

LEGAL INSTRUMENTS FOR THE PREVENTION AND MANAGEMENT OF DISPOSAL AND LOSS OF FISHING GEAR AT SEA

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1.0. Introduction

In the early 1980s, concern heightened over the impacts of persistent garbage and debris in the world's oceans on marine flora and fauna, on marine ecosystem function generally, and on various human activities. Subsequently, three international conferences and workshops were convened (1984, 1989, 1994) to define the scope and magnitude of the marine debris issue (Shomura and Yoshida 1984, Shomura and Godfrey 1990, Coe and Rogers 1997) and to consider appropriate monitoring, educational, and regulatory responses. A major theme of another international symposium on ocean disposal in 1986 was also the disposal or loss from ships at sea of plastics and other persistent synthetic materials (including fishing nets) and its impacts on marine life (Wolfe 1987). The consistent outcome of these meetings was the recognition that persistent marine debris, particularly discarded or lost fishing gear, was causing substantial harm to a large

variety and number of marine animals when they either ingested or became entangled in it, and posing operational risks to recreational and commercial marine traffic.

In 1984 when the first international conference on marine debris was convened, a number of multilateral and bilateral international agreements or conventions were in force that regulated disposal into the oceans of some forms of garbage were in force¹. All but one², however, were regional instruments. The single global agreement, the London Dumping Convention, arguably regulated only the deliberate disposal at sea of various garbage that was generated on land³. Most of the regional agreements did include provisions to generally proscribe the disposal of persistent plastic and other synthetic materials at sea, though these were not bright-line prohibitions. Rather, they contained key exceptions that made the agreements ineffective in regulating disposal or discard of the persistent marine debris (i.e., fishing gear of various sorts) that is a principle concern for conservation of living marine resources and the focus of the International Marine Debris Conference held in Hawaii in August 2000.

Not until 1983 was there a global agreement in force that addressed discharge of pollution⁴ from sources that were other than land-based. This instrument took initial

¹ For example, the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR, 1980), the Convention on the Protection of the Marine Environment (Helsinki Convention, 1974), the Convention for the Prevention of Marine Pollution from Land-Based Sources (Paris, 1974), the International Convention for the High Seas Fisheries of the North Pacific Ocean (Tokyo, 1952), the Convention for the Protection of Marine Pollution by Dumping from Ships and Aircraft (Oslo Convention), and several regional conventions which are part of the United Nations Environment Regional Seas Programme.

² Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (1972 London Dumping Convention). 26 U.S.T. 2403, T.I.A.S. No. 8165, 1046 U.N.T.S. 120. Entered into force 30 August 1976.

³ Though the Convention was designed to promote effective control over most sources of pollution that may affect the marine environment owing to dumping of wastes and other substances, a broad exception to the general prohibition of dumping excluded the dumping of wastes generated while ships are operating at sea (Art. III(1)(b)(i)). Consequently, the disposal or loss of entire nets or net fragments is not evidently covered by the general prohibition.

⁴ Pollution was defined primarily as oil and other noxious substances but excluded garbage.

form in 1973 as the International Convention for the Prevention of Pollution from Ships and was later modified and incorporated into its substantive Protocol in 1978 which then entered into force generally on 2 October 1983⁵. It has become known as MARPOL 73/78 and it consists of 20 Articles, 2 Protocols, and 6 Annexes⁶. However, the disposal of garbage (particularly including plastics) by ships at sea was not regulated globally until December 1988 when Annex V of MARPOL 73/78 entered into force.

Another important recent global agreement which contains a number of provisions relevant to disposal of various substances by ships at sea is the United Nations Convention on the Law of the Sea (UNCLOS)⁷. Although concluded in 1982 this convention did not enter into force until 16 November 1994⁸.

The London Dumping Convention, MARPOL 73/78, UNCLOS, and the Convention on the Intergovernmental Maritime Consultative Organization (CIMCO, 1948, 9 U.S.T. 621, T.I.A.S. 4044)⁹ obligate to promote cooperation with regional organizations and to assist developing states to protect the marine environment. Moreover, two key aspirational principles of the United Nations Conference on the Human Environment (Stockholm Conference of 1972) called on all states to take all possible steps to prevent pollution of the world's oceans and to condition their sovereign rights to exploit resources within their jurisdiction by a responsibility to avoid damage to

⁵ Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, London, 1978. 17 I.L.M. 546.

