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OBSERVER REPORTING OF TRANSHIPMENTS IN THE WCPFC

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Observer Reporting of Transshipments in in the WCPFC

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I. Introduction

The oceans are “enormously wide, deep and nontransparent.”¹ Light rapidly dissipates beyond a depth of 200 meters,² hiding the valuable tuna, swordfish, and other marine fish stocks sought by a global fleet of 4.6 million vessels.³ But they also hide a multitude of sins, including illegal, unreported, and unregulated (IUU) fishing, human rights violations, wildlife smuggling, and drug and gun smuggling.⁴ At the United Nations Security Council, transnational crime on the oceans has been linked to conflicts in Africa, millions of dollars of lost revenue, the spread of weapons, and drug and human trafficking.⁵

Nowhere is the ability to hide more true than the immense Western and Central Pacific Ocean. This area, managed by the Western and Central Pacific Fisheries Commission (WCPFC),⁶ covers roughly 20% of Earth’s surface,⁷ including areas within and beyond national jurisdiction.⁸ It is also home to perhaps the most valuable fisheries in the world; according to one estimate, in 2014 fishers in the region earned more than \$5 billion and the total catch retailed for more than \$22.68 billion.⁹ At the same time, this area includes some of world’s poorest nations with immense marine jurisdictions and few, if any, coast guard vessels to patrol their waters. Palau, for example, possesses an exclusive economic zone of more than 600,000 square

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¹ Cornelius Hammer, Observer and Observer Data — What for? — A View from an ICES Perspective, *in* Proceedings of the 9th International Fisheries Observer and Monitoring Conference, at 8, 8 (eds. Steve Kennelly & Lisa Borges, 2018), <https://ifomcvigo.com/wp-content/uploads/2018/08/proceedings-9th-ifomc.pdf>.

² NOAA, National Ocean Service, How Far Does Light Travel in the Ocean? <https://oceanservice.noaa.gov/facts/lighttravel.html>.

³ FAO, THE STATE OF WORLD FISHERIES AND AQUACULTURE: MEETING THE SUSTAINABLE DEVELOPMENT GOALS 5 (2018), <http://www.fao.org/3/i9540en/i9540en.pdf5>.

⁴ See generally U.N. OFFICE ON DRUGS AND CRIME, TRANSNATIONAL ORGANIZED CRIME IN THE FISHING INDUSTRY: FOCUS ON TRAFFICKING IN PERSONS, SMUGGLING OF MIGRANTS, ILLICIT DRUGS TRAFFICKING (2011), <https://www.unodc.org/documents/human-trafficking/IssuePaper-TOCintheFishingIndustry.pdf>.

⁵ United Nations, Security Council, High Seas Crime Becoming More Sophisticated, Endangering Lives, International Security, Speakers Tell Security Council, SC/13691 (Feb. 5, 2019), <https://www.un.org/press/en/2019/sc13691.doc.htm>.

⁶ The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean (WCPFC Convention) establishes the Western and Central Pacific Fisheries Commission (WCPFC). Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, Sept. 5, 2000, 2275 U.N.T.S. 40532, <https://www.wcpfc.int/system/files/text.pdf> [hereinafter WCPFC Convention].

⁷ *Frequently Asked Questions and Brochures*, W. & CENT. PAC. FISHERIES COMM’N, <https://www.wcpfc.int/frequently-asked-questions-and-brochures> (last updated Mar. 3, 2010).

⁸ The WCPFC Convention defines the Convention Area. WCPFC Convention, *supra* note 6, at art. 3(1). A pictorial representation can be found at WCPFC, Convention Area Map, <https://www.wcpfc.int/convention-area-map>.

⁹ Pew Charitable Trusts, *Netting Billions: A Valuation of Tuna in the Western and Central Pacific Ocean* (Oct. 23, 2016), <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2016/09/netting-billions-a-valuation-of-tuna-in-the-western-and-central-pacific-ocean>.

kilometers¹⁰ and just five Coast Guard vessels, all donated.¹¹ Faced with limited enforcement capacity, IUU fishers have preyed on the region; IUU fishing in the tuna fisheries costs Pacific nations approximately \$600 million per year.¹² Globally, IUU fishing costs nations between \$10 and \$23.5 billion—about one in every five fish caught.¹³

IUU fishing is facilitated by transshipment—movements of fish from a fishing vessel to a carrier vessel, non-fishing vessels with massive capacity to move refrigerated or frozen fish from ocean to port.¹⁴ This is particularly true on the high seas where activities are beyond the jurisdiction of coastal States and difficult if not impossible to monitor and verify.¹⁵ Without effective monitoring, transshipment provides opportunities for operators to mix illegal or unreported catch with legal catch, thus allowing them to “launder” their product.¹⁶ Transshipment at sea has also been implicated in a range of criminal activities, including wildlife trafficking, drug trafficking, human smuggling, and more.¹⁷

To mitigate the risks of IUU fishing, the WCPF Convention prohibits transshipment at sea by purse seine vessels¹⁸ and restricts high seas transshipments by longline and other non-purse seine vessels to those vessels for which transshipment in port is “impracticable.”¹⁹ Despite these restrictions, reported high seas transshipments continue to rise, from 525 in 2013 to a record 1,089 in 2017.²⁰

¹⁰ UNDP, About Palau, <http://www.pacific.undp.org/content/pacific/en/home/countryinfo/palau.html>.

¹¹ Nojima Tsuyosi, *Japan Patrol Vessel Donation to Help Palau Counter Maritime Threats*, NIPPON.COM (Mar. 23, 2018), <https://www.nippon.com/en/features/c04802/japan-patrol-vessel-donation-to-help-palau-counter-maritime-threats.html>.

¹² MRAG ASIA PACIFIC, TOWARDS THE QUANTIFICATION OF ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING IN THE PACIFIC ISLANDS REGION, § 3.1 (Feb. 2016) (estimating the total volume of IUU caught tuna in the Pacific region at 306,440t with an ex-vessel value of \$616.11 million), <https://www.ffa.int/files/FFA%20Quantifying%20IUU%20Report%20-%20Final.pdf>.

¹³ Andrew J. Agnew et al., *Estimating the Worldwide Extent of Illegal Fishing*, 4 PLoS ONE 4(2) 2009: <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0004570&type=printable>.

¹⁴ LACEY MALARKY & BETH LOWELL, NO MORE HIDING AT SEA: TRANSSHIPPING EXPOSED 4 (2017), <https://usa.oceana.org/sites/default/files/oceanatransshippingexposedreportfinal0.pdf>.

¹⁵ Christopher Ewell et al., *Potential Ecological and Social Benefits of a Moratorium on Transshipment on the High Sea*, 81 MARINE POL’Y 293, 296 (2017).

¹⁶ See *id.* at 294 fig.1, 295.

¹⁷ U.N. OFFICE ON DRUGS AND CRIME, *supra* note 4, at 9–10.

¹⁸ WCPF Convention, *supra* note 6, at art. 29(5).

¹⁹ WCPFC, *Conservation and Management Measure on the Regulation of Transshipment*, at ¶ 34, CMM 2009–06 (Dec. 7–11, 2009), <https://www.wcpfc.int/doc/cmm-2009-06/conservation-and-management-measure-regulation-transshipment-0> [hereinafter CMM 2009–06]. CCMs have defined “impracticable” to mean that the prohibition on high seas transshipment would cause a “significant economic hardship” and would require a vessel “to make significant and substantial changes to its historical mode of operation.” *Id.* at ¶ 37. For a detailed description of the impracticability exception, see Chris Wold, *The Impracticability Exemption to the WCPFC’s Prohibition on Transshipment on the High Seas*, 49 ENVTL. L. 101 (2019), <https://law.lclark.edu/live/files/27945-49-1wold-1pdf>.

²⁰ WCPFC, *Annual Report on WCPFC Transshipment Reporting, with an Emphasis on High Seas Activities*, at 6 tbl.1, WCPFC-TCC13-2017-RP03 (Sept. 20, 2017), <https://www.wcpfc.int/file/236644/download?token=uaZRdgST> [hereinafter *2017 Annual Report on WCPFC Transshipment Reporting*]; WCPFC, *Annual Report on WCPFC Transshipment Reporting with an Emphasis on High Seas Activities*, at 10 tbl.5, WCPFC-TCC-2018-RP03 (Sept. 14, 2018), <https://www.wcpfc.int/file/218683/download?token=midBBemR> [hereinafter *2018 Annual Report on WCPFC Transshipment Reporting*].

Consequently, the success of the WCPFC's transshipment rules in preventing IUU fishing depends on whether onboard observers—a WCPFC requirement for all high seas transshipments²¹—monitor the activities of both the fishing vessel and carrier vessel during transshipment and report that information for independent verification. While it appears that most, and maybe all, high seas transshipments in the WCPFC Convention Area are observed,²² the WCPFC's transshipment rules have significant problems. For example, observers are not required to monitor the activities or verify the records of the fishing vessel. Since the WCPFC has established a goal of just 5% observer coverage for non-purse seine vessels,²³ and with many significant fishing nations falling well short of that goal,²⁴ whether the transhipped fish were legally taken is unknown. Even if an observer is on a fishing vessel in the WCPFC Convention Area, nothing requires the observer to submit a transshipment report to the Secretariat or observer program responsible for hiring the observer for independent verification, although WCPFC members and cooperating non-members (collectively known as CCMs) are required to report all transshipment activities.²⁵ In fact, the Secretariat has reported receipt of just one observer transshipment report in 2016 and 2017²⁶ despite more than 2,000 reported high seas transshipments during the same period.²⁷ Even when observers report, the WCPFC is likely to get different types of information because it has not agreed on minimum data requirements or a standardized reporting format for observers.²⁸ Consequently, the Secretariat reports that verification of high seas transshipments remains a priority.²⁹

²¹ CMM 2009–06, *supra* note 19, at ¶¶ 13–15.

²² The WCPFC the Secretariat has reported that “[t]he majority of CCMs who were involved in high seas transshipment in 2017 seemed to affirm that high seas transshipment conducted in 2017 were 100% covered by observers,” *2018 Annual Report on WCPFC Transshipment Reporting*, *supra* note 20, at ¶ 16.

²³ WCPFC, *Conservation and Management Measure for the Regional Observer Programme*, CMM 2018–05, at Annex C, at ¶ 6 (2018), <https://www.wcpfc.int/file/265479/download?token=BHYxez2e>.

²⁴ Peter Williams et al., *Status of Observer Data Management*, WCPFC-SC15-2019/ST IP-02, 15–17, tbls. 3–4 (Aug. 20, 2019) (reporting that Vanuatu, China, Japan, and others, fell well short of the 5% goal for all or some of their fleets in 2017 and 2018), <https://www.wcpfc.int/file/305714/download?token=OmgcR3p8>.

²⁵ CMM 2009–06, *supra* note 19, at ¶ 11. In contrast, between 2014 and 2016, observer coverage on purse seine vessels ranged from 94% to 99%. WCPFC, *9th Annual Report for the Regional Observer Programme*, WCPFC-TCC13-2017-RP02, ¶ 8 (Sept. 2, 2018), <https://www.wcpfc.int/file/155668/download?token=Xv5HRPWk>.

However, the Secretariat has not been able to verify all placements on all vessels. WCPFC, *10th Annual Report for the Regional Observer Programme*, WCPFC-TCC14-2018-RP02, ¶ 36 (Sept. 2, 2018), <https://www.wcpfc.int/file/218519/download?token=yrhA6MsQ>.

²⁶ WCPFC, THIRTEENTH REGULAR SESSION OF THE TECHNICAL AND COMPLIANCE COMMITTEE: SUMMARY REPORT, at ¶ 203, WCPFC14-2017-TCC13 (Nov. 14, 2017) (“the Secretariat did not receive much data from observer providers relating to observation of transshipments at sea, that there was no mandatory requirement to do this and that only one observer report had been received in 2016.”), <https://www.wcpfc.int/system/files/TCC13%20Summary%20Report%20finalissued%2014%20Nov%202017.pdf>; see also *2018 Annual Report on WCPFC Transshipment Reporting*, *supra* note 20, (not reporting the receipt of any observer reports).

²⁷ *2018 Annual Report on WCPFC Transshipment Reporting*, *supra* note 20, at 9, tbl.3.

²⁸ WCPFC, *Information that Could Be Usefully Gathered Around Bycatch Mitigation Equipment and Their Application, during High Seas Transshipment Processes*, WCPFC-TCC14-2018-15A, ¶¶ 7, 8 (Aug. 29, 2018), <https://www.wcpfc.int/file/218466/download?token=w5orb1SV>. The lack of detailed and standardized reporting and other issues concerning the disclosure of observer information and reports can hamper investigations of possible fisheries violations. WCPFC, *Provision of Observer Reports to CCMs and Observer Conduct*, WCPFC-TCC14-2018-14 (Sept. 12, 2018), <https://www.wcpfc.int/file/218928/download?token=n-EE9iFY>.

²⁹ *2018 Annual Report on WCPFC Transshipment Reporting*, *supra* note 20, at ¶ 13.

Compared with other regional fisheries management organizations (RFMOs) that manage tuna, the WCPFC's rules are weak. The four other tuna RFMOs (t-RFMOs)—the Indian Ocean Tuna Commission (IOTC),³⁰ International Commission for the Conservation of Atlantic Tuna (ICCAT),³¹ Inter-American Tropical Tuna Commission (IATTC),³² and Commission for the Conservation of Southern Bluefin Tuna (CCSBT)³³—have virtually identical rules for regulating transshipment at sea,³⁴ including reporting by observers.³⁵ They specifically require observers to collect and verify significant fisheries-related information on both the carrier vessel and the fishing vessel.³⁶ They specifically require the observer to submit transshipment reports to the RFMO Secretariat.³⁷ These requirements allow independent verification of transshipment data submitted by the fishing and carrier vessels by the relevant RFMO Secretariat. As a consequence, these RFMOs are better able to prevent IUU fishing and other criminal activities facilitated by transshipment.

