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**Conservation and Utilization of
the Living Resources in the
Exclusive Economic Zone –
How Far Can We Go?**

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Conservation and Utilization of the Living Resources in the Exclusive Economic Zone – How Far Can We Go?

Zhen Sun¹

1. Introduction

The Exclusive Economic Zone (EEZ), as established in the United Nations Convention on the Law of the sea (UNCLOS),² is a compromise between the group of coastal States wanting to have the most extensive rights possible in the waters outside the 12nm territorial sea, and other States who rejected any curtailment on the freedoms of the high seas.³ Within this special legal regime, coastal States have been granted sovereign rights of the natural resources, while the most important high seas freedoms, including the freedoms of navigation and overflight, have been explicitly preserved as counterparts.⁴

The replacement of vast areas of the high seas by the EEZ has significant implications for the navigational regimes. Foreign vessels and aircraft are obliged to have due regard to the coastal State's rights and duties, and must observe the legal requirements established by the coastal State in conformity with UNCLOS and other applicable rules of international law.⁵ It is clear from the outset that there is considerable potential for conflicts between the rights and duties of the coastal State and those of other States.⁶ Since most of the sea-borne routes used for navigation and overflight are regulated under the EEZ regime, the manner in which navigational freedoms are exercised is of vital importance to the international community.⁷

¹ Ph.D. candidate (China), University of Cambridge, United Kingdom.

² William Thomas Worster, *United Nations Convention on the Law of the Sea: Selected Treaty Series*, 2nd edition (Uitgeverij Nieuwe Rijn, 2012), 5-163.

³ Sam Bateman, "Security and the Law of the Sea in East Asia: Navigational Regimes and Exclusive Economic Zone," in David Freestone, Richard Barnes and David M Ong, *The Law of the Sea: Progress and Prospects* (Oxford, 2006), 365.

⁴ UNCLOS, Article 56 (1), 58 (1).

⁵ UNCLOS, Article 58 (3).

⁶ Robin Churchill and Vaughan Lowe, *The Law of the Sea*, 3rd edition (Manchester University Press, 1999), 175.

⁷ Barbara Kwiatkowska, *The 200 Mile Exclusive Economic Zone in the New Law of the Sea*

This article examines the potential impact on foreign navigation in the EEZ by the coastal State's sovereign rights of the living resources. Part I introduces the legal framework of the sovereign rights granted to the coastal States under UNCLOS, Part II looks in detail at coastal States' rights to regulate foreign fishing activities, and, Part III examines the rights of coastal States to take environmental measures to protect marine habitats and ecosystems.

2. Sovereign Rights of the Living Resources

The EEZ is the area beyond and adjacent to the territorial sea of a coastal State, extending up to a seaward limit of 200 nautical miles (nm), within which the coastal States have been accorded additional rights to the economic benefits of the natural resources.⁸ The EEZ can be regarded as the direct result of the developments in the law of the sea concerning coastal State fisheries jurisdiction in the adjacent sea areas.⁹ As at 2011, there are 109 States, among the 129 States that have established an EEZ, claimed for the full distance of 200nm.¹⁰ The global EEZ regime embraces around 90% of the world's marine fisheries, which have traditionally been a major supply of food and a provider of employment.¹¹

According to Article 56 of UNCLOS, coastal States have "sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its subsoil."¹² The phrase "sovereign rights" suggests that the coastal State's rights are exclusive in the sense that although they do not constitute full sovereignty but have "all rights necessary for and connected with the exploration and exploitation of the natural resources," including "jurisdiction in connection with the prevention and punishment of violations of the law."¹³

"Living resources" refers to non-sedentary species found in the water

(Martinus Nijhoff Publishers, 1989), 198.

⁸ UNCLOS, Article 55-57.

⁹ Shigeru Oda, *International Control of Sea Resources*, 2nd edition (Martinus Nijhoff Publishers, 1989), xvii-xix.

¹⁰ Table of Claims to Maritime Jurisdiction (As at 15 July 2011), available at: http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/table_summary_of_claims.pdf (Visited on 20/08/2012).