⁶ Five original Annexes and a sixth (Regulations for the Prevention of Air Pollution from Ships) added in 1997.

⁷ 21 I.L.M. 1261

⁸ The United States is one of the few states that has signed but not yet ratified the Convention, though it has announced, as a matter of policy, that it considers all provisions contained in the instrument to be customary international law.

⁹ The purpose of the CIMCO was to, *inter alia*, provide machinery for co-operation among governments in regulating various issues in trans-global shipping, including issues of marine pollution. It established the

the resources within the jurisdictions of other states and in areas beyond the limits of national jurisdiction.

Here we briefly: (1) review the provisions of these global international instruments relevant to the prevention and regulation of the discharge, disposal, and accidental discard of fishing gear by ships at sea; (2) highlight some domestic laws which regulate the same in state waters; and (3) raise issues for dialogue on preventing discharge, complying with discharge prohibitions, complying with ship-based and port-based retention and processing, and monitoring the dynamics of derelict fishing gear.

2.0. International Legal Instruments

2.1. MARPOL 73/78

This treaty establishes specific regulations governing the discharge of pollution and wastes from ships at sea. Annex V regulates the disposal of ship-generated "garbage". It provides guidelines to govern whether, where, and how such garbage may be discharged into the ocean. It prohibits the deliberate (but not necessarily unintentional) discharge of all plastics, including synthetic fishing nets, and non-food garbage into the ocean. And it requires Parties to provide garbage receptacles at their ports for the disposal of garbage that is generated by ships while at sea. Under MARPOL, acceptance of Annex V provisions is optional. States that ratify MARPOL 73/78 are not consensually bound to Annex V's obligations unless they also ratify Annex V. As of 30 April 2000, 96 countries, accounting for about 86% of the world's merchant

Intergovernmental Maritime Consultative Organization, later renamed as the International Maritime Organization, to conduct this business.

fleet tonnage,¹⁰ were parties to Annex V; most of these are still developing programs to implement the Annex domestically as it is not self-executing in most of those countries. Key to our discussion here and the focus of concern, however, is that the prohibitions of Annex V are read to primarily apply to merchant fleets with less emphasis given to its application specifically to commercial fishing vessels. Nonetheless, Annex V does prohibit the dumping of plastics and synthetic ropes and fishing gear at sea and also regulates the dumping of other types of ship-generated garbage at sea.

The Annex applies to all vessels registered to Parties and includes a general prohibition of the disposal of 'garbage' in most areas, with some permitted exceptions. Garbage is defined as "all kinds of victual, domestic and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically except those substances which are defined or listed in other Annexes to the present Convention." The deliberate disposal of plastics is absolutely prohibited; plastics are defined as including "but not limited to synthetic ropes, synthetic fishing nets and plastic garbage bags." Parties to Annex V must ensure that marinas, ports, or terminals provide adequate port reception facilities for garbage whose disposal at sea is prohibited.¹¹

There are three exceptions to the disposal requirements of Annex V:

- (1) when the disposal of garbage at sea is necessary for securing the safety of the vessel, its crew, or other lives at sea;

¹⁰ As registered with Lloyd's Register

¹¹ At page 20 - "MARPOL – 25 years." *Focus on IMO*. www.imo.org. October 1998. 28pgs.

- (2) the disposal was caused by damage to the ship or its equipment, provided that all reasonable precautions have been taken before or after to prevent or minimize the escape; and
- (3) the loss of synthetic fishing nets or synthetic material incidental to their repair was accidental, provided that all reasonable precautions have been taken to prevent such loss.

In 1989 paragraph (c) of Annex V was amended to read “the accidental loss of synthetic fishing nets, provided that all reasonable precautions have been taken to prevent such loss.”¹² This change strengthens Annex V by narrowing the application of the exception to just the loss of *entire* synthetic fishing nets. Therefore, the loss of net pieces or fragments incidental to net repair, even if accidental and reasonable preventive precautions had been taken, is arguably no longer exempt from the general prohibition of discharge.