This paper assesses the failure of the WCPFC to require observer reports for high seas transshipments and the significance of the resulting data gaps. Section II begins by reviewing the linkages between IUU fishing and other criminal activities associated with transshipment at sea and the reasons for strictly monitoring and regulating those transshipment activities. Section III describes the important role that onboard observers play in monitoring compliance with the conservation and management rules of fisheries organizations and data collection that facilitates improved management of valuable fish stocks. Section IV introduces the existing requirements for observer reporting of transshipments in the WCPFC and other t-RFMOs, as well as the North Pacific Fisheries Commission, which manages non-tuna fisheries in an area that overlaps with the WCPFC Convention Area. Section V concludes with recommendations for the WCPFC to improve observer reporting of transshipment activities, in particular, by adopting many of the best practices already implemented by other t-RFMOs.

II. The Need to Monitor Transshipment at Sea

³⁰ The Indian Ocean Tuna Commission was established by the Agreement for the Establishment of the Indian Ocean Tuna Commission, art. I, Nov. 25, 1993 (entered into force Mar. 27, 1996), <https://www.iotc.org/about-iotc/basic-texts> [hereinafter IOTC Convention].

³¹ International Convention for the Conservation of Atlantic Tunas, art. 3, May 14, 1966, 20 U.S.T. 2887, 673 U.N.T.S. 63 (entered into force March 21, 1969), <https://treaties.un.org/doc/Publication/UNTS/Volume%20673/volume-673-I-9587-English.pdf> [hereinafter ICCAT].

³² Inter-American Tropical Tuna Convention, May 31, 1949, 1 U.S.T. 230, (entered into force Mar. 3, 1950) [hereinafter IATTC Convention]. The IATTC and its rules for fishing were updated in the Convention for Strengthening the Inter-American Tropical Tuna Convention, June 27, 2003, (entered into force on Aug. 27 2010) [hereinafter Antigua Convention]. Both treaties can be found at <https://www.iattc.org/IATTCDocumentsENG.htm>.

³³ Convention for the Conservation of Southern Bluefin Tuna, art. 6, May 10, 1993, 1819 U.N.T.S. 360 (entered into force May 20, 1994) [hereinafter CCSBT Convention], <https://treaties.un.org/doc/Publication/UNTS/Volume%201819/volume-1819-I-31155-English.pdf>.

³⁴ For a comprehensive assessment of the transshipment rules for these tuna RFMOs, see Wold, *The Impracticability Exception*, *supra* note 19, at 151–55; CLAIRE VAN DER GEEST, INT'L SEAFOOD SUSTAINABILITY FOUND., TRANSHIPMENT: STRENGTHENING TUNA RFMO TRANSHIPMENT REGULATIONS (2019), <https://iss-foundation.org/downloads/17862/>.

³⁵ See *infra* Section IV(B).

³⁶ *Id.*

³⁷ *Id.*

Transshipment is the unloading of fish from a fishing vessel to another fishing vessel, including support ships and carrier vessels, either at sea or in port.³⁸ Transshipment at sea allows fishing vessels to offload their catch, take on supplies, and continue fishing without leaving their fishing grounds.³⁹ Fishing vessels can thus stay at sea and continue fishing “for many years at a time.”⁴⁰ Fishing vessels that tranship at sea likely save time and money by avoiding fuel costs and eliminating the time needed to transit to port for transshipment.⁴¹ As Interpol reports, “[i]t makes commercial sense for [fishing vessels] to tranship and resupply near the fishing grounds, which may be mid-ocean. Many fishing vessels can be serviced by one [carrier vessel], and valuable fishing time is not lost by long journeys to designated transshipping sites near to shore.”⁴²

Nonetheless, the FAO has stated that “[i]t is clear that in the absence of effective monitoring and control, transshipping poses a serious risk to fisheries by allowing the catching and landing of fish to go unregulated and unreported.”⁴³ In fact, transshipment at sea escapes proper control by flag or coastal states and is, therefore, increasingly viewed as a serious concern. Studies have found that transshipment at sea is associated with higher levels of IUU fishing,⁴⁴ and four t-RFMOs have expressed “grave concern” that transshipment at sea facilitates organized tuna laundering and significant levels of IUU fishing.⁴⁵ But the problem is not unique to tuna fisheries. In the toothfish fishery, for example, fishing operators tranship on the high seas to avoid the inevitable scrutiny that would occur during transshipment in port,⁴⁶ allowing them, for example, to launder illegally caught fish with legally caught fish in order to “circumvent quota and licensing regulations.”⁴⁷ The United Nations Office on Drugs and Crime (UNODC) has concluded that fishers understand clearly that “transshipments are often hard to detect due to

³⁸ WCPF Convention, *supra* note 6, at art. I §§ (e), (h). The FAO similarly defines it as the “act of transferring the catch from one fishing vessel to either another fishing vessel or to a vessel used solely for the carriage of cargo.” FAO, FISHING OPERATIONS, § 1 (1996), <http://www.fao.org/3/W3591E/w3591e03.htm>.

³⁹ Ewell et al., *supra* note 15, at 293.

⁴⁰ U.N. OFFICE ON DRUGS AND CRIME, *supra* note 4, at 34.

⁴¹ Ewell et al., *supra* note 15, at 293.

⁴² INTERPOL, STUDY ON FISHERIES CRIME IN THE WEST AFRICAN COASTAL REGION 15 (Sept. 2014), <https://www.interpol.int/en/content/download/5144/file/INTERPOL%20Study%20on%20Fisheries%20Crime%20in%20the%20West%20African%20Coastal%20Region%20EN.pdf?inLanguage=eng-GB>.

⁴³ FAO, GLOBAL STUDY ON TRANSHIPMENT: REGULATIONS, PRACTICES, MONITORING AND CONTROL, 33 (June 2018) [hereinafter FAO GLOBAL STUDY ON TRANSHIPMENT], <http://www.fao.org/3/CA0464EN/ca0464en.pdf>.

⁴⁴ GLOBAL FISHING WATCH, THE GLOBAL VIEW OF TRANSSHIPMENT: REVISED PRELIMINARY FINDINGS 2 (2017), <https://globalfishingwatch.org/wp-content/uploads/GlobalViewOfTransshipmentAug2017.pdf>.

⁴⁵ IOTC, *Resolution on Establishing a Programme for Transshipment by Large-Scale Fishing Vessels*, at preamble ¶ 2, Resolution 18/06, (2018), <https://www.iotc.org/sites/default/files/documents/compliance/IOTC-CompendiumofACTIVECMMs04October2018.pdf> [hereinafter IOTC Resolution 18/06]; ICCAT, *Recommendation by ICCAT on Transshipment*, at 1, Res. 16-15, <https://www.iccat.int/Documents/Recs/compendiopdf-e/2016-15-e.pdf> [hereinafter ICCAT Recommendation 16-15]; IATTC, *Amendments to Resolution C-11-09 on Establishing a Program for Transshipments by Large-Scale Fishing Vessels*, at 1, Res. C-12-07, (June 25–29, 2012), <http://www.iatcc.org/PDFFiles/Resolutions/IATTC/English/C-12-07-ActiveAmends%20and%20replaces%20C-11-09%20Transshipments.pdf> [hereinafter IATCC Resolution C-12-07]; The Comm’n for the Conservation of S. Bluefin Tuna, *Resolution on Establishing a Program for Transshipment by Large-Scale Fishing Vessels*, at 1, (Oct. 12, 2017), <https://www.ccsbt.org/sites/default/files/userfiles/file/docsenglish/operationalresolutions/ResolutionTransshipment.pdf> [hereinafter CCSBT Transshipment Resolution].

⁴⁶ U.N. OFFICE ON DRUGS AND CRIME, *supra* note 4, at 107.

⁴⁷ *Id.*

the lack of adequate surveillance and vessel tracking of fishing vessels” and that “this *modus operandi* is quite common” in fisheries other than the toothfish fishery.⁴⁸ Because transshipment at sea generally facilitates the evasion of rules, the practice has real conservation and human costs: transshipments to evade fisheries rules and other IUU activities “deplet[e] fish stocks [and] severely affect[] food security.”⁴⁹

Moreover, where transshipment at sea is not effectively monitored, concerns arise relating to slavery, links to organized crime, and other criminal activity.⁵⁰ The UNODC has reported a litany of criminal activities associated with transshipment at sea, including human trafficking for forced labor and prostitution.⁵¹ The UNODC makes clear that unmonitored transshipment at sea abets human trafficking: “[f]ishers report that they are traded from vessel to vessel whilst at sea to meet crewing needs.”⁵² Fishers also smuggle migrants as part of criminal networks, including in the Oceania region.⁵³ Fishing vessels and the fish processing industry are crucial components of drug smuggling, and transshipment facilitates that smuggling.⁵⁴ These activities are also frequently associated with corruption and money laundering.⁵⁵ As the UNODC reports, with the ability of fishing vessels to stay at sea for very long periods of time, transshipment allows these criminal activities to remain out of sight and undetected.⁵⁶ With almost 40% of the transshipments occurring on the high seas,⁵⁷ the scale of criminal activity, including IUU fishing,⁵⁸ is potentially huge.

The problems associated with unmonitored transshipment are exacerbated by poor flag State compliance with their international obligations. The U.N. Convention on the Law of the Sea (UNCLOS)⁵⁹ requires flag States to exercise effective jurisdiction and control over ships flying its flag in order to ensure that it operates in accordance with generally accepted international regulations, procedures and practices.⁶⁰ These generally accepted international rules

⁴⁸ *Id.*

⁴⁹ *See id.* at 97.

⁵⁰ *Id.* at 9–10.

⁵¹ *Id.* at 9–10, 23. Some of these concerns, such as prostitution and human trafficking, are associated not only with transshipment at sea. *See id.* The Port of Majuro in the Marshall Islands, for example, is known as “a destination for East Asian and Marshallese girls and women subjected to sex trafficking and a transit point for foreign fishermen subjected to labor trafficking.” U.S. DEP’T. OF STATE, TRAFFICKING IN PERSONS REPORT 296 (2018), <https://www.state.gov/reports/2018-trafficking-in-persons-report/>.

⁵² U.N. OFFICE ON DRUGS AND CRIME, *supra* note 4, at 34.

⁵³ *Id.* at 56, 70.

⁵⁴ *Id.* at 86–88.

⁵⁵ *Id.* at 97. UNODC also reported “that environmental crimes (including marine living resource crimes) are the third most frequent predicate of money laundering in the Pacific,” although it did not draw a connection to transshipment at sea. *See id.* at 108.

⁵⁶ *Id.* at 4; MALARKY & LOWELL, *supra* note 14, at 2.

⁵⁷ MALARKY & LOWELL, *supra* note 14, at 2.

⁵⁸ *Id.* at 1–2.

⁵⁹ The United Nations Convention on the Law of the Sea, Dec. 10, 1982, art. 94, 1833 U.N.T.S 3, U.N. Doc. A/CONF.62/122 (entered into force Nov. 16, 1994),

http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm [hereinafter UNCLOS].

⁶⁰ UNCLOS Article 94(1) states, “Every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.” Article 94(5) provides, “In taking the measures called for in paragraphs 3 and 4 each State is required to conform to generally accepted international regulations, procedures and practices and to take any steps which may be necessary to secure their observance.” The International Tribunal for the Law of the Sea nicely summarized these two obligations as follows:

have been elaborated upon through subsequent treaties, jurisprudence, and soft law. For example, the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (the Compliance Agreement)⁶¹ prohibits a State from authorizing a fishing vessel—including a carrier vessel engaged in transshipment⁶²—to operate on the high seas “unless the Party is satisfied that it is able . . . to exercise effectively its responsibilities under this Agreement in respect of that fishing vessel.”⁶³

Although IUU fishing is often “carried out covertly, far from any official presence, and it will be far from obvious what the flag State could realistically have done to prevent it,” the flag State cannot escape its significant responsibilities over fishing vessels flying its flag, including those operating on the high seas.⁶⁴ A flag State must adopt the necessary measures to ensure that fishing vessels flying its flag are not involved in activities that will undermine its responsibilities with respect to the conservation and management of marine living resources.⁶⁵ A flag State is not required to prevent its flagged vessels from violating the law, but it must adopt a high level of vigilance and due diligence.⁶⁶ Exercising due diligence means “to deploy adequate means, to exercise best possible efforts, to do the utmost.”⁶⁷ The International Court of Justice has stated

[O]nce a ship is registered, the flag State is required, under article 94 of the Convention, to exercise effective jurisdiction and control over that ship in order to ensure that it operates in accordance with generally accepted international regulations, procedures and practices. This is the meaning of “genuine link.”

M/V “Virginia G” (Panama v. Guinea-Bissau) (Judgment), 2014 ITLOS Reports 4, para. 113 (April 14), https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.19/judgment_published/C19_judgment_140414.pdf.

⁶¹ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, Nov. 24, 1993, 2221 U.N.T.S. 91 (entered into force Apr. 24, 2003), <http://www.fao.org/3/X3130m/X3130E00.HTM> [hereinafter Compliance Agreement].

⁶² *Id.* at art. 1(a) (defining “fishing vessel” means any vessel used or intended for use for the purposes of the commercial exploitation of living marine resources, including mother ships and any other vessels directly engaged in such fishing operations.”).

⁶³ *Id.* at art. 3.3. The Agreement’s preamble explicitly refers to transshipment by providing that Parties are “conscious of the duties of every State to exercise effectively its jurisdiction and control over vessels flying its flag, *including fishing vessels and vessels engaged in the transshipment of fish.*” *Id.* pmb., at para. 8 (emphasis added).

⁶⁴ The South China Sea Arbitration (Republic of the Philippines v. People’s Republic of China) (Award), 12 July 2016, PCA Award Serie, para. 754, <https://www.pcacases.com/pcadocs/PH-CN%20-%2020160712%20-%20Award.pdf>.

