume 26, (2011): 195–234, https://doi.org/10.1163/157180811X558956.
- 148 'CMM 11–2015: Conservation and Management Measure Relating to Boarding and Inspection Procedures in the SPRFMO Convention Area', SPRFMO Commission, 2015, https://www.sprfmo.int/measures/; Article 27(3) SPRFMO Convention. China did not support the proposal on High Seas Boarding and Inspection presented by the USA at the 2021 SPRFMO Meeting, which had been developed over several meetings and had the support of 'many Members'. See '9th Annual Meeting of the Commission Meeting Report', SPRFMO Commission (26 January to 5 February 2021), https://www.sprfmo.int/assets/0–2021-Annual-Meeting/Reports/COMM9-Report-Adopted.pdf, paras. 98–106.
- 149 Article 21(1) UNFSA.
- 150 Article 21(5) UNFSA.
- 151 Article 21(6) UNFSA.
- 152 Article 21(8) UNFSA.
- 153 Article 21(8), (10), (16) UNFSA.

5.3.2 Vessel monitoring

The SPRFMO at-sea inspection procedure is supported by the SPRFMO VMS.¹⁵⁴ The CMM that establishes the system requires all member states and cooperating non-contracting parties (CNCPs) to require vessels flying their flag to report VMS data to the SPRFMO Secretariat155 when operating within the SPRFMO Convention Area or its 100 nm buffer zone. 156 The CMM provides that "[i]t shall be prohibited to destroy, damage, switch off, render inoperative or otherwise interfere" with the automatic location communicator.157 Therefore, China has an obligation to make it illegal for its vessels to switch off their locator devices and 'go dark'. A SPRFMO member or CNCP can request VMS data from the SPRFMO Secretariat without the permission of the flag state for the purpose of active surveillance operations and/or inspections at sea.158 This means that Peru or Ecuador, for example, could request VMS data from a vessel they suspect of engaging in IUU fishing in breach of a SPRFMO CMM in order to inspect

the vessel. At the 2021 SPRFMO meeting, Chile introduced a proposal to allow coastal states to request VMS data when fishing vessels are within 12 nm of their EEZ or within them, and to automatically alert coastal states when a vessel enters their EEZs from the SPRFMO Convention Area. 159 This proposal is reminiscent of the practice of WCPFC. Coastal state members of WCPFC can request that the WCPFC VMS covers their EEZs¹⁶⁰ and "may request and shall receive near real-time VMS data for high seas areas adjacent to and not more than 100 [nm] from their [EEZs] for the purpose of conducting [monitoring, control and surveillance] activities, including in areas under their national jurisdiction".161 The Commission was unable to reach consensus on the revised version of the proposal and it was not adopted. China stated that it was not able to accept the proposal and noted its view that some of its elements lacked an international legal basis and that once a vessel is outside of the SPRFMO Convention Area, the SPRFMO Convention does not apply. 162

- 154 'CMM 06–2020: Establishment of the Vessel Monitoring System in the SPRFMO Convention Area' SPRFMO Commission, 2020, https://www.sprfmo.int/measures/.
- 155 Establishment of the Vessel Monitoring System in the SPRFMO Convention Area' SPRFMO Commission, para. 9.
- 156 Establishment of the Vessel Monitoring System in the SPRFMO Convention Area' SPRFMO Commission, para. 2.
- 157 Establishment of the Vessel Monitoring System in the SPRFMO Convention Area' SPRFMO Commission, para. 15.
- 158 Establishment of the Vessel Monitoring System in the SPRFMO Convention Area' SPRFMO Commission, para. 24.
- 159 '9th Annual Meeting of the Commission Meeting Report', SPRFMO Commission, para. 82.
- 160 See Article 24(8) WCPFC Convention in conjunction with Para. 6(c), 'CMM 2014–02: Conservation and Management Measure for Commission VMS' WCPFC Commission, 2014, https://www.wcpfc.int/conservation-and-management-measures.
- 161 'Rules and Procedures for Protection Access to and Dissemination of High Seas Non-Public Domain Data and Information Compiled by the Commission for the Purpose of MCS Activities and Access to and Dissemination of High Seas VMS Data for Scientific Purposes', WCPFC Commission, 2010, para. 22, https://www.wcpfc.int/doc/commission-09/rules-and-procedures-protection-access-and-dissemination-high-seas-non-public. See further Goodman, Coastal State Jurisdiction, 211.
- 162 'Rules and Procedures for Protection Access to and Dissemination of High Seas Non-Public Domain Data and Information', WCPFC Commission, paras. 98–91.