The International Maritime Organization (IMO) is the agency responsible for promoting the MARPOL convention. A primary function of the IMO has become the prevention and control of marine pollution from ships. Moreover, the IMO is identified by UNCLOS (Article 211) as the organization that is presumed to authorize the establishment of marine pollution standards. The IMO does have the power to recommend regulations under MARPOL, though it lacks the power to impose those regulations. Imposition of standards is left to the individual states directly or indirectly through regional organizations that are delegated such authority.

¹² This Amendment to the Annex of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, London, 1989, entered into force on 18 February 1991.

2.1.1. Monitoring and Enforcement

Under MARPOL, Parties have a general obligation to capture and prosecute those who violate domestic laws that implement the provisions of the agreement. The monitoring and enforcement provisions of MARPOL 73/78 include two components: one applying to port states and another to flag states. A port state¹³ has an affirmative duty and right to monitor and inspect vessels as they enter its jurisdiction¹⁴. A flag state¹⁵ has a duty and right to investigate an alleged violation by a vessel flying its flag and take necessary enforcement actions against the ship. In addition, as will be discussed in the next section, flag states have a duty under the 1982 Convention on the Law of the Sea (Article 94) to ensure that vessels flying their flag observe and take measures which conform to all the applicable international regulations concerning the prevention, reduction, and control of marine pollution.

For inspections of discharge violations, a party to MARPOL does not need "clear grounds" to proceed.¹⁶ A Party to MARPOL 73/78 may also inspect a vessel to which the convention applies when it enters a port or off-shore terminal under its jurisdiction if another Party has requested an investigation and has provided sufficient evidence that the vessel has discharged harmful substances or effluents in violation of the Regulations. If an inspection by the port state or Party indicates that a vessel has violated the convention, the port state or party must provide the government of the flag state of the vessel with a report and evidence of the alleged violation. The government of the flag state must then

¹³ A "port state" is the state that has jurisdiction over the port or off-shore terminal where a vessel of another state has docked or landed.

¹⁴ Article 6, MARPOL 73/78

¹⁵ A "flag state" is the state that exercises legal jurisdiction over the vessels registered to it and flying its flag.

¹⁶ Guruswamy, Lakshman D, and Brent R. Hendricks. 1997. "Vessel –Based Pollution." pp. 251. *In International Environmental Law In A Nutshell*. pp. 241-262.

investigate the alleged violation. It may request additional or better evidence from the port state or party that alleges the violation and then begin proceedings over the violation in accordance with its laws if the evidence is adequately demonstrative. The government of the flag state must also promptly inform the port state or party that reports the violation and the IMO of any action taken.

Consequently, a state that is a party to MARPOL may generally inspect a foreign vessel as it enters its jurisdiction. If MARPOL violations are found, the party must document them and refer the case to the flag state of the vessel for investigation and enforcement action. The flag state is required to investigate the allegations, take enforcement action (if necessary), and inform the Party reporting the violation of the action taken. Furthermore, Article 4(4) requires Parties' domestic laws that implement MARPOL to specify penalties that are "adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur." Therefore, a flag state or a port state must not allow for more lenient treatment of vessels flying its flag or apply different penalties based on where the violation occurred.

A Party to MARPOL may also "cause proceedings to be taken in accordance with its law" when a violation occurs within its jurisdiction or it may simply furnish the evidence of the violation to the government of the vessel (Article 4(2)(a)(b)).

Article 11 of MARPOL requires that all Parties communicate certain information to the IMO, including the text of domestic laws adopted to implement the convention. This provision institutionalizes transparency¹⁷. Moreover, it promotes equity among Parties in application of these laws by educating all Parties about the various enforcement

¹⁷ i.e., it ensures that all Parties are aware of the types of laws and regulations implementing MARPOL that other Parties have adopted or promulgated.

procedures and penalties for violations of MARPOL. This provision provides an opportunity for Parties to determine if, in fact, other Parties to MARPOL are specifying penalties that are "adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur," as required under Article 4(4). However, all Parties do not or have not complied with this provision of MARPOL and there is no regular agenda item to address compliance with Article 11.