⁶⁵ Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC) (Advisory Opinion), 2015 ITLOS Reports 4, para. 119 (April 2), https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/advisory_opinion_published/2015_21-advop-E.pdf [hereinafter SRFC Advisory Opinion].

⁶⁶ International law describes this distinction as obligations of result and obligations of conduct: “obligations of result involve in some measure a guarantee of the outcome, whereas obligations of conduct are in the nature of best efforts obligations, obligations to do all in one’s power to achieve a result, but without ultimate commitment.” James Crawford, Second Report on State Responsibility, U.N. Doc. A/CN.4/498 and Add.1–4, ¶ 57 (17 March, 1 and 30 April, 19 July 1999), http://legal.un.org/ilc/documentation/english/a_cn4_498.pdf.

⁶⁷ Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (Advisory Opinion), 2011 ITLOS Reports 10, para. 110 (Feb. 1), https://www.itlos.org/fileadmin/itlos/documents/cases/case_no_17/17_adv_op_010211_en.pdf; SRFC Advisory Opinion, *supra* note 65, at para. 129. *See also* Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay), 2010 I.C.J. Rep. 14, paras. 187–88 (Apr. 20), <https://www.icj-cij.org/files/case-related/135/135-20100420-JUD-01-00-EN.pdf> [hereinafter Pulp Mills Case].

that due diligence “entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators, to safeguard the rights of the other party.”⁶⁸ In the context of fisheries, a flag State is under an obligation to “take all necessary measures to ensure compliance.”⁶⁹ If the flag State learns of violations by vessels it flags, it “is obliged to investigate and, if appropriate, take any action necessary to remedy the situation.”⁷⁰ A failure to exercise due diligence could lead to the flag State being held responsible under international law.⁷¹

The Fish Stocks Agreement affirms and elaborates on the responsibilities of flag States.⁷² It calls on Parties to adopt requirements for “recording and timely reporting of vessel position, catch of target and non-target species, fishing effort and other relevant fisheries data in accordance with subregional, regional and global standards for collection of such data.”⁷³ It further requires vessels to “verify[] the catch of target and non-target species through such means as observer programs, inspection schemes, unloading reports, supervision of transshipment and monitoring of landed catches and market statistics.”⁷⁴ The Fish Stocks Agreement and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)⁷⁵ also provide that States should undertake comprehensive and effective monitoring, control and surveillance, including through the implementation of national or regional observer programs, and calls on states to regulate transshipment on the high seas to ensure that the effectiveness of conservation and management measures is not undermined.⁷⁶ The FAO Code of Conduct promotes effective observer programs as critical components of efforts to ensure responsible fishing.⁷⁷ Finally, the Flag State Performance Guidelines call on flag States to

⁶⁸ Pulp Mills, *supra* note 67, at para. 197.

⁶⁹ SRFC Advisory Opinion, *supra* note 65, at para. 129.

⁷⁰ *Id.* at para. 119.

⁷¹ See, e.g., HUGO CAMINOS & VINCENT P. COGLIATI-BANTZ, THE LEGAL REGIME OF STRAITS: CONTEMPORARY CHALLENGES AND SOLUTIONS 324 (2014) (stating, “[E]ven though the flag State may not be held directly responsible for damage caused, it will be held responsible under international law for failure to exercise due diligence to ensure that the ship or aircraft complied with their duties.”). Henrik Ringbom, “Ship-Source Marine Pollution,” in THE PRACTICE OF SHARED RESPONSIBILITY IN INTERNATIONAL LAW 279 (eds. André Nollkaemper & Elias Plakokefalos, 2017) (stating, “Failure to ensure and maintain international minimum standards on ships flying its flag could hence give rise to international responsibility for a pollution incident, provided that a link can be established between the flag state’s failure to respect its duties and the pollution.”). In the context of river pollution, the International Court of Justice stated, “due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works.” Pulp Mills, *supra* note 67, at para. 204.

⁷² U.N. Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the Provisions of this United Nations Convention of the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, Aug. 4, 1995, UNDOC A/Conf.164/37, art.18 (entered into force Dec. 11, 2001), <https://www.un.org/Depts/los/conventionagreements/conventionoverviewfishstocks.htm> [hereinafter Fish Stocks Agreement].

⁷³ *Id.* art. 18(3)(e).

⁷⁴ *Id.* art. 18(3)(f).

⁷⁵ FAO, The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU), <http://www.fao.org/3/a-y1224e.pdf>.

⁷⁶ Fish Stocks Agreement, *supra* note 72, at art. 18(3)(g)(ii), 18(3)(h); IPOA-IUU, *supra* note 72, at para. 49.

⁷⁷ The Code of Conduct for Responsible Fisheries provides:

implement a control regime over their vessels that includes, *at a minimum*, monitoring tools, such as vessel monitoring systems (VMS), logbooks, and observers; mandatory requirements regarding fisheries-related data that must be recorded and reported in a timely manner by vessels (e.g. catches, effort, landings, and transshipments); and in port *and* at sea inspection.⁷⁸ Although the Flag State Performance Guidelines are voluntary, the UN General Assembly habitually calls upon States to implement them as soon as possible.⁷⁹ A reasonable interpretation of the flag State responsibilities found in UNCLOS⁸⁰ would consider the Guidelines to be a reflection of what flag State due diligence requires.⁸¹ In short, these rules impose substantial requirements on flag States to ensure vessels are recording and reporting relevant fisheries data, including with respect to transshipment activities.

Because of the difficulty of monitoring at sea transshipment, many flag States strictly regulate their vessels' transshipment activity, or even prohibit it. This is consistent with international expectations; the FAO has stated that in the absence of effective monitoring and control, “[a] prohibition on transshipping . . . is considered appropriate.”⁸² For example, even when operating outside EU waters, EU-flagged vessels may not tranship catches from third country fishing vessels unless the fishing vessels are registered as carrier vessels under the auspices of an RFMO.⁸³ Regulation of transshipment, however, varies from one country to another. For example, some developing countries—at least in West Africa—do not prohibit transshipment at sea because the small size of their ports cannot accommodate larger carrier

States, in conformity with their national laws, should implement effective fisheries monitoring, control, surveillance and law enforcement measures including, where appropriate, observer programmes, inspection schemes and vessel monitoring systems. Such measures should be promoted and, where appropriate, implemented by subregional or regional fisheries management organizations and arrangements in accordance with procedures agreed by such organizations or arrangements.

FAO, Code of Conduct for Responsible Fisheries, § 7.7.3 (1995), <http://www.fao.org/3/v9878e/V9878E.pdf>.

⁷⁸ FAO, Flag State Performance Guidelines, art. 31 (2015), <http://www.fao.org/3/I4577T/i4577t.pdf>.

⁷⁹ See, e.g., U.N. General Assembly Resolution of 11 December 2018, A/Res/73/125, para. 105 (Jan. 15, 2019) (“...urges all flag States to implement those Guidelines as soon as possible, including, as a first step, by carrying out a voluntary assessment”), <https://undocs.org/pdf?symbol=en/A/RES/73/125>.

⁸⁰ UNCLOS, *supra* note , at art. 94.

⁸¹ Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC) (Advisory Opinion) (Separate Opinion of Judge Paik), 2015 ITLOS Reports 102, para. 26 (stating, “. . . regulations, procedures or practices established in international legal instruments that are accepted by a sufficient number of States may be regarded as being generally accepted. It may also be relevant that those regulations, procedures or practices are consistently upheld by a series of legal instruments.”),

https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/advisory_opinion_published/2015_21_SO_Paik-E.pdf; Victor Alencar Mayer Feitosa Ventura, *Tackling Illegal, Unregulated and Unreported Fishing: The ITLOS Advisory Opinion on Flag State Responsibility for IUU Fishing and the Principle of Due Diligence*, 50 BRAZILIAN J. INT’L L. 50, 58 (2015) (indicating that the Flag State Performance Guidelines are relevant generally accepted international rules), <https://uniceub.emnuvens.com.br/rdi/article/download/3361/pdf>.

⁸² FAO GLOBAL STUDY ON TRANSHIPMENT, *supra* note 43, at 33.

⁸³ Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999 (OJ L286/1), OJ L 286 art. 4(4) (2018), <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32008R1005>.

vessels at port.⁸⁴ Moreover, not all flag States act in accordance with their international responsibilities.

The unwillingness or inability of some States to implement their flag State responsibilities, which is frequently referred to as the use of “flags of convenience,”⁸⁵ has long been associated with IUU fishing.⁸⁶ FAO has called the use of flags of convenience “[o]ne of the most significant contemporary problems in the international legal regime for marine capture fisheries.”⁸⁷ As one author succinctly states, vessels flying flags of convenience

account for a disproportionate share of vessel and tonnage losses; labor violations; oil spills and pollution violations; instances of inadequate communication and equipment; deliberate mislabeling of vessels to disguise the vessel’s true identity; falsified certificates of competency and documentation on engine power output; unauthorized modifications of vessel structures (such as hulls to conceal catch); discarded illegal fishing gear upon sighting of fishery protection vessels; altered satellite communication systems; falsified fisheries information; piracy; and overfishing—all in contravention of and without regard to international, national, and regional regulations.⁸⁸

This should be a concern of the WCPFC because transshipment at sea is associated with the use of carrier vessels flagged by states known to issue flags of convenience.⁸⁹ Moreover, the WCPFC has registered a large number of carrier vessels to tranship in the WCPFC Convention Area

⁸⁴ Environmental Justice Foundation, *Transshipment at Sea: The Need for a Ban in West Africa*, 2 (2013), https://ejfoundation.org/resources/downloads/ejf_transshipments_at_sea_web_0.pdf.

⁸⁵ Strictly speaking, the phrase “flags of convenience” refers to the issuance of flags by States to foreign vessel owners having no real connection with those States. However, these States “lack often the will or the capacity to exercise effective jurisdiction in matters of vessel safety, pollution control and, last but not least, fisheries control. It is convenient to note though that the matter of a link between those States and the vessels is of less importance than the matter of the willingness of these States to exercise effective control and jurisdiction over vessels after having granted registration.” Annick Van Houtte, *Flag State Responsibility and the Contribution of Recently Concluded International Instruments in Preventing, Deterring and Eliminating Illegal, Unreported and Unregulated (IUU) Fishing 2* (undated), http://www.fao.org/fishery/docs/DOCUMENT/Ec-OpenRegistries/Van_Houtte_FSRversion3.pdf.

⁸⁶ See generally David J. Douman, *Illegal, Unreported and Unregulated Fishing: Mandate for an International Plan of Action* (2000), <http://www.fao.org/3/Y3274E/y3274e06.htm>.

⁸⁷ Gail L. Lugten, *A Review of Measures Taken by Regional Marine Fishery Bodies to Address Contemporary Fishery Issues* (FAO Fisheries Circular No. 940, 1999), <http://www.fao.org/3/x1051E05.htm>.

⁸⁸ Jessica Ferrell, *Controlling Flags of Convenience: One Measure to Stop Overfishing of Collapsing Fish Stocks*, 35 ENVTL. L. 323, 332–33 (2005). See also Environmental Justice Foundation, *Lowering the Flag: Ending the Use of Flags of Convenience by Pirate Fishing Vessels* (2009), <https://ejfoundation.org/resources/downloads/Lowering-the-flag.pdf>.

⁸⁹ Ewell et al., *supra* note 15, at 296–97.

flagged by Panama (115 vessels), Liberia (twenty-five vessels), and Vanuatu (four vessels).⁹⁰ These states have historically been associated with the issuance of flags of convenience.⁹¹

III. Importance of Fishery Observers

One strategy for ensuring effective monitoring and control of transshipment is the placement of observers onboard the carrier vessel and fishing vessel to monitor the transshipment and require these observers to report information on transshipments to the relevant RFMO Secretariat. Onboard fishery observers are a key component of monitoring, control, and surveillance programs and for collecting scientific data.⁹² Observers collect data concerning fish catches, bycatch, transshipment activities, and other information as required by national governments or RFMOs while deployed on fishing and carrier vessels. They are intended to be the independent and unbiased “eyes and ears on the water,”⁹³ monitoring, recording, and reporting information that verifies the accuracy of information submitted by vessel captains.⁹⁴ Observers are, in effect, both “watchdog” and scientist.⁹⁵

The need for observers who report or verify fish catches is manifest; “[i]dentification of species is central to all biological data, catch statistics, quota debiting, and hence decisions on the status and successful management of marine resources.”⁹⁶ Accurate identification would seem to

⁹⁰ WCPFC, *WCPFC Record of Fishing Vessels*, <https://www.wcpfc.int/record-fishing-vessel-database> (last visited Feb. 16, 2019). The WCPFC has recognized this issue and decided in 2017 to require CCMs to report observer coverage on carrier vessels. WCPFC, FOURTEENTH REGULAR SESSION OF THE COMMISSION: SUMMARY REPORT, at ¶ 387 (2018), <https://www.wcpfc.int/system/files/WCPFC14%20Summary%20Report%202017%20Issued%2016%20March%2018complete.pdf> [hereinafter WCPFC14 SUMMARY REPORT].

⁹¹ Allan I. Mendelsohn, *Flags of Convenience: Aviation and Maritime*, 79 J. AIR L. & COM. 151, 157 (2014), <https://scholar.smu.edu/cgi/viewcontent.cgi?article=1336&context=jalc>; see also Nathan A. Miller et al., *Identifying Global Patterns of Transshipment Behavior*, 5 FRONT. MAR. SCI., July 2018, at 5, <https://www.frontiersin.org/articles/10.3389/fmars.2018.00240/full>.

⁹² Kelly M. James et al., *Tools and Technologies for the Monitoring, Control and Surveillance of Unwanted Catches*, in THE EUROPEAN LANDING OBLIGATION: REDUCING DISCARDS IN COMPLEX MULTI-SPECIES AND MULTI-JURISDICTIONAL FISHERIES, 363, 369 (eds. Sven Sebastian Uhlmann, et al., (2019).