This argument is, however, unpersuasive as the mandate of RFMOs covers CMMs with respect to fisheries falling within their substantive and geographical mandate – regardless of whether the effect of a CMM itself extends beyond the constitutive treaty's area of application (such as in the case of port state measures). The existence of WCPFC's VMS regime (to which China has consented) is ample proof of this. The report of the meeting records Chile's 'deep disappointment' that consensus could not be reached on this proposal designed to protect straddling stocks.¹⁶³

5.3.3 IUU Vessel List

SPRFMO has also adopted a system whereby vessels presumed to have carried out IUU fishing activities in the SPRFMO Convention Area are included on an IUU Vessel List. 164 Once a vessel has been included on the list, members and CNCPS are to take all necessary non-discriminatory measures to remove any fishing authorizations, to prohibit their vessels from assisting in any way in the fishing operations of that vessel, to refuse authorization to that vessel to enter their ports except in case of *force*

majeure, to refuse to grant their flag to that vessel unless safeguard conditions have been met, and to prohibit the import, landing or transshipment of species covered by SPRFMO from that vessel. 165 This CMM therefore calls on the combined enforcement powers of the flag state, port states, and all other members and CNCPs of SPRFMO. At the time of writing, there were no vessels listed on the SPRFMO IUU Vessel List. 166

5.3.4 Port state control

Port states play an increasingly important role in ensuring compliance with and enforcement of the law of the sea generally, including international fisheries law.¹⁶⁷ Under customary international law, by virtue of their territorial sovereignty, port states have the right to refuse access to vessels seeking to enter their port, and to set conditions for entry.¹⁶⁸ The UNFSA provides that port states have "the right and duty to take measures, in accordance with international law, to promote the effectiveness" of CMMs.¹⁶⁹ These measures may include inspecting documents, fishing gear and catch when a fishing vessel is voluntarily in port.¹⁷⁰ SPRFMO has adopted minimum standards of inspection

- 163 'Rules and Procedures for Protection Access to and Dissemination of High Seas Non-Public Domain Data and Information', WCPFC Commission, para. 90.
- 164 'CMM 04–2020: Conservation and Management Measure Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the SPRFMO Convention Area', SPRFMO Commission, 2020, https://www.sprfmo.int/measures/.
- 165 'CMM 04-2020', SPRFMO Commission, para. 16.
- 166 '9th Annual Meeting of the Commission Meeting Report', SPRFMO Commission, para. 46.
- 167 Arron Honniball, 'The Exclusive Jurisdiction of Flag States: A Limitation on Pro-active Port States?',

 The International Journal of Marine and Coastal Law, Volume 31, (2016): 499–530, 500, https://doi.
 org/10.1163/15718085–12341410. See further Arron Honniball, Extraterritorial Port State Measures: The Basis and Limits of Unilateral Port State Jurisdiction to Combat Illegal, Unreported and Unregulated Fishing (Utrecht: Utrecht University, 2019).
- 168 Rayfuse, Non-Flag State Enforcement in High Seas Fisheries, 65.
- 169 Article 23(1) UNFSA.
- 170 Article 23(2) UNFSA.

in port, out of its "deep concern" about IUU fishing in the SPRFMO area and in recognition of the fact "that port state measures provide a powerful and cost-effective means of preventing, deterring and eliminating" IUU fishing.¹⁷¹ Prior to its entry to port, the foreign fishing vessel must notify the port state, and respond to requests from the port state for information required to determine whether it has engaged in IUU fishing.¹⁷² On the basis of this information, the port state may either authorize or deny entry to port.¹⁷³ Members and CNCPs of SPRFMO are required to inspect at least 5% of landing and transshipment operations in the ports that they have designated for entry by foreign fishing vessels.174

Port state measures to prevent IUU fishing have been strengthened and harmonized on a global basis with the 2016 entry into force of the PSMA. The PSMA aims to prevent, deter and eliminate IUU fishing by placing binding obligations on port states to apply certain measures when foreign vessels are in port or seeking entry to port, designed to ensure that IUU vessels are not able to enter port and land their catch.¹⁷⁵ Port states are also required to inspect a minimum number of vessels in their ports in order to identify vessels that have engaged in IUU fishing or related activities.¹⁷⁶ There are currently 71 parties to the PSMA including Chile, Ecuador and Peru, but not Colombia or Argentina. However, as highlighted above in section 2, many of the foreign vessels fishing just outside the EEZs of the Latin American states do not land their catch at the local ports but rather engage in transshipment, offloading their cargo and resupplying at sea. This system severely weakens the utility of port state control and enforcement and its potential to enhance compliance with international fisheries law.

5.3.5 Preliminary conclusion

While the primacy of flag state enforcement on the high seas remains central to the law of the sea and international fisheries law, the range of non-flag state enforcement mechanisms can play an important supplementary role. Vessel monitoring systems operated by RFMOs are a valuable tool to support at-sea inspection, which can lead to non-flag state investigation of suspected IUU fishing when the flag state consents or fails to fulfil its investigation obligations. Other RFMO-led measures such as the blacklisting of IUU vessels have the potential to reduce IUU fishing in circumstances where the flag state is in breach of its obligations to ensure its vessels are in compliance with applicable international law. Port state control and enforcement, particularly when coordinated at the global or regional level, is an effective way of ensuring compliance with international fisheries law, provided that vessels enter port outside their home country.