Annex V was amended in 1995 to substantially enhance the powers of port states to enforce MARPOL regulations. Regulation 8 provides that a port state can inspect a vessel and prevent it from sailing when there are "clear grounds for believing that the master or crew are not familiar with essential shipboard procedures relating to the prevention of pollution by garbage." A port state can require that such a vessel remain docked until it has complied with the requirements of Annex V. Also in 1995, the IMO Assembly adopted Resolution A.787(19) "Procedures for Port State Control". This resolution outlines the procedures for port state control of operational requirements related to the safety of ships and prevention of pollution. Moreover, amendments to it in 1999¹⁸ provide detailed guidelines, recommendations, and definitions for procedural conduct by port states for what actions may be taken and for how results should be reported.

The resolution also includes guidelines for when and how more detailed investigations and inspections can be carried out pursuant to the discharge requirements of Annexes I and II, but not Annex V. The guidelines for control of operational requirements address how it may be determined that all of the operational requirements

¹⁸ Resolution A.882(21), adopted 25 November 1999 (Agenda item 5). "Amendments to the Procedures for Port State Control (Resolution A.787(19))".

of Annex V have been met. For example, the Port State Control Officer (PSCO) may check certain on-board operational requirements, including garbage requirements under Annex V. However, when exercising the controls “recommended” by the guidelines “the PSCO should not include any operational tests or impose physical demands, which, in the judgement of the master, could jeopardize the safety of the ship, crew, passengers control officers or cargo.” Furthermore, the PSCO “should ensure, as far as possible, no interference with normal shipboard operations. . .nor should the PSCO require demonstration of operational aspects which would unnecessarily delay the ship.” Unlike the procedures established for Annex I and II, these guidelines require that the PSCO “exercise professional judgement” to determine if the vessel is operationally fit to sail without being a threat to the ship, persons on board, or an “unreasonable threat of harm to the marine environment.” There is no chapter that sets out what the port state action could be based on a PSCO investigation, other than the actions provided for in the Convention (Article 6), like there is for Annex I and II.

In 1988, the IMO published guidelines for the implementation of Annex V, which were updated in 1991 and again in 1997¹⁹. Certain kinds of “cargo residues”²⁰ are not explicitly excluded from being disposed as garbage, though it is not clear that this may be relevant to fishing gear. The guidelines do caution, however, that these items may nonetheless pose harm to the marine environment but may also not be suitable for disposal at port reception facilities that may be equipped to handle general garbage.

2.2. The 1982 United Nations Convention on the Law of the Sea (UNCLOS)

¹⁹ Guidelines for the Implementation of Annex V of MARPOL 73/78. Halston & Co. Ltd. 1997. 40pp.

²⁰ i.e., plastics, which are not prohibited from disposal as garbage.

The principal duties of flag states are clearly identified in Article 94 of UNCLOS. Specifically, a state should not register a vessel and allow it to fly its flag unless it can “effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.” The duties of a flag state covered by Article 94 include obligations under generally accepted international regulations, procedures, and practices, such as MARPOL.

States that become Parties to UNCLOS agree to adopt domestic laws and regulations to prevent, control, and reduce marine pollution²¹. Further, the effects of these measures must be in harmony with generally accepted international rules and standards that have been developed through the competent international organization or general diplomatic conference. Therefore, states that are not a Party to MARPOL are still obliged to adopt laws and standards which give effect to its provisions, under UNCLOS. Furthermore states must ensure compliance by vessels flying their flag with applicable international rules and standards, developed by a competent international organization or diplomatic conference, and with their laws and regulations adopted pursuant to UNCLOS for the prevention, reduction, and control of marine pollution from ships. Moreover, states should take measures to implement the applicable international rules and regulations and provide for effective enforcement of these rules, regardless of where the violations may occur. These measures particularly include adopting domestic laws and regulations. Thus, obligations under UNCLOS would appear to bring all fishing fleet nations within the framework of MARPOL Annex V for preventing loss and discard of debris and garbage generally and fishing gear specifically.