⁹³ Gus van Helvoort, *Observer Program Operations Manual*, at Introduction, (1986), <http://www.fao.org/3/S8480E/S8480E01.htm#chI>. See also NOAA, *Fishery Observers* (also using the phrase “eyes and ears”), <https://www.fisheries.noaa.gov/topic/fishery-observers>.

⁹⁴ Int’l Seafood Sustainability Fdn., *Training Guide for Purse Seine Fishery Observers*, 10 (2014) (noting, “observer data serve as a useful cross-check of a skipper’s logbook” and “[t]he true value of an observer lies in their independence from the commercial fishing industry. Maintaining this impartiality—thus avoiding conflicts of interest—ensures the objectivity of an observer’s work”), <http://www.issfguidebooks.org/downloadable-guides/observer-guide-english>.

⁹⁵ van Helvoort, *supra* note 93, at § 2.1, <http://www.fao.org/3/S8480E/S8480E02.htm>. This dual role can put observers in danger. Several observers have gone “missing” under suspicious circumstances. For an account of one such incident, see Tom Knudson, *He Was Supposed to Protect the Sea. Then He Vanished from His Ship*, REVEAL (Feb. 15, 2017), <https://www.revealnews.org/article/he-was-supposed-to-protect-the-sea-then-he-vanished-from-his-ship/>.

⁹⁶ Craig H. Faunce, *A Comparison between Industry and Observer Catch Compositions within the Gulf of Alaska Rockfish Fishery*, 68 ICES J. MAR. SCI. 1769, 1772 (2011) (noting that all Pacific ocean perch were misidentified by industry participants the day after the U.S. National Marine Fisheries Service reported that 95% of the total allowable catch for the species had already been caught and that observer reports were more accurate), <https://academic.oup.com/icesjms/issue/68/8..>

be even more critical as marine fish stocks continue to decline worldwide. FAO estimates that the percentage of overfished stocks has increased to 33% and that the state of monitored fish stocks “has continued to decline.”⁹⁷ This stark assessment is consistent with long-term trends. According to FAO, from 1974 to 2015,

- marine fish stocks fished within biologically sustainable levels declined from 90.0% to 66.9%;
- marine fish stocks fished at biologically unsustainable levels increased from 10% to 33.1%; and
- the percentage of “underfished stocks” declined continuously.⁹⁸

Moreover, these trends are mirrored in the world’s tuna fisheries; 43% of tuna stocks are fished at biologically unsustainable levels.⁹⁹

These declines are fueled, in part, by unverified and inaccurate data supplied by vessel captains. Indeed, “managers and scientists have often raised concerns about errors that are commonly encountered, and the challenges associated with verifying industry reports.”¹⁰⁰ For example, evidence indicates that industry misidentified species more often than observers and that industry misidentified species specifically to avoid fisheries closures¹⁰¹ and other fisheries regulations.¹⁰²

Thus, the need for observers who provide unbiased information concerning catches *and* infractions in order to protect these increasingly scarce and increasingly valuable fisheries resources¹⁰³ has become acute.¹⁰⁴ Because onboard observers actually see what occurs on the

⁹⁷ 2018 STATE OF WORLD FISHERIES, *supra* note 3, at 6. Moreover, trends indicate that fish scarcity will increase. Both total catch (171 million tonnes including aquaculture) and per capita consumption (20.3 kilograms) of fish reached record highs in 2016. *Id.* Since 1961, the annual average increase in global fish consumption (3.2%) has outpaced population growth (1.6%) as per capita consumption during the same period grew from 9.0 kg/person to 20.3 kg/person in 2016. *Id.* at 2.

⁹⁸ *Id.* at 6.

⁹⁹ *Id.* at 6.

¹⁰⁰ William A. Karp, *Fisheries Monitoring: Looking Back and Looking Ahead*, in PROCEEDINGS OF THE 8TH INTERNATIONAL FISHERIES OBSERVER AND MONITORING CONFERENCE, at 7 (ed. Steve Kennelly, 2016), <http://eminformation.com/wp-content/uploads/2017/09/8th-IFOMC-2016-Proceedings.pdf>.

¹⁰¹ Faunce, *supra* note 96, at 1774–75.

¹⁰² In the IOTC, longline vessels misreport southern bluefin tuna as yellowfin tuna, presumably to avoid reporting catches of the much rarer southern bluefin tuna. They also underreport the weight of shark fins, fail to report catches of smaller yellowfin and bigeye tuna, and “occasionally tranship fish in nets, particularly when oil fish are transferred, which can make it difficult to estimate both weight and numbers.” MRAG & CapFish, Review of the IOTC Regional Observer Programme, IOTC-2011-S15-CoC48Add1[E], at 5 (2011), <https://iotc.org/sites/default/files/documents/proceedings/2011/s/IOTC-2011-S15-CoC48%5BE%5DAdd1.pdf>. See also Japan, Opening Statement, in REPORT OF THE TWENTY FIFTH ANNUAL MEETING OF THE COMMISSION, Attachment 4–5 (Oct. 18, 2018), (stating that the CCSBT “has been informed recently that Chinese longline fishing vessels allegedly caught SBT in the SBT fishing grounds and tried to transship them under the name of yellowfin tuna.”), <https://www.ccsbt.org/sites/default/files/userfiles/file/docsenglish/meetings/meetingreports/ccsbt25/reportofCCSBT25.pdf>.

¹⁰³ The value of the catch at first sale was US\$362 billion. 2018 STATE OF WORLD FISHERIES, *supra* note 3, at 2.

¹⁰⁴ See Karp, *supra* note 100, at 7 (“The need for observers has increased during the last 30 years and programs have grown worldwide.”).

vessel, they provide the “best monitoring solution in many cases.”¹⁰⁵ For example, they are able to detect discards or gear violations, as well as monitor transshipments, which at-port observers and inspectors are unable to do. As such, onboard observers “represent a unique source for enforcement of regulations governing discarding, retention of prohibited species, gear usage, and onboard processing of fishery resources.”¹⁰⁶ In addition, they provide critically important information on fishing activities that “are used to monitor fisheries, assess fish populations, set fishing quotas, and inform management” and “support compliance with fishing and safety regulations.”¹⁰⁷ In short, “[o]bservers provide fisheries managers with the necessary data to manage fisheries, including who, what, where, when, how, and how much.”¹⁰⁸

For these and other reasons, the FAO in its Code of Conduct for Responsible Fisheries declares effective observer programs to be critical components of efforts to combat IUU fishing.¹⁰⁹ The U.N. Fish Stocks Agreement calls on Parties to “verify[] the catch of target and non-target species through such means as observer programmes.”¹¹⁰ The Fish Stocks Agreement and IPOA-IUU also provide that States should undertake comprehensive and effective monitoring, control and surveillance, including through observer programs.¹¹¹

The presence of an onboard observer is frequently sufficient to deter fisheries violations¹¹² but more is needed: “Whether motivated by issues of science or compliance, observer programmes should provide outputs that contribute to the development of management measures that encourage good fishing practices and promote both stock and fishery sustainability.”¹¹³ Those outputs, though, must also be placed in the right hands. An observer transshipment report, for example, is not helpful unless it can be used to independently verify catches or used to identify and remedy violations. To accomplish both compliance and statistical goals, the reports must be made available to both the flag State and the relevant Secretariat, which is well-placed to independently corroborate information provided by the captain and fishing nation.

¹⁰⁵ See Karp, *supra* note 100, at 7.

¹⁰⁶ Reed D. Porter, *Fisheries Observers As Enforcement Assets: Lessons from the North Pacific*, 34 MARINE POL’Y 583, 587 (2010).

¹⁰⁷ NOAA, *Fishery Observers*, *supra* note 64.

¹⁰⁸ Vanessa J. Tuttle, *Data Collection in a Fishery Dependent World: Have Your Hake and Eat It Too*, in KENNELLY, *supra* note 1, at 75, 75.

¹⁰⁹ The Code of Conduct for Responsible Fisheries provides:

States, in conformity with their national laws, should implement effective fisheries monitoring, control, surveillance and law enforcement measures including, where appropriate, observer programmes, inspection schemes and vessel monitoring systems. Such measures should be promoted and, where appropriate, implemented by subregional or regional fisheries management organizations and arrangements in accordance with procedures agreed by such organizations or arrangements.

FAO, Code of Conduct for Responsible Fisheries, *supra* note 77, at § 7.7.3.

¹¹⁰ Fish Stocks Agreement, *supra* note 72, at arts. 6(b), 18(3)(f).

¹¹¹ *Id.* at art. 18(3)(g)(ii); IPOA-IUU, *supra* note 75, at ¶ 24.

¹¹² MRAG & CapFish, *ICCAT Regional Observer Programme Manual* 8 (2012), <https://www.iccat.int/Documents/ROP/ICCATObserverManual.pdf>.

¹¹³ *Id.*

IV. Transshipment Reporting in RFMOs

Because of the concerns associated with transshipment at sea, particularly transshipment on the high seas, RFMOs and other international bodies have been seeking to ban or strictly limit transshipment at sea.¹¹⁴ The South East Atlantic Fisheries Organisation, for example, has completely banned transshipment at sea within its convention area.¹¹⁵ However, the WCPFC and other t-RFMOs have established bifurcated systems in which transshipment at sea by purse seine vessels is strictly prohibited but transshipment at sea by other vessels is allowed provided that certain conditions are met. Consequently, monitoring by observers is central to regulating high seas transshipment effectively.

To make observer programs effective, however, information from observer reports must be transparent. This is especially true with respect to high seas transshipments, which otherwise would take place without the scrutiny of inspections officers. As described below, the WCPFC lags behind other t-RFMOs in two respects. First, WCPFC transshipment observers collect less information than their t-RFMO counterparts. Second, WCPFC transshipment observers are not required to submit transshipment reports. In contrast, the transshipment observers in the other RFMOs must submit their transshipment reports to the RFMO secretariat, which then forwards them to the flag State.

A. Transshipments in the WCPFC

The WCPF Convention prohibits transshipment at sea—both within exclusive economic zones and on the high seas—by purse seine vessels while allowing the WCPFC to establish procedures for high seas transshipment by non-purse seine vessels—longline, troll, and pole-and-line fishing vessels.¹¹⁶ With Conservation and Management Measure 2009–06 (CMM 2009–06), transshipment by non-purse seine vessels in national waters must occur in accordance with relevant domestic laws,¹¹⁷ while transshipment on the high seas is prohibited except where a CCM determines that it is “impracticable” for a vessel “to operate without being able to tranship on the high seas.”¹¹⁸ A CCM may determine that transshipment in port is “impracticable” for a

¹¹⁴ Kristina Boerder et al., *Global Hot Spots of Transshipment of Fish Catch at Sea*, 4 SCI. ADV. 1 (2018), <https://advances.sciencemag.org/content/4/7/eaat7159/tab-pdf>.

¹¹⁵ S. E. ATL. FISHERIES ORGANISATION, SYSTEM OF OBSERVATION, INSPECTION, COMPLIANCE AND ENFORCEMENT, art. 5 (2016), <http://www.seafo.org/media/a3636990-9491-4827-8869-f9c3f9159565/SEAFOWeb/pdf/COMM/open/eng/SEAFOSYSTEM2016pdf>.

¹¹⁶ See WCPF Convention, *supra* note 6, at art. 29. Through CMM 2009–06, the WCPFC authorized two exceptions certain purse seine vessels flagged by Papua New Guinea and the Philippines. CMM 2009–06, *supra* note 19, at ¶ 25(a). A third exception for New Zealand purse seine vessels no longer applies. See also WCPF Convention, *supra* note 6, at art. 29(5) (prohibiting transshipment at sea by purse seine vessels unless the WCPFC grants an exception). Notwithstanding these exceptions, no purse seine vessel may tranship on the high seas. CMM 2009–06, *supra* note 19, at ¶ 32.

¹¹⁷ CMM 2009–06, *supra* note 19, at ¶ 33.

¹¹⁸ *Id.* ¶ 34. All fishing vessels, including carrier vessels, must also be authorized to fishing the WCPF convention area and included in WCPFC’s the Record of Vessels. WCPF Convention, *supra* note , art. 24 (requiring each CCM to authorize vessels to fish in the WCPF convention area and maintain a record of vessels so authorized); WCPFC, *WCPFC Record of Fishing Vessels and Authorization to Fish*, CMM 2018–06 (2018) (establishing recommendations for authorizations to fish and establishing the Record of Fishing Vessels), <https://www.wcpfc.int/file/227218/download?token=Int7OI5K>.

vessel if such transshipment would create a “significant economic hardship”¹¹⁹ and cause the vessel to make “significant and substantial changes to its historical mode of operation.”¹²⁰ This two-part test contemplates a vessel-by-vessel analysis rather than a fisheries-wide determination.¹²¹ However, with just under 55% of longline and other non-purse vessels registered to tranship on the high seas,¹²² the WCPFC Secretariat has reported that impracticability determinations are “implied from information provided as part of the Record of Fishing Vessels” rather than affirmatively made and reported.¹²³ In recent years, five CCMs (China, Chinese Taipei, Japan, Korea, and Vanuatu) have availed themselves of this exception with increasing frequency: From 2014 to 2017, the number of high seas transshipments has steadily increased from 552 to 1,089.¹²⁴

If a CCM allows transshipment to occur, it must, among other things, advise the WCPFC of its procedures for monitoring and verifying transshipments and submit to the WCPFC a plan detailing the steps it is taking to encourage transshipment in port.¹²⁵ Despite these requirements, no CCM has complied.¹²⁶

1. Transshipment Information Requirements

¹¹⁹ CMM 2009–06, *supra* note 19, at ¶ 37(a). The relevant CCM must determine whether transshipment in port causes “significant economic hardship” based on

the cost that would be incurred to transship or land fish at feasible and allowable locations other than on the high seas, as compared to total operating costs, net revenues, or some other meaningful measure of costs and/or revenues.