¹¹ FAO, Code of Conduct for Responsible Fisheries, Preface, para.1-2, available at: <http://www.fao.org/docrep/005/v9878e/v9878e00.HTM#7> (Visited on 20/08/2012).

¹² UNCLOS, Article 56 (1) (a).

¹³ Myron H. Nordquist, *United Nations Convention on the Law of the Sea 1982: A Commentary*, Vol. II (Dordrecht: Kluwer, 1993), 541-542.

column superjacent to the seabed, including marine mammals, highly migratory species, shared and straddling stocks, anadromous and catadromous species, and sedentary species of the seabed and its subsoil.¹⁴ Although sedentary species have been explicitly exempted from the EEZ regime under Article 68, they should nevertheless be treated as having the same status as non-sedentary species for the purpose of conservation and management for three main reasons. First, Article 68 was included as a historical consideration, because sedentary species were protected under the continental shelf regime before the establishment of the EEZ.¹⁵ Secondly, the exemption was meant to ensure that coastal States do not have the obligation of giving the surplus to other States when it does not have the capacity to harvest the entire allowable catch.¹⁶ Thirdly, the coastal States are given sovereign rights over sedentary species found outside the EEZ but on the extended continental shelf.¹⁷ Therefore, although coastal States have no obligation to take conservation and management measures of sedentary species, they may do so as a consequence of their sovereign rights.

Coastal States' rights not only relate to the management of these species and other natural features, but also to the conservation of these resources for economic utilization.¹⁸ These rights, together with certain duties imposed on the coastal State, are elaborated in Articles 61 to 73. The coastal States' sovereign rights encompass two main aspects as listed in Articles 61 and 62 of UNCLOS: conservation and utilization, of which the objective of the conservation measures is to reach the goal of optimum utilization of living natural resources.¹⁹

Coastal States are required to "ensure through proper conservation and management measures that the maintenance of the living resources in the [EEZ] is not endangered by over-exploitation."²⁰ These measures should be designed to "maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the economic needs of coastal fishing communities."²¹ In order to do so, the coastal States should take into account the best available scientific evidence, and cooperate with competent

¹⁴ UNCLOS, Article 61-68, 77 (4).

¹⁵ Nordquist, *Virginia Commentary*, Vol. II, 687-688.

¹⁶ UNCLOS, Article 77 (2).

¹⁷ UNCLOS, Article 76 (4)-(8).

¹⁸ Tomas Dux, *Specially Protected Marine Areas in the Exclusive Economic Zone: The Regime for the Protection of Specific Areas of the EEZ for Environmental Reasons under International Law* (LIT Berlin, 2011), 90.

¹⁹ Nordquist, *Virginia Commentary*, Vol. II, 608.

²⁰ UNCLOS, Article 61 (2).

²¹ UNCLOS, Article 61 (3).

international organizations as appropriate, whether sub-regional, regional or global.²²

Each coastal State must determine the total allowable catch of the living resources as well as its own capacity to harvest, and, where it does not have the capacity to harvest the entire allowable catch, it must, give other States access to the surplus through agreements or other arrangements.²³ In cases where foreign nationals have been granted the right to fish in a coastal State's EEZ, they "shall comply with the conservation measures and with other terms and conditions established in the laws and regulations of the coastal State" which are consistent with UNCLOS.²⁴

It is also acknowledged that, in exercising their sovereign rights over the living resources, coastal States must have "due regard" to the rights and duties of other States and must act "in a manner which would not constitute an abuse of right."²⁵ These general obligations are inserted to balance the rights and interests between the coastal State and other States in the EEZ. These obligations require the coastal States to be cognizant of the freedoms of other States in navigating through the same area, and to refrain from activities that unreasonably interfere with the exercise of these freedoms.²⁶ The following section will examine the effects imposed on navigational freedoms by the coastal States undertaking conservation and utilization measures within their EEZs.