²¹ See Article 211 of the 1982 United Nations Convention on the Law of the Sea.

UNCLOS also clarified the major difficulty of the MARPOL convention for determining who²² has authority and jurisdiction to investigate and prosecute pollution violators by codifying the duties and powers of states to protect the flag state. Each state is required to ensure that vessels flying its flag or carrying its registry comply with pertinent international rules and standards²³. The primary response of port and coastal states when a ship is found in violation of these rules and standards is to inform the ships flag state of the violation, even though it is recognized that flag states may generally be reluctant to prosecute vessels flying their flag. Enhanced port state enforcement abilities as provided by international agreement will undoubtedly promote the effectiveness of such otherwise voluntary compliance by flag states.

In November 1999, the IMO Assembly passed a resolution on the self-assessment of flag-state performance, which includes a self-assessment form.²⁴ This resolution asserts that flag states have the principal responsibility to have an adequate and effective system in place to exercise jurisdiction and control over vessels entitled to fly their flag and to ensure these vessels adhere to the relevant international rules and regulations. The “Flag State Performance Self-Assessment Form” is intended to establish a uniform set of internal and external criteria which can be voluntarily used by flag States to gauge how well their maritime administrations are functioning and to assess their own performance as flag States. The resolution urges Member Governments to complete a self-assessment of their capabilities and performance in implementing and complying with the various instruments to which they are Party. It also encourages Member Governments to use the

²² i.e., the flag state, the port state, the coastal state, or combinations.

²³ i.e., Flag State Jurisdiction as the primary law of the sea.

²⁴ A.881(21) “Self-Assessment of Flag State Performance.” Adopted November 1999 by the IMO Assembly, 21st Session.

self-assessment form when requesting technical assistance from or through IMO. However, submission of a completed form is voluntary and not a prerequisite for receiving technical assistance. The resolution requests that Member Governments submit a copy of their self-assessment report so that a database that would assist IMO in its efforts to achieve consistent and effective implementation of IMO instruments may be established.

3.0. Domestic Implementation of Annex V of MARPOL 73/78

3.1. United States

The U.S. Ocean Dumping Act²⁵ implements the London Dumping Convention regarding the at-sea disposal of land-generated wastes. The Ocean Dumping Act narrows the exemptions of the London Dumping Convention however to only the discharge of effluents that are incidental to the propulsion or operation of motor-driven equipment or vessels²⁶ as opposed to matter that is incidental to the “normal operations of vessels”.

Regarding the discharge of vessel-source garbage and fishing gear at sea, the U.S. Act to Prevent Pollution from Ships of 1982 (APPS)²⁷ was specifically enacted to implement the relevant provisions of MARPOL 73/78, including an amendment to include the application of Annex V when it entered into force. The APPS/MPPRCA applies to (1) a U.S. flagged vessel *wherever* it is located in the world’s oceans and (2) to *all* vessels while in the navigable waters or EEZ of the United States. U.S. regulations follow Annex V in that they require the person in charge of a vessel to keep a detailed log

²⁵ Marine Protection, Research and Sanctuaries Act of 1972. Publ. L. 92-532. 86 Stat 1052.

²⁶ 33 U.S.C. §1402(f); 40 C.F.R. §220 1(c)(3)(i).

²⁷ Publ. L. 96-478. 94 Stat 2297. 33 U.S.C. §§ 1901-1915. As amended by the Marine Plastic Pollution Research and Control Act (MPPRCA) of 1987.

of the discharge and disposal of solid waste, including plastics, and to develop a waste management plan. These records must be maintained by the vessel for at least two years and be available for inspection. Vessels must also display pollution prevention placards. Penalties for violations under MPPRCA include civil penalties of \$25,000 per day per violation; criminal penalties of \$50,000 and five years in prison; and denied access to US ports, terminals, and marinas. In 1998 the U.S. Coast Guard reported 219 violations of the MPPRCA and imposed nearly \$500,000 in penalties. Of these 219 cases, 57 were fishing vessels and 90 were recreational vessels.