Id.

¹²⁰ *Id.* ¶ 37(b). The CMM does not provide guidance on how that determination should be made, leaving considerable discretion to individual CCMs. However, the test does not provide CCMs with unfettered discretion.

¹²¹ For example, it refers to “the vessel”; both the use of the definite article (“the”) and the singular “vessel” indicate that the test must be applied to a specific vessel. The test also refers to historical modes of operation, an assessment which must be made for a particular vessel since each vessel will have a different history. Each vessel, due to the location of where it fishes, the size of the vessel, the size of the crew, and other factors, will have different costs associated with transshipping in port, within national waters, or on the high seas.

¹²² 2018 Annual Report on WCPFC Transshipment Reporting, *supra* note 20, at ¶ 6.

¹²³ WCPFC, *Development of Guidelines for High Seas Transshipment from Vessels Other than Purse Seine Vessels* (CMM 2009-06 Para 37), WCPFC-TCC12-2016-15rev2, ¶ 10 (Aug. 25, 2016) (“Since July 2014 determinations of impracticability made by individual CCMs are implied from information provided as part of the Record of Fishing Vessels.”), <https://www.wcpfc.int/system/files/WCPFC-TCC12-2016-15rev2%20Draft%20Guidelines%20on%20Impracticability%20of%20Transshipment.pdf>.

¹²⁴ 2018 Annual Report on WCPFC Transshipment Reporting, *supra* note 20, at 9, tbl. 3.

¹²⁵ CMM 2009–06, *supra* note 19, at ¶¶ 35(a)(i)–(v). CCMs, must also indicate the vessels to which an “impracticability” finding applies and notify the Executive Director 36 hours prior to transshipment.

¹²⁶ WCPFC, *Guidelines for Determining Impracticability—High Seas Transshipment Activities*, WCPFC-TCC9-2013-17, at 9 (Aug. 30, 2013) (“No compliance has occurred in respect of the provisions in paragraph 35”), available at <https://www.wcpfc.int/system/files/WCPFC-TCC9-2013-17%20Guidelines%20for%20determining%20impracticability-%20high%20seas%20transshipment.pdf>; *Development of Guidelines for High Seas Transshipment*, *supra* note 123, at ¶ 11 (“In general, little or no information is provided to the Commission on monitoring and verification procedures or on steps taken to encourage transshipment in port, as required by paragraph 35”).

Each transshipment is monitored in two important ways. First, both the fishing vessel and the carrier vessel must complete a WCPFC transshipment declaration¹²⁷ that includes the names of the relevant vessels, the species and quantities transhipped, the location of the catches and transshipment, and other information.¹²⁸ CCMs responsible for the fishing and carrier vessels must submit the transshipment declaration to the WCPFC Executive Director within 15 days of transshipment.¹²⁹

Second, any transshipment at sea requires an observer from the WCPFC Regional Observer Programme to observe the transshipment, typically on board the receiving vessel for high seas transshipments.¹³⁰ The observer must monitor implementation of the provisions of CMM 2009–06 and “confirm to the extent possible that the transhipped quantities of fish are consistent with other information available to the observer,” such as the catch reported on the transshipment declaration, logbooks, vessel position data, and the intended port of landing.¹³¹ In other words, the observer is not required to record the location of the transshipment, the name of the fishing vessel transshipping the fish, or even co-sign the transshipment declaration. The observer only “confirms” the transhipped quantities of fish, presumably by species, but even this basic condition has not been specified.

2. Reporting of Transshipment Information

The WCPFC recognizes the importance of observer reporting for achieving the objectives of the WCPF Convention. In fact, it established the Regional Observer Programme “to collect verified catch data, other scientific data, and additional information related to the fishery from the Convention Area and to monitor the implementation of the conservation and management measures adopted by the Commission.”¹³² Similarly, the WCPFC established transshipment rules, which include a requirement for observers on carrier vessels, in order “to obtain and verify data on the quantity and species transhipped in the Convention Area to ensure accurate reporting catches, and enhance stock assessments of highly migratory fish stocks.”¹³³

¹²⁷ CMM 2009–06, *supra* note 19, at ¶ 10.

¹²⁸ *Id.* at Annex 1.

¹²⁹ *Id.* at ¶ 24.

¹³⁰ *Id.* at ¶ 13. In the case of transshipments to receiving vessels less than or equal to 33 meters in length and not involving purse-seine-caught or frozen longline-caught fish, the observer may be deployed on either the offloading or receiving vessel. For transshipments involving troll caught or pole-and-line-caught fish not covered by the first condition and in all other cases, the observer must be deployed on the receiving vessel. *Id.*

¹³¹ *Id.* at ¶ 14.

¹³² WCPFC, *Conservation and Management Measure for the Regional Observer Programme*, CMM 2018–05, ¶ 4 (2007), <https://www.wcpfc.int/file/227221/download?token=SDlaqdYG>.

¹³³ CMM 2009–06, *supra* note 19, at preamble para. 9.

CCMs must report all transshipment activities from those vessels they flag or charter, and they may use observer reports and other information in doing so.¹³⁴ However, nothing requires observers to submit transshipment reports to the flag or charter CCM or the Secretariat. Thus, despite perhaps 100% observer coverage on carrier vessels transshipping on the high seas,¹³⁵ the Secretariat indicates that it has received only one observer transshipment report over the last two years and 2,045 transshipments.¹³⁶

As the Regional Observer Programme Coordinator reported in 2016, non-binding guidelines for completion of observer reports relating to transshipment “were for guidance only and were not mandatory.”¹³⁷ Moreover, “there was no mandatory requirement” for observer providers to submit information [relating to transshipment] to the Secretariat.¹³⁸ While observer providers must submit information gathered by observers to the WCPFC,¹³⁹ this requirement appears limited to catch data and other information approved by the Commission.¹⁴⁰ As noted in the previous sub-section, the CMM 2009–06 does not clearly require the submission of detailed information to the observer provider, Secretariat, or flag State. In addition, the WCPFC did accept a recommendation that data from the Regional Observer Programme “should be submitted to the Secretariat or SPC where possible within 100 days of the observer disembarking purse seine vessels and within 120 days of the observer disembarking longline vessels.”¹⁴¹ However, the WCPFC’s *Agreed Minimum Standards and Guidelines for the Regional Observer Programme* further states that observer providers that “place observers on fish carrier vessels that transship on the high seas *should* send the completed data forms, workbooks, reports and journals of the observer to the Commission Secretariat where possible within 120 days of the disembarkation of the observer from the carrier.”¹⁴²

At best, the WCPFC has created rules for observer reporting that lack clarity. However, the use of “should” with respect to observer reporting of transshipments, the failure to include

¹³⁴ *Id.* at ¶ 11.

¹³⁵ *2018 Annual Report on WCPFC Transshipment Reporting*, *supra* note 20, at ¶ 16 (“The majority of CCMs who were involved in high seas transshipment in 2017 seemed to affirm that high seas transshipment conducted in 2017 were 100% covered by observers.”).

¹³⁶ *2018 Annual Report on WCPFC Transshipment Reporting*, *supra* note 20, (not reporting receipt of any observer transshipment reports). The secretariat reports 956 high seas transshipments in 2016 and 1,089 in 2017 for a total of 2,045. *Id.* at 9, tbl. 3. The Secretariat reported receiving one observer transshipment report in 2016. TCC13 SUMMARY REPORT, *supra* note 26, at ¶ 203.

¹³⁷ TCC13 SUMMARY REPORT, *supra* note 26, at ¶ 203.

¹³⁸ *Id.*

¹³⁹ CMM 2018–05, *supra* note 132, at Annex C, ¶ 4 (“Data obtained through these observer programmes shall be submitted to the Commission and shall be considered Commission data.”)

¹⁴⁰ *Id.* at ¶ 6 (“The functions of observers operating under the Commission ROP shall include collecting catch data and other scientific data, monitoring the implementation of the conservation and management measures adopted by the Commission and any additional information related to the fishery that may be approved by the Commission.”).

¹⁴¹ WCPFC, TENTH REGULATION SESSION SUMMARY REPORT, ¶¶ 218(iii), 220 (2013),

<https://www.wcpfc.int/system/files/WCPFC%2010%20FINAL%20RECORD1.pdf> (adopting the TCC’s recommendation); WCPFC, *Technical and Compliance Committee Ninth Regular Session Summary Report*, ¶ 160 (2013) (recommending “that ROP data should be submitted to the Secretariat or SPC where possible within 100 days of the observer disembarking purse seine vessels and within 120 days of the observer disembarking longline vessels.”), <https://www.wcpfc.int/system/files/FinalTCC9%20summary%20report.pdf>. See also WCPFC, *Agreed Minimum Standards and Guidelines of the Regional Observer Programme*, p. 8 (rev. 2018) (restating the non-mandatory 100-day rule), <https://www.wcpfc.int/file/227225/download?token=C4DH3DaB>.

¹⁴² *Id.* (emphasis added).

clear guidance for observer reporting of transshipments in a binding conservation and management measure, and the failure of observer providers and CCMs to submit observer transshipments reports to the Secretariat all suggest that the submission of observer reports to the Secretariat is not mandatory.

Without any obligation for observers or observer producers to submit transshipment reports, the WCPFC has no means to verify information submitted by CCMs. As such, the placement of observers on carrier vessels fails to meet the stated objectives of the transshipment measure: “verifying data on the quantity and species transhipped to ensure accurate reporting of catches.”¹⁴³ Nonetheless, due to a memorandum of cooperation with the CCSBT, WCPFC observers are required to report transshipments of southern bluefin tuna,¹⁴⁴ thereby assisting the CCSBT achieve its management and compliance goals with respect to that stock.

B. Transshipments in Other Tuna RFMOs

The four other t-RFMOs—the IOTC, ICCAT, IATTC, and CCSBT—have virtually identical rules for regulating transshipment at sea; they prohibit transshipment at sea by purse seine vessels but allow it for large-scale longline vessels subject to a number of rules.¹⁴⁵ They also require both the longline vessel and the carrier vessel involved in the transshipment to be authorized by the flag State to engage in transshipment on the high seas,¹⁴⁶ and be included in the RFMO’s vessel registry.¹⁴⁷ Moreover, any transshipment must be accompanied by a transshipment declaration that includes information about the carrier vessel, the fishing vessel, the location of the transshipment, and the species transhipped, including the weight of each species and the type of product (whole, gutted, etc.).¹⁴⁸

As in the WCPF Convention Area, transshipments at sea are increasing elsewhere. Within the IOTC convention area, transshipments by large-scale longliners increased from 726 in 2015 to

¹⁴³ CMM 2009–06, *supra* note 19, at preamble, para. 9.

¹⁴⁴ WCPFC-CCSBT, Memorandum of Cooperation (MoC) on the Endorsement of WCPFC Regional Observer Programme Observers for Observing Transshipments of Southern Bluefin Tuna on the High Seas of the WCPFC Convention Area, WCPFC13 Summary Report Attachment Y, ¶ 5 (2017), <https://www.wcpfc.int/file/142890/download?token=tSx-hseA>.

¹⁴⁵ See IOTC Resolution 18/06, *supra* note 45, at ¶¶ 1, 4 (creating a program to monitor large scale tuna vessels transshipment at sea and requiring all other transshipments be done at port); ICCAT Recommendation 16-15, *supra* note 45, at ¶ 1 (creating a program to monitor large scale tuna vessels transshipment at sea and requiring all other transshipments be done at port); IATTC Resolution C-12-07, *supra* note 45, at ¶¶ 1, 4 (creating a program to monitor large scale tuna vessels transshipment at sea and requiring all other transshipments be done at port); CCSBT Transshipment Resolution, *supra* note 45, at ¶ 2 (creating a program to monitor large scale tuna vessels transshipment at sea and requiring all other transshipments be done at port).

¹⁴⁶ IOTC Resolution 18/06, *supra* note 45, at ¶¶ 5–7; ICCAT Recommendation 16-15], *supra* note 45, at ¶¶ 8, 13; IATTC Resolution C-12-07, *supra* note 45, at ¶¶ 5, 7, 12; CCSBT Transshipment Resolution, *supra* note 45, at ¶¶ 4, 5, 10.

¹⁴⁷ IOTC Resolution 18/06, *supra* note 45, at ¶¶ 6, 14; ICCAT Recommendation 16-15, *supra* note 45, at ¶¶ 7, 13; IATTC Resolution C-12-07, *supra* note 45, at ¶¶ 5, 6; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 4, 30(c).

¹⁴⁸ IOTC Resolution 18/06, *supra* note 45, at ¶ 14, Annex III; ICCAT Recommendation 16-15, *supra* note 45, at ¶ 16, appendix 1; IATTC Resolution C-12-07, *supra* note 45, at ¶¶ 13–15, Annex 2; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 15, Annex I.

1,215 in 2016¹⁴⁹ to at least 1,259 in 2017,¹⁵⁰ with the vast majority occurring on the high seas.¹⁵¹ Longliners from Chinese Taipei accounted for 67% of these transshipments with Chinese, Seychellois, Japanese, Malaysian and Korean flagged vessels accounting for smaller amounts.¹⁵² Fishing vessels transhipped to carrier vessels predominantly flagged to Vanuatu (29%), Chinese Taipei (24%), and Malaysia (10%), among others.¹⁵³

The IATTC posted its highest number of at-sea transshipments in 2016 at 676; the previous high was 515 transshipments in 2011.¹⁵⁴ China and Chinese Taipei accounted for well over half of the transshipments in 2016 and the first months of 2017, with Japan, Panama, and Korea accounting for the remainder.¹⁵⁵ Of the 73 registered carrier vessels, 29 are flagged by Liberia and 17 by Panama.¹⁵⁶

ICCAT perhaps represents an anomaly as reported transshipments declined from 854 transshipments in 2016,¹⁵⁷ accounting for 31,057 metric tons of tuna and tuna-like species¹⁵⁸ to 539 transshipments representing 29,109 metric tons in 2017.¹⁵⁹ Chinese Taipei, Japan, and China accounted for more than 93% of these transshipments in both years.¹⁶⁰ ICCAT has registered 110 carrier vessels, 41 of which are flagged by Panama and 23 by Liberia.¹⁶¹

1. Transshipment Information Requirements

With such high levels of transshipment occurring on the high seas in the t-RFMOs, the role of observers for reporting compliance issues and statistical information is critical. In these

¹⁴⁹ MRAG & CapFish, *A Summary of the IOTC Regional Observer Programme During 2016*, IOTC-2017-CoC14-04b [E], 5, 10 (2017), <http://www.iotc.org/sites/default/files/documents/2017/04/IOTC-2017-CoC14-04bE-IOTCROPContractor0.pdf>.