3. Jurisdiction over Foreign Fishing Activities

The sovereign rights give coastal States the final authority to choose one way or another regarding conservation and utilization measures of the living resources in the EEZ, including the grant of access to and the regulation of the uses by foreign nationals.²⁷ Coastal State jurisdiction over foreign fishing vessels²⁸ refers to the competence of the coastal State to prescribe and apply

²² UNCLOS, Article 61 (2).

²³ UNCLOS, Article 61 (1), 62 (2).

²⁴ UNCLOS, Article 62 (4).

²⁵ UNCLSO, Article 56 (3), 300.

²⁶ Moritaka Hayashi, "Military and Intelligence Gathering Activities in the EEZ: Definition of Key Terms," *Marine Policy* 29 (2005): 133.

²⁷ William T. Burke, *The New International Law of Fisheries: UNCLOS 1982 and Beyond* (Oxford, 1994), 39.

²⁸ "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. Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, Food and Agriculture Organization of the United Nations (FAO), Rome, 1995, Article 1 (a), available at: <http://www.fao.org/docrep/meeting/003/x3130m/X3130E00.HTM> (Visited on

laws, policy and regulations to extended fishing activities, including the licensing, exploration, capturing, onboard processing, transportation, loading and unloading of the captures.²⁹

3.1 General Regulations

Article 62 (4) elaborates the kinds of regulations and laws that coastal States may prescribe for the purposes of conservation and utilization of the living resources. These include licenses, fees and remuneration, species restrictions and catch quotas, age and size of the fish, fishing seasons and areas, permitted vessels and equipment, required information, fisheries research, observers or trainees, landing, joint ventures, training and transfer of technology, and enforcement.³⁰ In addition, a number of international instruments provide general measures that can be used to achieve conservation objectives.³¹

Foreign fishing vessels first need to obtain a fishing license from the coastal State, with or without “payment of fees and other forms of remuneration,” through agreement or other arrangement with the coastal State.³² They must only fish in authorized areas during fishable seasons, using permitted gear and other equipment to harvest predetermined amount of certain species.³³ The coastal State may also require the fishing vessels to provide certain information with regards to their fishing activities, or place observers or trainees on board to ensure compliance with coastal regulations.³⁴

Foreign fishing vessels must also comply with the conservation measures established in the coastal laws and regulations.³⁵ Pollution, physical damage to marine life and habitats, aquatic nuisance species transferred through ballast water, grounding and collisions are the main damages posted by vessels.³⁶ Measures that aim at reduce such impacts mainly relate to the use of ships routing measures that are developed and monitored under the auspice of the International Maritime Organization (IMO).³⁷ If the coastal State has

20/08/2012).

²⁹ Burke, *New International Law of Fisheries*, 26.

³⁰ UNCLOS, Article 62 (4).

³¹ UNCLOS, Article 61 (2).

³² UNCLOS, Article 62 (2), (4) (a).

³³ UNCLOS, Article 62 (4) (b)-(d).

³⁴ UNCLOS, Article 62 (4) (e), (g).

³⁵ UNCLOS, Article 62 (4).

³⁶ International Maritime Organization (IMO), Res. A.982 (24), Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas, 1 December 2005, para. 2, available at:

[http://www.imo.org/blast/blastDataHelper.asp?data_id=25322&filename=A982\(24\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=25322&filename=A982(24).pdf)

(Visited on 18/08/2012).

³⁷ IMO, Ships' Routing, available at:

sufficient reasons to believe that the density of traffic is hazardous in or around a specific area, it may submit a proposal to IMO for approval of adopting ship's routing systems.³⁸ These systems may be made voluntary or mandatory for "all ships, certain categories of ships, or ships carrying certain cargoes" in the designated sea areas.³⁹

The proposed routing systems must "reasonably be expected to significantly prevent or reduce the risk of pollution or other damage to the marine environment of the area concerned."⁴⁰ The precise measure will depend on the particular circumstance which it is intended to alleviate, but may include some or all of the following: traffic separation schemes, two-way routes, recommended tracks, areas to be avoided, inshore traffic zones, roundabouts, precautionary areas, and deep water routes.⁴¹