In 1992, the United States informed the IMO of change in United States enforcement policy about ships in U.S. ports suspected of Annex V violations occurring within the U.S. exclusive economic zone (EEZ). Because only a few flag states consistently responded to reported violations (pursuant to MARPOL 73/78), the United States notified IMO that it would subsequently "...take direct enforcement action consistent with all international law principles against ships in the United States ports for all suspected Annex V violations that have occurred with the United States 200-mile exclusive economic zone."²⁸

3.2. People's Republic of China²⁹

The People's Republic of China is a party to MARPOL and Annex V. The requirements of MARPOL and Annex V are implemented by Ministry level regulation and are enforced by the Maritime Safety Administration. Under these regulations, all

²⁸ "Enforcement of Pollution Conventions: MARPOL Annex V Violations." Submitted to the 33rd Session of the Marine Environment Protection Committee of the IMO by the United States. MEPC 33/INF.44. September 9, 1992.

vessels registered in China and flying a Chinese flag are required to designate a person responsible for the disposal of garbage, have a garbage plant, and maintain garbage disposal records. Both the shipping companies and the vessel's masters are held accountable for adhering to the requirements of Annex V. Maritime Safety Administration inspectors enforce Annex V regulations on Chinese flagged vessels, but do not inspect foreign flagged vessels for Annex V compliance. In addition, the Maritime Safety Administration implements and enforces Annex V regulations on the high seas, in Chinese coastal waters, and on the Yangtze River. An interagency committee coordinates enforcement on the Yangtze River because several Ministries have jurisdiction over the Yangtze River.

3.3. Republic of Korea³⁰

The Republic of Korea is a party to MARPOL and Annex V. To implement the provisions of Annex V, Korea enacted the Marine Pollution Prevention Act in 1994, as the implementing ministerial decree. The law and decree incorporate the suggested language of Annex V, including the language defining the types of garbage covered by the Act. The law includes the following enforcement provisions:

- in instances of insufficient record keeping - a fine of up to one million Korean *won* (approximately \$900 USD);
- intentional throwing of waste into the ocean - a fine up to 20 million Korean *won*, or up to three years in prison; and

²⁹ This information was gained during diplomatic exchanges between the U.S. Department of State and government representatives of the People's Republic of China and the Republic of Korea in July 1999.

³⁰ Ibid.

- unintentional throwing of waste into ocean - a fine of up to 10 million Korean *won*, or up to one year in prison.

The Maritime Police Authority is responsible for enforcement of the Act, turning cases over to the prosecutor's office for prosecution.

4.0. Implementation Challenges and Weaknesses of MARPOL

4.1. MARPOL is a UN Agreement

MARPOL was concluded under the auspices of the International Maritime Organization (IMO), a UN body organization which administers the convention. Because of that association with the United Nations, non-state entities like Taiwan cannot become a party to MARPOL or any of its Annexes³¹. As Taiwan has the sixth largest fishing fleet in the world (and the second largest fleet in the central and western Pacific Ocean) its inability to be legally bound to MARPOL and its Annexes weakens the effectiveness of the Agreement. Under these circumstances, such fishing entities could consent to unilaterally implement MARPOL, but this is not the optimal solution.

Nonetheless, despite its inability to become a party to MARPOL or its annexes, Taiwan has taken steps to address the marine debris problem it is experiencing in its own marine habitats (e.g., coral reefs).³² Taiwan is drafting a marine pollution prevention law which will contain provisions that discourage ships from discarding nets and other types of debris at sea and amendments to its Fisheries Act to increase the protection of marine resources.

³¹ A prerequisite for becoming a contracting party to treaties in the United Nations system is statehood.

4.2. Non-Parties

MARPOL is weakened by the fact that many countries active in commercial fishing, either directly or by as registries for foreign vessels, are not yet Parties to the convention or its various Annexes. Non-Parties are not legally bound to abide by the provisions. Of the 96 present Parties to Annex V, nearly all of the nations with fishing fleets operating in the northern Pacific region are party to Annex V, except for Taiwan (see section 4.1) and the Philippines.³³ In this case, it appears, that non-Parties to MARPOL and Annex V are less of a problem than the effective implementation and enforcement of the provisions of Annex V by Parties operating fishing vessels in the Pacific region.