¹⁵⁰ MRAG & CapFish, *A Summary of the IOTC Regional Observer Programme During 2017*, IOTC-2018-CoC15-04b [E], 5, 10 (2018), <https://www.iotc.org/sites/default/files/documents/2018/04/IOTC-2018-CoC15-04bE-IOTCROPContractor.pdf>.

¹⁵¹ *A Summary of the IOTC Regional Observer Programme During 2016*, *supra* note 118, at 7, fig. 3; *A Summary of the IOTC Regional Observer Programme During 2017*, *supra* note 119, at 7, fig. 3.

¹⁵² *A Summary of the IOTC Regional Observer Programme During 2016*, *supra* note 118, at 5.

¹⁵³ *Id.* at 5.

¹⁵⁴ IATTC, *Implementation of the IATTC Regional Observer Program for Transshipment at Sea*, Doc. No. 92-06, tbl. 3.2 (2017), <https://www.iattc.org/Meetings/Meetings2017/IATTC-92/PDFs/Docs/English/IATTC-92-06Observer-program-for-transshipments-at-sea.pdf>.

¹⁵⁵ *Id.* at fig. 3.3.

¹⁵⁶ List of carrier vessels authorized to receive tuna and tuna-like species at sea from large-scale tuna longline fishing vessels (LSTFVs) (Resolution C-12-07 on a program for transshipments) (May 9, 2018), <https://www.iattc.org/VesselDataBaseENG.htm>.

¹⁵⁷ ICCAT, *Report on the Implementation of the ICCAT Regional Observer Programme (ROP) for Transshipment 2016/2017*, Doc. No. PWG-402/2017, 3 (Nov. 15, 2017).

¹⁵⁸ *Id.* at 3, tbl. 1.

¹⁵⁹ ICCAT, *Report on the Implementation of the ICCAT Regional Observer Programme (ROP) for Transshipment 2017/2018*, Doc. No. PWG-402/2018, tbl. 1, pages 3-4 (Nov. 8, 2018), <https://www.iccat.int/com2018/ENG/PWG402ENG.pdf>.

¹⁶⁰ PWG-402/2017, *supra* note 157, at 3; PWG-402/2018, *supra* note 159, at 4. Vessels from Belize, Côte d'Ivoire, Korea, Senegal, and St. Vincent and the Grenadines accounted for the remaining high seas transshipments. PWG-402/2017, *supra* note 157, at 3; PWG-402/2018, *supra* note 159, at 4.

¹⁶¹ Van der Geest, *supra* note 34, at 60.

respects, these four t-RFMOs have more specific information gathering and reporting requirements than the WCPFC.

The four t-RFMOs have adopted similar approaches to information gathering of transshipment events by observers. Each of these RFMOs requires the carrier vessel to have an onboard observer trained and chosen from the RFMO's Regional Observer Programme.¹⁶² Without an observer, vessels are prohibited from commencing or continuing at-sea transshipment.¹⁶³ Observers on carrier vessels are specifically required to record and report on the transshipment activities of the vessel.¹⁶⁴ As part of monitoring the carrier vessel's compliance with relevant conservation and management measures, the observer is required to:

- record and report upon the transshipment activities carried out;
- verify the position of the vessel when engaged in transshipping;
- observe and estimate products transshipped;
- verify and record the name of the longline vessel] concerned and its registration number;
- verify the data contained in the transshipment declaration;
- certify the data contained in the transshipment declaration; and
- countersign the transshipment declaration.¹⁶⁵

The rules applicable to an observer on a longline vessel are less clear. As a general rule, these t-RFMOs do not require observers on all longline and other non-purse seine vessels. The IATTC requires “at least 5%” of the fishing effort of longline fleets to carry an observer.¹⁶⁶ The IOTC requires 5% for any type of vessel,¹⁶⁷ and the CCSBT 10%.¹⁶⁸ Some fisheries, such as ICCAT's bluefin tuna fishery, require at least 20%.¹⁶⁹ Although the rules specify that any carrier

¹⁶² IOTC Resolution 18/06, *supra* note 45, at ¶ 18; ICCAT Recommendation 16-15, *supra* note 45, at ¶ 19; IATTC Resolution C-12-07, *supra* note 45, at ¶ 16; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19.

¹⁶³ IOTC Resolution 18/06, *supra* note 45, at ¶ 19; ICCAT Recommendation 16-15, *supra* note 45, at ¶ 20; IATTC Resolution C-12-07, *supra* note 45, at ¶ 17; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 20.

¹⁶⁴ IOTC Resolution 18/06, *supra* note 45, at ¶ 18, Annex IV, ¶ 5; ICCAT Recommendation 16-15, *supra* note 45, at ¶ 19, Appendix 2, ¶ 6.2; IATTC Resolution C-12-07, *supra* note 45, at ¶ 16, Annex 3, ¶ 5.2; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6.

¹⁶⁵ IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.2(a). The same requirements, with slightly different wording, are found in the other RFMOs. IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(b); ICCAT Recommendation 16-15, *supra* note 45, at Appendix 2, ¶ 6.2; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(b).

¹⁶⁶ IATTC, *Resolution on Scientific Observers for Longline Vessels*, Resolution C-11-08, ¶ 1 (2011), <https://www.iattc.org/PDFFiles/Resolutions/IATTC/English/C-11-08-ActiveObservers%20on%20longline%20vessels.pdf>.

¹⁶⁷ IOTC, *Resolution on a Regional Observer Programme*, Resolution 11/04 (2011) (requiring 5% observer coverage “at least 5% of the number of operations/sets for each gear type by the fleet of each CPC while fishing in the IOTC area of competence of 24 meters overall length and over, and under 24 meters if they fish outside their Exclusive Economic Zone (EEZ)), <https://www.iotc.org/cmm/resolution-1104-regional-observer-scheme>.

¹⁶⁸ CCSBT, *CCSBT Scientific Observer Program Standards*, § 4 “The Program will have a target observer coverage of 10% for catch and effort monitoring for each fishery. Observer coverage should therefore be representative of different vessel-types in distinct areas and times.”), <https://www.ccsbt.org/sites/ccsbt.org/files/userfiles/file/docsenglish/operationalresolutions/observerprogramstandards.pdf>.

¹⁶⁹ ICCAT requires each CPC to

vessel transshipping at sea must have an observer, the rules do not require a longliner transshipping at sea to have an observer. Given the low observer coverage in the longline fleets, chances are high that the longliner will not have an observer to monitor transshipments at sea.

Nonetheless, the relevant transshipment rules of each t-RFMO include extensive reporting requirements by an observer on a longliner, including the following:

- i. check the validity of the fishing vessel's authorization or license to fish for tuna and tuna-like species and sharks in the Convention Area;
- ii. check and record the total quantity of catch on board, and the quantity to be transferred to the carrier vessel;
- iii. check that the VMS is functioning, and examine the logbook;
- iv. verify whether any of the catch on board resulted from transfers from other vessels, and check the documentation on such transfers;
- v. in the case of an indication that there are any violations involving the fishing vessel, immediately report the violations to the master of the carrier vessel; and
- vi. record the results of these duties on the fishing vessel in the observer's report.¹⁷⁰

The obligatory nature of the obligations imply that an observer will be transferred from the carrier vessel to the longliner if no observer is onboard the longliner. At least with respect to the IATTC, however, transferring an observer from one vessel to another is considered too dangerous without being accompanied by an officer from the carrier vessel, something which the IATTC members are apparently unwilling to allow.¹⁷¹ In contrast, IOTC observers are routinely transferred from carrier vessels to the fishing vessel,¹⁷² as are ICCAT and CCSBT observers.¹⁷³

ensure coverage by observers, issued with an official identification document, on vessels and traps active in the bluefin tuna fishery on at least:

- 20% of its active pelagic trawlers (over 15 m),
- 20% of its active longline vessels (over 15 m),
- 20% of its active baitboats (over 15 m),
- 100% of towing vessels;
- 100% of harvesting operations from traps.

CPCs with less than five catching vessels of the first three segments defined above authorized to fish actively for bluefin tuna shall ensure coverage by observers 20% of the time the vessels are active in the bluefin tuna fishery.

ICCAT, *Recommendation Establishing a Multi-annual Management Plan for Bluefin Tuna in the Eastern Atlantic and the Mediterranean Sea*, ¶ 83 (2018), <https://www.iccat.int/Documents/Recs/compendiopdf-e/2018-02-e.pdf>.

¹⁷⁰ IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.1. Nearly identical rules apply in the other t-RFMOs. IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(a); ICCAT Recommendation 16-15, *supra* note 45, at Appendix 2, ¶ 6.1; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(a).

¹⁷¹ IATTC staff wrote the following to the author:

Yes, that part of the resolution implies tasks to be done in the long line vessels by the observers. Nevertheless and unfortunately part of this task is not applicable. The reason is that the only way to transport the observer from the carrier vessel to the long line vessel is through the pulley used to transport the fish from one vessel to the other one and this is very dangerous for the observer. We

2. Reporting of Transshipment Information

As with the WCPFC, the four other t-RFMOs require their respective parties and cooperating non-parties (collectively referred to as CPCs) that tranship on the high seas to submit transshipment reports annually.¹⁷⁴ The CPCs must report the quantities of tuna and tuna-like species transhipped by species and the names of the vessels that transhipped these catches, as well as submit a “comprehensive report” that assesses the content of observer reports relating to these transshipments.¹⁷⁵ However, the quality of these transshipment reports are often inconsistent and, moreover, the observer reports are often not immediately available for verification and validation against corresponding transshipment reports.¹⁷⁶

CPCs get this information from the transshipment declaration itself, as well as via observer reports. As noted above, the observer must verify and record the quantity of catch on board and the amount to be transferred to the carrier vessel,¹⁷⁷ as well as any catch resulting from transfers from other vessels.¹⁷⁸ While the rules expressly require the observer to record the

have talked on that with MRAG and they have refused to do it so we cannot force them to put in risk to the observer. We have commented this to the Commission and they have understood this situation. Some general documents are revised by the observer that are transferred from the longliner to the carrier vessel.

Email from IATTC Staff, to Chris Wold, Professor of Law, Lewis & Clark Law School (May 30, 2019) (on file with author). Communications with MRAG are slightly different. MRAG staff report that it requested that an officer from the carrier vessel accompany the observer to the fishing vessel for safety reasons. The IATTC did not revise its transshipment resolution to make this a requirement and, at that point, the IATTC Secretariat decided that observers would not board the fishing vessel and that the information would be verified through other means. E-mail from James Clark, MRAG, to Chris Wold, Professor and IELP Director (June 14, 2019).

¹⁷² MRAG & CapFish, A Summary of the IOTC Regional Observer Programme during 2017, IOTC-2018-COC15-04b, at § 4 (noting that of 1,259 transshipments in the IOTC convention area, checks by the observer were carried out 1,224 times and “[i]n most cases” the observer from the carrier vessels boarded the longliner to make checks consistent with the resolution on transshipment), <https://www.iotc.org/sites/default/files/documents/2018/04/IOTC-2018-CoC15-04bE-IOTCROPContractor.pdf>.

¹⁷³ MRAG & CapFish, *ICCAT, IOTC and CCSBT Regional Observer Programme Manual*, § 8 (June 2019) (describing protocols for the observer to transfer from the carrier vessel to the fishing vessel) (on file with author).

¹⁷⁴ IOTC Resolution 18/06, *supra* note 45, at ¶ 23; ICCAT Recommendation 16-15, *supra* note 45, at ¶ 22; IATTC Resolution C-12-07, *supra* note 45, at ¶ 19; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 31.

¹⁷⁵ IOTC Resolution 18/06, *supra* note 45, at ¶ 23; ICCAT Recommendation 16-15, *supra* note 45, at ¶ 22; IATTC Resolution C-12-07, *supra* note 45, at ¶ 19; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 31.

¹⁷⁶ TCC13 SUMMARY REPORT, *supra* note 26, at ¶ 189 (noting that “there were differing levels of reporting in the Annual Report Part 1 reports [relating to transshipment], which made it difficult to easily summarize the information into a single document.”),

https://www.wcpfc.int/system/files/TCC13%20Summary%20Report%20final_issued%2014%20Nov%202017.pdf; Francisco Blaha, Overview of Tuna Fisheries in the WCPO, Including Economic Conditions, for 2017 (Sept. 30, 2018) (“A robust analysis of transshipment data, however, is difficult because information regarding transshipment is diffuse, spread out between multiple reports, and tends to be inconsistent between reporting sources.”), <https://www.franciscoblaha.info/blog?offset=1538619953994>.

¹⁷⁷ IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(a)(ii); ICCAT Recommendation 16-15, *supra* note 45, at Appendix 2, ¶ 6.1(c); IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.1(ii); CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(a)(ii).