In the case of a coral reef area where anchoring is hazardous or could result in unacceptable damage to the marine habitats, the coastal State may establish through IMO a clearly defined no-anchoring area where anchoring should be avoided by all ships or certain classes of ships.⁴² It is very common for coastal States to establish closed areas or seasons in spawning areas or during spawning seasons to preserve and improve the spawning grounds of the anadromous species.⁴³ It may worth considering using similar conservation measures for catadromous species to protect their marine habitats as well.⁴⁴ In addition, coastal States may seasonally or completely close specific areas for

<http://www.imo.org/OurWork/Safety/Navigation/Pages/ShipsRouteing.aspx> (Visited on 04/08/12).

³⁸ The International convention for the Safety of Life at Sea (SOLAS) 1974 (entered into force 25 May 1980), Chapter V, Regulation 10, para.2, available at:

<http://www.shmsa.gov.cn/UserFiles/File/e%20SOLAS%20consolidated%20edition2004.pdf> (Visited on 04/08/2012).

³⁹ IMO, MSC/Circ.1060, Guidance Note on the Preparation of Proposals on Ships' Routing Systems and Ship Reporting Systems for Submission to the Sub-Committee on Safety of Navigation, 6 January 2003, Annex, para. 2.1, available at:

<http://www.imo.org/OurWork/Safety/Navigation/Documents/1060.pdf> (Visited on 19/08/2012).

⁴⁰ Ibid, para.3.5.2.

⁴¹ IMO, General Provisions on Ships' Routeing, Res. A.572(14), 20 November 1985, Annex, para.2.1, available at:

[http://www.imo.org/blast/blastDataHelper.asp?data_id=22369&filename=A572\(14\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=22369&filename=A572(14).pdf) (Visited on 19/08/2012).

⁴² IMO Sub-Committee Acts on Erika Incident, 10 July 2000, available at:

http://www.imo.org/blast/mainframe.asp?topic_id=68&doc_id=551 (Visited on 19/08/2012).

⁴³ Douglas M. Johnston, *The International Law of Fisheries: A Framework for Policy-Oriented Inquires* (Yale, 1965), 61, 65.

⁴⁴ Council for Endangered Species Act Reliability, Petition to List the American Eel (*Anguilla Rostrata*) as a Threatened Species Under the Endangered Species Act, submitted to U.S. Fish and Wildlife Service, Washington D.C. and Sacramento Field Office, California, 30/04/2010, available at: http://www.fws.gov/northeast/newsroom/pdf/American_eel_petition_100430.pdf (Visited on 19/08/2012).

any fishing activities.⁴⁵ This very intensive conservation measure provides a high level of protection to marine species, and, in particular may assist in fostering the recovery of vulnerable fish stocks. In some specific cases, where shipping and other collateral activities *per se* may cause considerable damage to the spawning grounds or nurseries, the coastal State should enjoy a wide margin of discretion as to restrict navigation for conservation.⁴⁶ This measure may be combined with ships' routing systems where alternative routes are proved to minimize the impact on navigation.

One of the major threats to coastal States' efforts to conserve and manage the living resources in its EEZ is the rising incidences of illegal, unreported and unregulated (IUU) fishing.⁴⁷ IUU fishing undermines the objective of sustainable use of fisheries, and is responsible for the depletion of many fish stocks.⁴⁸ It has been identified as one of the main causes of overfishing and has "constrained progress in achieving food security for dependent populations and supporting sustainable livelihoods," which has indirectly threatened international peace and security.⁴⁹ Coastal States are taking various measures to prevent and deter IUU fishing, some through regulating the navigation of foreign fishing vessels in their EEZs.