^{171 &#}x27;CMM 07–2021: Conservation and management Measure on Minimum Standards of Inspection in Port', SPRF-MO Commission, 2021, https://www.sprfmo.int/assets/Fisheries/Conservation-and-Management-Measures/2021-CMMs/CMM-07–2021-Port-Inspection-12Mar2021.pdf, preamble.

^{172 &#}x27;CMM 07-2021', SPRFMO Commission, paras. 11-13; see also the IPOA-IUU paras. 52-64.

^{173 &#}x27;CMM 07-2021', SPRFMO Commission, para. 13.

^{174 &#}x27;CMM 07–2021', SPRFMO Commission, para. 15.

^{175 &#}x27;CMM 07–2021', SPRFMO Commission, Articles 9, 11.

^{176 &#}x27;CMM 07-2021', SPRFMO Commission, Part 4.

6. Conclusion

This paper set out to explore the role of international fisheries law in the context of the ongoing tensions between China and the Pacific Latin American coastal states triggered by the fishing activities of the Chinese DWF fleet in EEZ-adjacent high seas areas. The Chinese DWF fleet, which is fishing for squid and other species in great numbers in these waters, is suspected of IUU fishing both on the high seas and - illicitly - in the EEZs of Latin American coastal states. The directed and sometimes confrontational operation of DWF fleets in EEZ-adjacent high seas areas is increasingly classified as an international maritime security threat, particularly where it reaches a level of intensity that has geopolitical implications - such as in the case study at issue in this paper.

International law provides the framework for the regulation of fishing activities in EEZ-adjacent high seas areas. However, significant gaps remain. Although the Chinese DWF fleet may be fishing at unsustainable levels just outside the EEZs of the Latin American coastal states, coastal state prescriptive jurisdiction does not extend beyond the limits of the EEZ, although some jurisdiction is available, for example, with respect to transiting foreign fishing vessels. Absent incursion into the EEZ in breach of the coastal state's sovereign rights, the Chinese fishing off the Pacific Latin American coast will only be considered IUU fishing if it is unregulated and/or in breach of the applicable provisions of global international fisheries law (e.g., Part VII of UNCLOS) or CMMs adopted by the competent RFMO. Against this background, a classification of the Chinese DWF fleet operations requires an in-depth analysis of the available factual evidence and applicable law in each concrete situation. The main target species of the Chinese DWF fleet in this area, the jumbo flying squid, is not currently subject to catch allocation restrictions or other substantive requirements under SPRFMO CMMs. Strengthening RFMO regulation through the elaboration of substantive restrictions is therefore critically important to ensure that unsustainable fishing practices are brought within the reach of specific international regulation.

The primary responsibility for preventing and responding to IUU fishing falls on the flag state. International law places binding obligations on flag states such as China to ensure that their vessels are not engaging in IUU fishing. However, the implementation of these obligations requires flag state willingness and capacity. Further, being obligations of due diligence, the fact that a flag state's vessels are engaging in IUU fishing will not necessarily mean that the flag state has breached its obligations. IUU fishing continues to proliferate around the globe and States Parties to UNCLOS have to date been unwilling to initiate dispute settlement procedures against flag states that have failed in their duties, despite their availability. The Pacific Latin American coastal states, notwithstanding their keen concern with regard to the matter, have only very limited enforcement powers unless foreign fishing vessels illegally enter their EEZ and enforcement assets are available to address such incursions. RFMOs such as SPRFMO and their members play an important role in enforcing CMMs on the high seas, for

example by the collection and sharing of VMS data and through at-sea inspection and subsequent investigation systems. RFMOs can also play a role in enhancing the ability of coastal states to monitor the activity of fishing vessels passing through their EEZs or fishing in high seas areas outside their EEZs - which in turn allows for more effective enforcement measures. NGOs and other non-state actors can also make a valuable contribution to the prevention and enforcement of IUU fishing through the collection and sharing of monitoring and surveillance data. Port state control in Latin America has great potential in theory to ensure compliance with CMMs. However, with the extensive use of transshipment negating the need for the landing of catch in port, this potential is likely to be unfulfilled.

Despite its weaknesses, international law plays an important role in the regulation and enforcement of fishing in EEZ-adjacent high seas areas. This role has the potential to be enhanced through the strengthening of RFMO CMMs, which will allow for the increased use of the available enforcement mechanisms. On paper at least, China has recently shown a willingness to take its flag state responsibilities seriously, and if properly implemented, the new Rules may result in a substantial reduction in harmful or potentially IUU Chinese DWF. Absent flag state willingness or capacity, the combined force of coastal state, port state and non-flag state enforcement through RFMOs, supported by NGO advocacy and data, has the potential to reduce IUU fishing and its related security risks, including the risks of international confrontation or disputes.

Authors

Prof. Dr Valentin Schatz is Junior Professor of Public Law and European Law with a Focus on Sustainability at the Faculty of Sustainability of Leuphana University Lüneburg. He can be reached at valentin.schatz@leuphana.de.

Millicent McCreath is a teaching fellow and Scientia PhD candidate at the School of Global and Public Law at the Faculty of Law and Justice of UNSW Sydney. She can be reached at millicent.mccreath@gmail.com.