¹⁷⁸ IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(a)(iv); ICCAT Recommendation 16-15, *supra* note 45, at Appendix 2, ¶ 6.1(e); IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.1(iv); CCSBT Transshipment

results of transshipment activities in the observer's report,¹⁷⁹ the rules do not state to whom the observer submits this report. A separate resolution states that scientific observers must submit their "observer reports" to the authorities of the vessel's flag State.¹⁸⁰ However, that resolution addresses the recording of scientific information and does not appear to apply to transshipments.¹⁸¹

The rules applicable to observers on carrier vessels contemplate two other types of reports. First, the observer must submit a "daily report" of the carrier vessel's transshipping activities,¹⁸² although the rules do not specify to whom this report must be sent. The rules further specify that the observer must compile information concerning the carrier vessel's transshipment activities in a "general report" and submit that report to the relevant RFMO Director within 20 days from the end of the period of observation.¹⁸³

Despite the lack of clarity about the number of reports to prepare and to whom to send them, the observer provider for the four t-RFMOs—the Consortium of Marine Resource Assessment Group (MRAG) and Capricorn Fisheries (CapFish)—has standardized the flow of observer reports.¹⁸⁴

Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(a)(iv). The observer is also directed to examine the logbook and license to fish in the IATTC Convention Area, ensure the vessel monitoring system is functioning, and report any possible violations of IATTC rules. IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(a); ICCAT Recommendation 16-15, *supra* note 45, at Annex 2, ¶ 6.1; IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.1; CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(a).

¹⁷⁹ IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.1(vi); ICCAT Recommendation 16-15, *supra* note 45, at Appendix 2, ¶ 6.1(g); .

¹⁸⁰ IATTC, *Resolution on Scientific Observers for Longline Vessels*, IATTC Resolution C-11-08, ¶ 6, <http://www.iatcc.org/PDFFiles/Resolutions/IATTC/English/C-11-08-ActiveObservers%20on%20longline%20vessels.pdf> [hereinafter IATTC Resolution C-11-08].

¹⁸¹ *Id.* at ¶ 4.

¹⁸² IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(b)(viii); ICCAT Recommendation 16-15, *supra* note 45, at Annex 2, ¶ 6.3(a); IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.2(b); CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(c).

¹⁸³ IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(b)(ix); ICCAT Recommendation 16-15, *supra* note 45, at Annex 2, ¶ 6.3(c)-(d); IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.2(c)-(d); CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(d).

¹⁸⁴ See ICCAT, *IOTC and CCSBT Regional Observer Programme Manual*, *supra* note 170. Ultimately, the RFMO Secretariat receives just one report. In response to a question from this author about observer transshipment reporting, IATTC staff wrote the following:

We got just one report from the observer containing the information recollected pursuant to paragraphs 5.1 and 5.2. The main document that result of the work of the observer is the declaration form in which the information provided by the longline vessel and carrier vessel is registered. The declaration form is filled out by the captain of the carrier vessel and signed by the observer.

The observer sends to MRAG and then MRAG to the IATTC Secretariat a number of reports on his activity including a general report (R4) of all the trip summarizing transshipments made, possible infractions detected, places of the transshipments, etc..

Email from IATTC Staff, *supra* note 171.

Form T1 includes basic information such as the name of the observer, the identity of the carrier vessels, and ports and dates of embarkation and disembarkation. The observer completes Form T1 at the end of the trip.¹⁸⁵

Report R1, the Observer Deployment Report, includes information collected from Form T1, as well as other forms concerning a pre-sea inspection of any vessel used to transfer the observer to the carrier vessel and the carrier vessel itself; the observer submits this form to MRAG prior to deployment.¹⁸⁶

Form T4, the Transshipment Details Form, includes details of each transshipment event. With this form, the observer records estimates of the species, product codes, fish counts, and weights. The observer also records the information reported by the longliner and carrier vessel about the fish products transhipped, as well as the location of the transshipment.¹⁸⁷

Report R2, the Observer 5-Day Report, is a document that the observer submits to MRAG. R2 reports include a summary of transshipments that occurred during the 5-day reporting period, provided that the transshipment has been completed. Observers submit their R2 reports to MRAG according to the following schedule:

- Period A – 1st to 5th
- Period B – 6th to 10th
- Period C – 11th to 15th
- Period D – 16th to 20th
- Period E – 21st to 25th
- Period F – 26th to the end of the month.¹⁸⁸

Report R3, the Supplier 15-Day Report, is submitted by MRAG to the relevant RFMO Secretariat. This report includes information on all observer movements, as well as summaries of

¹⁸⁵ MRAG & CapFish, IOTC Regional Observer Programme Manual, IOTC-2009-ROPMANUAL, § 3.1.2.1 (Feb. 2009), <https://www.iotc.org/sites/default/files/documents/2014/02/IOTCObserverManual.pdf>; MRAG & CapFish, ICCAT Regional Observer Programme Manual, § 3.2.1.1 (Nov. 2012), <https://www.iccat.int/Documents/ROP/ICCATObserverManual.pdf>; MRAG, Review of the IATTC Regional Observer Programme Covering the Period January 1, 2017 to February 15, 2018, IATTC Doc. CAF-06-03 Add.1, at 11, (Apr. 2018), <https://www.iattc.org/Meetings/Meetings2018/IATTC-93/PDFs/Docs/English/CAF-06-03-02ADDENDUM%201%20MRAG%20Americas%C2%A0Program%20to%20monitor%20transshipments%20at%20Osea.pdf>. ICCAT, IOTC and CCSBT Regional Observer Programme Manual, *supra* note 173, at § 5.1.

¹⁸⁶ IOTC Regional Observer Programme Manual, *supra* note 182, at § 3.2; ICCAT Regional Observer Programme Manual, *supra* note 185, at § 3.2.1.4; Review of the IATTC Regional Observer Programme, *supra* note 185, at 11–12; ICCAT, IOTC and CCSBT Regional Observer Programme Manual, *supra* note 173, at § 5.4.

¹⁸⁷ IOTC Regional Observer Programme Manual, *supra* note 185, at § 3.1.2.4; ICCAT Regional Observer Programme Manual, *supra* note 185, at § 3.2.2.1; Review of the IATTC Regional Observer Programme, *supra* note 185, at 12; ICCAT, IOTC and CCSBT Regional Observer Programme Manual, *supra* note 173, at §§ 6.1, 7.

¹⁸⁸ IOTC Regional Observer Programme Manual, *supra* note 182, at § 3.2; ICCAT Regional Observer Programme Manual, *supra* note 185, at § 3.2.2.2; Review of the IATTC Regional Observer Programme, *supra* note 185, at 12; ICCAT, IOTC and CCSBT Regional Observer Programme Manual, *supra* note 173, at § 6.3.

information from observer R2 reports.¹⁸⁹ In this way, observer reports are submitted to the Secretariat within the 20-day period contemplated by the relevant resolutions.¹⁹⁰

The IOTC, ICCAT, and CCSBT also require submission of **Form R4**, the End of Trip Report. In this report, the observer provides details from the observer's daily logs and other observations of the cruise.¹⁹¹ The daily log includes information on

- the carrier vessel's position, course, and speed;
- the estimated dates of future transshipments and next port stop;
- vessel-to-vessel exchanges of goods, fuel, and crew;
- potential violations, vessel problems, and interpersonal conflicts; and
- any other information worth noting, such as correspondence with the contractor, issues concerning job performance, and marine mammal and seabird sightings.¹⁹²

The observer submits a draft R4 report on disembarkation to the fishing master, who is given an opportunity to comment on it to MRAG within 5 days of receiving it. The observer also submits the draft report to MRAG, which is reviewed during a debriefing session, after which the observer submits a final report to MRAG within 12 days of disembarkation. MRAG then combines the report with any comments from the master of the carrier vessel and submits this information to the relevant Secretariat.¹⁹³

Unique among RFMOs, ICCAT makes observer reports publicly available via its website.¹⁹⁴

C. Rules of the North Pacific Fisheries Commission

The Convention on the Conservation and Management of the High Seas Fisheries Resources in the North Pacific Ocean (NPFC Convention)¹⁹⁵ establishes the North Pacific Fisheries Commission (NPFC)¹⁹⁶ to manage bottom fisheries and other fisheries not managed by

¹⁸⁹ ICCAT Regional Observer Programme Manual, *supra* note 185, at § 3.2.3.3.

¹⁹⁰ IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(b)(ix); ICCAT Recommendation 16-15, *supra* note 45, at Annex 2, ¶ 6.3(c)-(d); IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.2(c)-(d); CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(d).

¹⁹¹ IOTC Regional Observer Programme Manual, *supra* note 185, at § 3.2; ICCAT Regional Observer Programme Manual, *supra* note 13, at § 3.2.4.1; *ICCAT, IOTC and CCSBT Regional Observer Programme Manual*, *supra* note 173, at § 9.1.

¹⁹² IOTC Regional Observer Programme Manual, *supra* note 185, at § 3.2; ICCAT Regional Observer Programme Manual, *supra* note 185, at § 3.2.4.1; *ICCAT, IOTC and CCSBT Regional Observer Programme Manual*, *supra* note 173, at 10.1.

¹⁹³ IOTC Regional Observer Programme Manual, *supra* note 185, at § 3.2; ICCAT Regional Observer Programme Manual, *supra* note 185, at § 3.2.4.1; *ICCAT, IOTC and CCSBT Regional Observer Programme Manual*, *supra* note 173, at § 10.1 (although this combined manual does no longer includes specific deadlines).

¹⁹⁴ ICCAT, ICCAT Regional Observer Programme for At-Sea Transshipments, <https://www.iccat.int/en/ROP.html>.

¹⁹⁵ Convention on the Conservation and Management of the High Seas Fisheries Resources in the North Pacific Ocean, Feb. 24, 2012 (entered into force July 19, 2015), <https://www.npfc.int/npfc-convention> [hereinafter NPFC Convention] The NPFC Convention establishes the North Pacific Fisheries Commission (NPFC). *Id.* at art. 5(1).

¹⁹⁶ *Id.* art. 5.

other RFMOs in the high seas areas of the North Pacific Ocean.¹⁹⁷ Although the NPFC does not manage tuna and other fish managed by the WCPFC,¹⁹⁸ the area it manages overlaps significantly with that of the WCPF Convention.¹⁹⁹ Thus, it is not inconceivable that vessels authorized to fish in the NPFC convention area but not the WCPFC convention area catch fish managed by the WCPFC. Consequently, the WCPFC and the NPFC should ensure that they share information about catches and, significantly, transshipments.

The NPFC Convention requires the NPFC to establish transshipment procedures and develop and implement an observer program.²⁰⁰ It further requires each flag State to ensure its vessels carry observers and, with respect to bottom trawlers, ensure 100% observer coverage.²⁰¹ Unlike the WCPFC and other t-RFMOs, however, the NPFC Convention delegates to each flag State the responsibility to train and place observers on the vessels it flags.²⁰²

At present, approximately 60% of vessels authorized to fish in the NPFC Convention Area appear to fish without observers as not all fish in the NPFC Convention Area are caught using bottom trawls.²⁰³ For example, vessels catching Pacific saury (*Cololabis saira*) “mainly use stick-held dip nets or lift nets (a similar fishing method which uses fishing lamps)” while other vessels use longline hook gear and longline trap gear to fish around seamounts in the Northeastern Pacific Ocean.²⁰⁴ Even where the NPFC requires observers, as in the bottom trawl fisheries, it does not require observer reporting of transshipments. The two conservation and management measures specific to bottom trawl fisheries, despite including a long list of scientific information for the observer to collect, do not require reporting of transshipments.²⁰⁵

¹⁹⁷ *Id.* art. 4(1).

¹⁹⁸ More precisely, the NPFC manages within the convention area “fisheries resources,” defined to include

all fish, mollusks, crustaceans and other marine species caught by fishing vessels within the Convention Area, excluding:

(i) sedentary species insofar as they are subject to the sovereign rights of coastal States consistent with Article 77, article 4 of [UNCLOS] and indicator species of vulnerable marine ecosystems as listed in, or adopted pursuant to [the NPFC Convention];

(ii) catadromous species;

(iii) marine mammals, marine reptiles and seabirds; and

(iv) other marine species already covered by pre-existing international fisheries management instruments within the area of competence of such instruments.

Id. at art. 1(h).

¹⁹⁹ Compare WCPF Convention *supra* note 6, at art. 3 (defining the Convention Area) and NPFC Convention, *supra* note 192, art. 4(1).

²⁰⁰ NPFC Convention, *supra* note 195, art. 7(2)(a)–(b).

²⁰¹ *Id.* art. 13(6).

²⁰² *Id.* (stating, “Each Contracting Party shall place observers on board fishing vessels entitled to fly its flag operating in the Convention Area in accordance with the Observer Program.”).

²⁰³ NPFC, Register of Fishing Vessels, <https://www.npfc.int/compliance/vessels>, Aug 19, 2019. (616 non-trawl fishing vessels out of 1032 are registered to operate in the NPFC Convention Area.)

²⁰⁴ NPFC, Fisheries Overview, <https://www.npfc.int/fisheries-overview>.

²⁰⁵ See NPFC, *Conservation and Management Measure for Bottom Fisheries and Protection of Vulnerable Marine Ecosystems in the Northwestern Pacific Ocean*, CMM 2018–05, Annex 5 (entered into force Nov. 17, 2018); NPFC, *Conservation and Management Measure for Bottom Fisheries and Protection of Vulnerable Marine Ecosystems in the Northeastern Pacific Ocean*, CMM 2017–06, Annex 5 (entered into force Nov. 28, 2017).

The NPFC has adopted a conservation and management specific to transshipment of fish taken through bottom fishing, including bottom trawling,²⁰⁶ but it does not require the deployment of an observer on the carrier vessel or the fishing vessel.²⁰⁷ Conservation and Management Measure 2016–03 does, however, require both the offloading and receiving vessels to submit a transshipment declaration that provides the date and time that the transshipment began and ended, the position of the vessels at the time the transshipment began and ended, as well as the product type by species and weight, among other things.²⁰⁸ The vessels send their transshipment declarations to the flag States of the vessels, not the NPFC Secretariat.²⁰⁹ NPFC members must submit a summary of the transshipment declarations to the NPFC each year.²¹⁰

Without a requirement for observers to monitor transshipments and submit their transshipment reports to the NPFC Secretariat, there is no means to verify the information submitted by vessels or their flag States. Because transshipments increased by 50% in the NPFC convention area²¹¹ and the NPFC does not make transshipment data publicly available,²¹² the failure to deploy observers to monitor transshipments is a major data and compliance gap for both the NPFC and the WCPFC as such vessels may also catch WCPFC-managed fish.