Under Maldives law, "no foreign vessels shall enter the [EEZ] of Maldives except with prior authorization from the Government."⁵⁰ Costa Rica requires foreign fishing vessels without fishing permits but which need to transit its EEZ to "communicate entry and departure" to local authorities with information of characteristics of vessel, proposed course, place of entry and exit, and time required for passage.⁵¹ Similar legislation was adopted by Canada where "no foreign fishing vessel shall enter Canadian fisheries waters

⁴⁵ UNCLOS, Article 62 (4) (c).

⁴⁶ Dux, *Specially Protected Marine Areas*, 38-40.

⁴⁷ FAO, Illegal, Unreported and Unregulated Fishing, available at: <http://www.fao.org/fishery/topic/3195/en> (Visited on 19/08/2012).

⁴⁸ FAO, International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, I. Introduction, para. 1, available at: <ftp://ftp.fao.org/docrep/fao/012/y1224e/y1224e00.pdf> (Visited on 19/08/2012).

⁴⁹ United Nations General Assembly (UNGA), A/63/63, Oceans and the Law of the Sea: Report of the Secretary-General, 10 March 2008, para.98-99, available at: <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N08/266/26/PDF/N0826626.pdf?OpenElement> (Visited on 08/05/2012).

⁵⁰ Maritime Zones of Maldives Act No.6/96, Article 14, available at: http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/MDV_1996_Act.pdf (Visited on 19/08/2012).

⁵¹ Costa Rica, Law No.6267/1978, Art.7, Decree No.9996-S of 16 April 1979, from FAO Corporate Document Repository, Coastal State Requirements for Foreign Fishing, available at: <http://www.fao.org/docrep/V9982E/v9982e10.htm> (Visited on 19/08/2012).

for any purpose unless authorized.”⁵² These domestic laws unilaterally create an obligation of reporting for foreign fishing vessels transiting through the EEZ, which effectively place a condition on the freedom of navigation that seems contrary to the freedom of navigation preserved in UNCLOS.⁵³

Ship reporting systems, nevertheless, are commonly used for monitoring the movement of foreign vessels, which must be adopted and implemented through IMO.⁵⁴ The foreign vessel may be required to provide its identity, position, course and other related information through the automatic identification systems, long-range identification and tracking system, or other applicable ship reporting systems.⁵⁵ The information required should be restricted to that essential for the proper operation of the system and for safety of navigation.⁵⁶ In this case, coastal States may only require data essential for ensuring the foreign vessel is not acting inconsistent with fishery conservation and utilization measures.

3.2 Regulation of Ancillary Activities

The categories of coastal regulations listed in Article 62 (4) are rather illustrative than exhaustive, as signified by the term “*inter alia*” in the introduction. The list establishes a guideline for the coastal State to adopt fisheries laws and regulations that are designated to avoid over-exploitation of the resources, and to meet the coastal State’s “environmental, social and economic goals.”⁵⁷ This broad interpretation is supported by subsequent state practice which shows the tendency of regulating a wide array of activities connected with fishing that may affect the freedom of navigation.

In January 1985, Canadian authorities refused to grant a license for fishing in the Gulf of St Lawrence to the French vessel *La Bretagne*, which was equipped with on-board fish filleting equipment, the French authorities challenged this decision on the basis of a bilateral agreement and submitted

⁵² Canada, Coastal Fisheries Protection Act (1985), Article 3. According to Article 2, “Canadian fisheries waters” include “all waters in the fishing zones of Canada, all waters in the territorial sea of Canada and all internal waters of Canada.” Available at: <http://laws-lois.justice.gc.ca/PDF/C-33.pdf> (Visited on 19/08/2012).

⁵³ UNCLOS, Article 58 (1).

⁵⁴ SOLAS, Chapter V, Regulation 11, para.1.

⁵⁵ SOLAS, Chapter V, Regulation 19.

⁵⁶ IMO, Res. A.851(20), General Principles for Ship Reporting Systems and Ship Reporting Requirements, Including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants, 27 November 1997, Annex, para.1.1, available at: [http://www.imo.org/blast/blastDataHelper.asp?data_id=22635&filename=A851\(20\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=22635&filename=A851(20).pdf) (Visited on 04/08/2012).