4.3. Lack of Capacity and infrastructure to comply with MARPOL requirements

One significant obstacle to States becoming a party to MARPOL and Annexes, or adopting domestic laws and regulations that have the same effect as generally accepted international rules and standards (as required under UNCLOS III), is the institutional capacity required to fully and effectively implement the relevant regulations and provisions of the convention (i.e., enforcement, administration, and infrastructure). Understandably, States do not want to accept obligations that they may not meet. Increasing the capacity of States to comply with the regulations of MARPOL and its Annexes will not only encourage their ratification of the Agreement but also increase its effective implementation. This is especially important for small island and developing

³² This information was gained during an exchange between the U.S. Department of State and the Taiwan Authorities in July, 1999.

States. Joint development projects between intergovernmental organizations and donor institutions, such as the IMO- World Bank Wider Caribbean Initiative, could help to overcome this obstacle. This would also increase the number of Parties to the Agreement and promote effective implementation.

4.4. Enforceability

Due to the nature of fishing and marine transport operations, vessels spend a significant portion of their time far out to sea or on the high seas. The enforcement of regulations by States becomes very difficult in this case. Vessels must be observed violating the regulations or there must be some other type of clear evidence that can be attributed to that particular vessel to initiate enforcement proceedings. Methods of identifying the source of derelict fishing gear, which may have been either lost or intentionally discarded, could assist flag State enforcement efforts and the detection of violations by other Parties.

4.5. Penalty Action

MARPOL itself does not specify any penalties for violations of its Regulations. Parties are required to investigate alleged violations and, given sufficient evidence, initiate proceedings against the vessel. If found guilty of a violation of a MARPOL Regulation, MARPOL states that the law of Parties shall specify penalties that are "adequate in severity to discourage violations of the present Convention and shall be

³³ During a diplomatic exchange between the U.S. Department of State and government representatives of the Philippines (June, 1999), the Philippine Government indicated that it supports MARPOL and Annex V

equally severe irrespective of where the violations occur." This allows a Party to develop a penalty scheme according to its law. However, MARPOL could be strengthened if it identified the types of penalties that should be imposed by Parties when a violation occurs. A range of penalty options for violations of increasing severity could be developed. This would help to standardize the types of penalties among Parties for specific categories of violations so that any penalties imposed are in fact "adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur." Moreover, IMO's efforts could be particularly enhanced if Parties would make available copies of domestic laws which have been adopted to implement the Convention (as required by Article 11).

5.0. Regional Fisheries Management Organizations (RFOs)

Fisheries that extend beyond the exclusive jurisdiction of one state, such as straddling fish stocks and highly migratory fish stocks, are most often managed by regional fisheries organizations or commissions established by multilateral agreements. In the Pacific there are two, the Inter-American Tropical Tuna Commission (IATTC) and the North Pacific Anadromous Fisheries Commission (NPAFC), and one under negotiation for the central and western pacific (referred to as the MHLC). These regional fisheries organizations could play an important role in trying to eliminate the discard of fishing gear and related debris.

RFOs and their members have a duty to comply with relevant international law and agreed upon standards, such as UNCLOS and the Food and Agriculture

and has recommended the ratification of the convention and its annexes to the Philippine Congress.

Organization's Code of Conduct for Responsible Fisheries.³⁴ One of the general principles of the Code of Conduct is that the "harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will ... minimize negative impacts on the environment".³⁵ The Code of Conduct has several provisions which assert that States and subregional or regional fisheries management organizations or arrangements should adopt appropriate measures to minimize catch by lost or abandoned fishing gear and its impact on non-target species, in particular endangered species (Article 7.2 (f)(g); Article 7.6.9)), and that fishing activities ought to be conducted with due regard for the IMO requirements relating to the protection of the marine environment and the loss of fishing gear (Article 8.4.1; Article 8.7.1).