V. Improving Observer Reporting of Transshipments in the WCPFC

Transshipment on the high seas continues to increase and abet IUU fishing and other maritime security risks. To mitigate these risks in the western and central Pacific Ocean, the WCPFC must strengthen its provisions for observer monitoring and reporting of transshipments. As described in the preceding section, the WCPFC lags behind the other t-RFMOs with respect to information gathering and reporting of high seas transshipments. By implementing some of the rules already implemented by these other t-RFMOs, the WCPFC can take relatively modest steps to improve its transshipment regime significantly.

1. Specify additional duties and information requirements for the observer to report

²⁰⁶ The NPFC Convention defines “bottom fishing” to mean “fishing activities where the fishing gear is likely to contact the seafloor during the normal course of fishing operations.” NPFC Convention, *supra* note 192, at art. 1(c).

²⁰⁷ NPFC, *Conservation and Management Measure on the Interim Transshipment Procedures for the North Pacific Fisheries Commission*, CMM 2016–03, ¶ 1 (Limiting the transshipment procedures to “bottom fishing”) (entered into force Jan. 16, 2017), <https://www.npfc.int/index.php/system/files/2018-08/CMM%202016-03%20ON%20THE%20INTERIM%20TRANSSHIPMENT%20MEASURES%20FOR%20THE%20NORTH%20PACIFIC%20FISHERIES%20COMMISSION.pdf>.

²⁰⁸ *Id.* at ¶ 3(b)–(c). The vessels must also be authorized to fish in the NPFC convention area. *Id.* at ¶ 2(b).

²⁰⁹ *Id.*

²¹⁰ *Id.* at ¶ 4.

²¹¹ Stop Illegal Fishing, Chatham House Forum Addresses Key Issues of Illegal Fishing and Fisheries Related Crime (May 18, 2018) (quoting Peter Flewwelling of NPFC as saying, “Unmonitored transshipment is rampant at a time when the volume of fish transhipped is increasing rapidly. In the North Pacific we saw an increase in transshipment activity of approaching 50% from 2015 to 2017.”), <https://stopillegal-fishing.com/news-articles/chatham-house-forum-addresses-key-issues-of-illegal-fishing-and-fisheries-related-crime/>.

²¹² E-mail from Peter Flewwelling, NPFC Compliance Manager, to Chris Wold, Professor and IELP Director (June 17, 2019) (on file with author).

At present, the four other t-RFMOs require the observer to collect far more information than the WCPFC observer. As an initial matter, the WCPFC’s CMM 2009–06 does not require that the observer collect information. Rather, it provides that the observer “shall confirm to the extent possible that the transshipped quantities of fish are consistent with other information available to the observer, which *may* include

- a. the catch reported in the WCPFC Transshipment Declaration;
- b. data in catch and effort logsheets, including catch and effort logsheets reported to coastal States for fish taken in waters of such coastal States;
- c. vessel position data; and
- d. the intended port of landing.²¹³

In other words, the observer does not independently verify the weight of the transhipped fish. Nor is the observer required to collect other information relevant to transshipment activities, such as the position of the vessels. Instead, this type of information is only a source of information to confirm the quantities of transhipped fish. In contrast, the duties and information collection requirements of the other four t-RFMOs are much more substantial. The WCPFC should adopt these requirements, as they would appear to represent current best practices for t-RFMOs.

Observer Duties in other T-RFMOs	
Regarding the Carrier Vessel	Regarding the Fishing Vessel
<ul style="list-style-type: none"> • record and report upon the transshipment activities carried out; • verify the position of the vessel when engaged in transshipping; • observe and estimate products transshipped; • verify and record the name of the longline vessel concerned and its registration number; • verify the data contained in the transshipment declaration; • certify the data contained in the transshipment declaration; and • countersign the transshipment declaration. 	<ul style="list-style-type: none"> • check the validity of the fishing vessel’s authorization or license to fish for tuna and tuna-like species and sharks in the Convention Area; • check and record the total quantity of catch on board, and the quantity to be transferred to the carrier vessel; • check that the VMS is functioning, and examine the logbook; • verify whether any of the catch on board resulted from transfers from other vessels, and check the documentation on such transfers; • in the case of an indication that there are any violations involving the fishing vessel, immediately report the violations to the master of the carrier vessel; and • record the results of these duties on the fishing vessel in the observer’s report.

2. Mandate the submission of observer transshipment reports to the WCPFC Secretariat

²¹³ CMM 2009–06, *supra* note 19, at ¶ 14 (emphasis added).

Consistent with the rules of the other t-RFMOs, the WCPFC should mandate that observer reports be submitted to the Secretariat. The submission of observer reports can be accomplished in one of two ways. The observer could submit the reports directly to the Secretariat. In the alternative, the WCPFC could require the observer provider to submit the observer reports.

The other t-RFMOs specify that the observer shall submit a report to the Secretariat within 20 days from the end of the period of observation.²¹⁴ In practice, however, the observer submits transshipment reports to the observer provider, which then submits the reports to the Secretariat. Either way, the observer reports are submitted to the Secretariat, which allows for independent verification of the information submitted by CCMs.

3. Ensure WCPFC transshipment declarations are compatible with those of the IATTC, IOTC, and CCSBT

The WCPFC should ensure that its transshipment declaration is compatible with those of the IATTC, IOTC, and CCSBT. Those three RFMOs have areas of competence that overlap with that of the WCPFC.²¹⁵ Although no transshipment appears to occur in the WCPFC-IOTC overlap area, significant transshipment occurs in the WCPFC-IATTC overlap area and many vessels are authorized to fish in both the IATTC and the WCPFC convention areas. Consequently, a single vessel and observer may be subject to different transshipment reporting rules. Moreover, if the IATTC is responsible for the observer and the vessel is fishing outside the IATTC convention area and in the WCPFC convention area,²¹⁶ the captain determines, at his discretion, whether the observer may monitor and report on the transshipment.²¹⁷ This is apparently due to the lack of an agreement between the WCPFC and MRAG Americas, the observer provider for the IATTC.²¹⁸

²¹⁴ IOTC Resolution 18/06, *supra* note 45, at Annex IV, ¶ 5(b)(x); ICCAT Recommendation 16-15, *supra* note 45, at Annex 2, ¶ 6.3(c); IATTC Resolution C-12-07, *supra* note 45, at Annex 3, ¶ 5.2(c); CCSBT Transshipment Resolution, *supra* note 45, at ¶ 19, Annex II, ¶ 6(d).

²¹⁵ The WCPFC and IOTC have a memorandum of understanding but the document does not include provisions relating to transshipment. See *Memorandum of Understanding between the Commission for the Conservation of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean and the Indian Ocean Tuna Commission* (May 18, 2007), <https://www.iotc.org/sites/default/files/documents/commission/Memorandum/WCPFC-IOTCMemorandumofUnderstanding2007.pdf>.

²¹⁶ The two convention areas overlap between 130° West longitude and 150° West Longitude. Compare WCPFC Convention *supra* note 6, at art. 3 (defining the Convention Area) and Antigua Convention, *supra* note 32, at art. III (defining the Convention Area).

²¹⁷ IATTC Doc. CAF-06-03 Add.1, *supra* note 185, at 13.

²¹⁸ MRAG Americas reported the following:

Currently MRAG has a contract with the IATTC to provide observers to vessels planning to transship within the Eastern Pacific. The IATTC Convention (management) Area begins at the 150° W line and includes all high seas waters east of that line of longitude, all the way to the Americas. MRAG does not currently have an agreement with the WCPFC to collect data on transshipments in the Western Pacific. The dividing line is the 150 W line, despite the fact that the WCPFC area overlaps the IATTC, particularly around Tahiti. If the transshipment occurs at-sea east of 150W an observer is required.

If the carrier vessel takes transshipments west of 150W, these will be designated WCPFC transshipments. The observer is to observe these transshipments at carrier vessel captain's discretion. If the captain allows WCPFC transshipments to be observed, follow the same

Thus, during a 13.5-month period in 2017–2018, 50 of 463 transshipments (10.8%) went unobserved.²¹⁹ With an average transshipment amount of 56.03 metric tons,²²⁰ the transshipment of more than 2,800 metric tons of valuable tuna went unobserved.

By harmonizing transshipment declarations, the observer’s work is simplified and the RFMOs receive compatible information. Moreover, if recommendation 1 is adopted, all high seas transshipments will be subject to the same rules.

4. Require the observer to transfer to the fishing vessel to gather information

The IOTC, ICCAT, and CCSBT all transfer observers from the carrier vessel to the fishing vessel with an officer from the carrier vessel to obtain the information included in Recommendation 1, above. The IATTC also mandates that the observer obtain such information from the fishing vessel, although protocols to transfer the observer to the fishing vessel have not been established yet.

In any event, the WCPFC should establish its own requirement to transfer observers from the carrier vessel to the fishing vessel. In this way, the observer can obtain valuable information about the fishing vessel that is otherwise not likely to be obtainable given the low rates of observer coverage of the longline fleet²²¹ and much higher rates of vessels authorized to tranship on the high seas—just under 55% of longline and other non-purse vessels.²²² Because each carrier vessel may tranship with 30 or more vessels per trip²²³ and most longline vessels do not have an observer onboard, an opportunity is lost to engage those longline vessels to ascertain their compliance with relevant rules.

5. Ensure cross-endorsement of WCPFC observers with IATTC, IOTC, and CCSBT observers

The WCPFC should provide for the cross-endorsement of observers with the IATTC and IOTC—as it already does with the CCSBT²²⁴—beginning with the IATTC due to the higher levels of fishing by vessels in the two convention areas of those RFMOs. The CCSBT and IOTC also have an MOU that allows monitoring of transshipments at sea of southern bluefin tuna by the same observer in either convention area.²²⁵ Of course, the WCPFC and IATTC will need to ensure that observers are trained with regards to both RFMOs. However, if the transshipment rules are, for the most part, similar, as recommended above, then such training should be

procedures as for the IATTC transshipments, designated the transshipment number as WP1 (number consecutively and independent of IATTC transshipments).

IATTC Doc. CAF-06-03 Add.1, *supra* note 185, at 13.

²¹⁹ *Id.* at 5.

²²⁰ *Id.*

²²¹ See *supra* notes 163–66, and accompanying text.

²²² 2018 Annual Report on WCPFC Transshipment Reporting, *supra* note 20, at ¶ 6.

²²³ IATTC Doc. CAF-06-03 Add.1, *supra* note 185, at 12.

²²⁴ See *supra* note 144 and accompanying text.

²²⁵ IOTC, *Memorandum of Understanding between the IOTC and the Commission for the Conservation of Southern Bluefin Tuna*, (June 3, 2015), <https://www.iotc.org/sites/default/files/documents/commission/Memorandum/CCSBT-IOTC%20MoU2015%20-%20SIGNED.pdf>.

relatively straightforward. In any event, the IATTC observer provider appears to provide this training already.²²⁶

6. Establish an MOU with the NPFC to obtain transshipment information

The Pew Charitable Trusts has reported that at least 24 WCPFC-authorized carriers operated in the WCPFC–NPFC overlap area in 2016.²²⁷ Nonetheless, the Secretariat did not report the transshipment of any fish managed by the WCPFC in this overlap area in 2016, nor in any subsequent year.²²⁸ These 24 carrier vessels could possibly transship only NPFC-managed fish, but with significant amounts of WCPFC-managed fish caught in the area,²²⁹ “it is also possible that WCPFC-managed fish are being transshipped (such as longline caught North Pacific albacore, yellowfin, bigeye tuna and swordfish).”²³⁰ Similarly, NPFC-registered carrier vessels may be transshipping WCPFC-managed fish and failing to report those transshipments.

Despite the presence of significant WCPFC fisheries in the WCPFC–NPFC overlap area, the WCPFC and NPFC lack the type of transshipment reporting and observer protocols that the WCPFC has with the CCSBT. Without this information, it is difficult to “understand the activities of carrier vessels operating in this part of the WCPFC Convention Area and to what extent these vessels might be transshipping mixed quantities of WCPFC and NPFC managed species.”²³¹ Consequently, the WCPFC should establish data sharing protocols with the NPFC, particularly with respect to transshipments.

²²⁶ IATTC Doc. CAF-06-03 Add.1, *supra* note 185, at 5, 13 (noting that IATTC observers monitored transshipments occurring in the WCPFC convention area).

²²⁷ Pew Charitable Trusts, A Review of Management and Reporting Trends Relating to Transshipment Occurring within the WCPFC, WCPFC-TCC14-2018-OP03, at 5 (Sept. 25, 2018), <https://www.wcpfc.int/file/218894/download?token=LapYqhZY>.

²²⁸ See 2017 Annual Report on WCPFC Transshipment Reporting, *supra* note 20 (not reporting any transshipments in the North Pacific); 2018 Annual Report on WCPFC Transshipment Reporting, *supra* note 20 (not reporting any transshipments in the North Pacific).

²²⁹ Stephen Brouwer, et al., *The Western and Central Pacific Tuna Fishery: 2017 Overview and Status of Stocks*, WCPFC15-2018-IP12, figs. 4–6, at pages 15–17 (Nov. 5, 2018) (showing significant catches of various WCPFC-managed species in the high seas areas of the North Pacific), <https://www.wcpfc.int/file/219352/download?token=IdoltTzQ>.

²³⁰ Pew Charitable Trusts, *supra* note 226, at 5.

²³¹ *Id.*