⁵⁷ UNCLOS, Article 61 (3). Nordquist, *Virginia Commentary*, Vol. II, 635, 637.

this dispute to arbitration.⁵⁸ The Arbitral Tribunal considered the phrase “fishery regulations” in Canadian law as covering all the rules applicable to fishing activities, taking into consideration future developments, and determined it refers not only to “technical standards for the physical conditions in which the fishing is carried on, but, also those requiring the completion of certain formalities prior to the performance of these activities.”⁵⁹ Accordingly, coastal States may adopt and enforce laws to regulate all fishing activities to maintain order on fishing grounds as well as to protect and conserve the living resources, albeit subject to UNCLOS and general international law. First, although the list in Article 62 (4) is not exhaustive, it does not authorize coastal States to regulate subjects of a different nature other than those described, for example, “fishing equipment” should not be interpreted as to include processing equipment that beyond the ordinary meaning of this term.⁶⁰ Secondly, the exercise of coastal States’ rights subject to the rule of “reasonableness” requires that regulations must be proportional to the aim legally pursued and gives reasonable regard to the rights of other States.⁶¹ Furthermore, such rights are also subject to the rule of “relativity,” whereby the prohibition of an activity could only be legislated and enforced if the coastal State can prove that the practice of this activity would inevitably lead to an infringement of the law.⁶²

Guinea took a step further to expand its jurisdiction by arresting the *M/V Saiga*, an oil tanker of St Vincent and Grenadines with no fishing equipment on board, for supplying oil to three fishing vessels in Guinean EEZ.⁶³ The matter was submitted to the International Tribunal on the Law of the Sea (ITLOS), which stated during the prompt release phase of the dispute that “it has already been indicated that laws or regulations on bunkering of fishing vessels may arguably be classified as laws or regulations on activities within the scope of the exercise by the coastal State of its sovereign rights to explore, exploit, conserve and manage the living resources in the [EEZ].”⁶⁴ But ITLOS did not come to a clear conclusion. At the merits phase, ITLOS avoided to make any findings on this question by examining a broader question of the application of customs laws in Guinean EEZ.⁶⁵ When denying Guinea’s

⁵⁸ *La Bretagne Arbitration* (Canada v. France), Summary, *ILR* 82 (1990): 591-592.

⁵⁹ *Ibid.*, para.37, 38, page: 618-620.

⁶⁰ *Ibid.*, para.52, page: 630.

⁶¹ *Ibid.*, para.54, page: 631.

⁶² *Ibid.*, para.63, page: 637.

⁶³ *M/V Saiga (No. 1) Case (Saint Vincent and the Grenadines v Guinea)* (Prompt Release) (1997), Summary, *ILR* 110 (1998): 737-738.

⁶⁴ *Ibid.*, para.63, page: 753.

⁶⁵ *M/V Saiga (No.2) Case (Saint Vincent and the Grenadines v Guinea)* (Admissibility and Merits) (1999), para. 137-138, *ILR* 120 (2002): 192.

appeal, ITLOS seems to have applied the rule of “reasonableness” and “relativity”: first, it pointed out that recourse to the principle of “public interest” to apply customs law in the EEZ would entitle a coastal State to prohibit any activities that it considers as affecting its economic interests, and would unreasonably curtail the rights of other States; secondly, there was no evidence showing that Guinea’s “essential interests were in grave and imminent peril,” or that the application of the customs laws was the only means to protect those interests.⁶⁶

In the *La Bretagne*, the Arbitration Tribunal did not accept Canada’s claim that it could regulate fish processing equipment because the prohibition of using on-board filleting equipment was not explicitly included in its national law, nor was it a “long-standing policy,” but not because Canada did not have the right to prescribe such regulations.⁶⁷ In the *Saiga*, ITLOS rejected the application of customs law in the EEZ, but indicated to reorganize the coastal State’s right to regulate bunkering of fishing vessels as an ancillary activity.⁶⁸ It is noteworthy that, in 2011, ITLOS received another case regarding a coastal State’s ability to regulate the passage of vessels through its EEZ based on its assertion of resource protection measures. The Panamanian flagged oil tanker *M/V Virginia G*, was arrested and detained by the maritime authorities of Guinea-Bissau for supplying fuel to four fishing vessels with a plausible license in its EEZ.⁶⁹ It would help to clarify the authority of coastal States to regulate the transit of vessels through their EEZs under the auspices of protection of their marine resources if ITLOS could resolve the legality of Guinea-Bissau regulating refueling operations in its EEZ as fishing related activities.