Therefore, RFOs should have among their mandates and binding conservation rules a prohibition on discarding gear, light-sticks, or other types of material related to fishing activities, which apply to its members fishing within its regulatory area. By expanding its mandate to include prohibitions on discarding fishing gear, RFOs will more fully implement the Code of Conduct and help to ensure that the requirements of IMO are more widely implemented and enforced. In addition, implementation of these requirements by RFOs (depending on their membership) could capture fishing vessels that otherwise could not be legally bound to the provisions of MARPOL Annex V (e.g., Taiwan).

6.0. Summary

³⁴ The Code of Conduct for Responsible Fisheries is a voluntary agreement which sets out principles and international standards of behavior for responsible fishing practices. All States and those involved in fishing activities are encouraged to apply the Code and give effect to it. The Code was adopted by the Twenty-eighth Session of the FAO Conference, 31 October 1995.

A number of international legal instruments are now in force which have various effects in limiting the discharge of persistent fishing gear and fishing gear fragments into the marine environment. Among the global instruments, the London Dumping Convention of 1972 regulates the deliberate disposal at sea of garbage and persistent plastics of land-based or land-generated origin (= “dumping”). MARPOL 73/78, and in particular Annex V to the Protocol to this Convention, addresses the operational and unintentional discharge of vessel-source pollution, including certain fishing gear, persistent plastics and other operational garbage at sea (i.e., ocean “dumping” is not covered by MARPOL 73/78). These instruments therefore act in concert to regulate the input of pollution, including derelict fishing gear, into the world’s oceans, though Annex V of MARPOL 73/78 has emerged as the principal legal instrument regulating the disposal by ships at sea of all plastic materials. Certain exemptions or ambiguous definitions of terms, however, have arguably left the discharge of some forms of derelict fishing gear unregulated. UNCLOS also contains several provisions that have direct relevance for regulating discharge of fishing gear by vessels at sea, though similar loopholes exist. A number of regional international agreements, most notably those within the United Nations Regional Seas Programme, apply to at-sea discharge of fishing gear. The language and terms in those agreements are similar, however, to that in global agreements leading to similar inadequacies in effective governance of reducing the impacts of derelict fishing gear to marine environments and human traffic. Implementation of domestic legislation by to international agreements to govern such impacts coupled with State compliance of both international and domestic legal instruments are key to limiting future burdens to marine environments from the threats of

³⁵ FAO Code of Conduct for Responsible Fisheries. Article 6.7

these persistent pollutants. Elimination of the extant burdens through cooperative and collaborative programs, an issue not yet embraced by any of these instruments, is also a key issue for further international dialogue and action.

7.0. Recommendations for Further Discussion: Opportunities for Improvement and Actions Needed

- Develop public-private partnerships or enlist the aid of international donor institutions (e.g., the World Bank or the International Monetary Fund) to increase capacity in States, particularly developing states, so they can comply with MARPOL regulations and/or will be in a position to ratify and effectively implement the Convention and its annexes. (Example: Wider Caribbean Project)
- Increase the flag state response to alleged violations by other Parties.
- Encourage all Parties to comply with Article 11 of MARPOL and establish an agenda item regarding this provision in the appropriate sub-committee (i.e., the IMO Marine and Environment Protection Committee)
- Enhance the enforcement provisions of MARPOL Annex V or develop new mechanisms to increase compliance with Annex V provisions.
- Parties should encourage those that have not already done so to become a party to MARPOL and/or ratify the optional Annexes.
- Address issues of inadequate reception facilities through development projects
- Develop programs with positive incentives for proper disposal (e.g., a deposit system for light sticks and other types of plastics).

- Increase the fishing industry's awareness of the navigational hazards and potential economic costs of marine debris (i.e., fouling of props and damage to set nets).
- Strengthen the Port State Control procedures and guidelines for Annex V provisions.
- Encourage MARPOL to implement strong domestic legislation for regulating intentional and unintentional discharge of fishing gear from vessels either flagged or registered under their jurisdiction which applies to those vessels regardless of the location of their activities.
- Encourage the IMO to provide guidance and technical support to MARPOL for crafting effective domestic legislation for regulating the discharge of fishing gear from vessels at sea.
- Encourage regional and sub regional fisheries organizations and arrangements to incorporate into their mandate and binding conservation measures a prohibition on discarding fishing gear and related fishing debris.

7.0. References

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