There is a tendency to recognize a broadened coastal State jurisdiction with regard to activities that may affect its sovereign rights over living resources in the EEZ. It is arguable that the attribution of the jurisdiction of a specific activity should be assimilated to the jurisdiction of the main activity of which it is ancillary. But such laws need to be compatible with UNCLOS and should not unreasonably impede other State’s rights in the EEZ. Compliance with coastal States’ laws and regulations inevitably increases the burden of foreign vessels traversing their waters, and, more importantly, violation of these laws could lead to the enforcement measures being taken by

⁶⁶ Ibid, para.129-136, page:190-192.

⁶⁷ *La Bretagn*, para.42-46, page: 622-626.

⁶⁸ *M/V Saiga (No.1)*, para.63, page: 753.

⁶⁹ The *M/V Virginia G (Panama/Guinea-Bissau)*, Notification submitted by Panama, available at:

http://www.itlos.org/fileadmin/itlos/documents/cases/case_no.19/Notification_submitted_by_Panama.pdf (Visited on 19/08/2012).

the coastal State.

3.3 Enforcement Powers

Coastal States' enforcement powers came a long way during the negotiation of UNCLOS, as many major long-distance fishing States preferred exclusive flag State enforcement jurisdiction, or, jurisdiction through regional or international organizations with regard to violations in the EEZ.⁷⁰ The authorization is included in Article 73, where a foreign vessel is found fishing without a license, or acting in contrary with its license, or infringing any other applicable laws and regulations in the EEZ, coastal States may board, inspect, arrest and initiate juridical proceedings as appropriate against the vessel.⁷¹ Although coastal States are given broad enforcement jurisdiction as “in the exercise of its sovereign rights” over the living resources, they must act in “good faith” and pay “due regard to the rights and duties of other States.”⁷²

As a common practice, if a coastal State has “good reason to believe” that a foreign vessel has committed a violation of its domestic laws,⁷³ it may stop the vessel and verify its flag and other information. It is significant that the right of hot pursuit can be used if the foreign vessel attempts to evade coastal enforcement measures.⁷⁴ Hot pursuit may only be commenced when the foreign vessel is in the EEZ and refused to stop voluntarily after been given a visual or auditory signal to do so.⁷⁵ Also, hot pursuit must be continuous and uninterrupted in order for it to be continued outside the EEZ.⁷⁶

The term “boarding” implies that coastal authorities may go on board the vessel, and may use force if necessary and not in violation of the Charter of the United Nations.⁷⁷ “Inspection” is normally limited to the examination of various certificates, records or other documents as the vessel is required to carry, further inspection may be undertaken if the circumstance so warrant.⁷⁸ The word “arrest” is used in relation to both the vessel and the crews, signifying the initiation of detention with the purpose to invoke judicial proceedings.⁷⁹ These procedures must be progressed on reasonable grounds and be proportional to ensure that the legal rights of the foreign vessel is not

⁷⁰ Nordquist, *Virginia Commentary*, Vol. II, 786-791.

⁷¹ UNCLOS, Article 73 (1).

⁷² UNCLOS, Article 56 (2), 73 (1) and 300.

⁷³ UNCLOS, Article 111 (1).

⁷⁴ UNCLOS, Article 111 (2).

⁷⁵ UNCLOS, Article 111 (4).

⁷⁶ UNCLOS, Article 111 (1).

⁷⁷ Nordquist, *Virginia Commentary*, Vol. II, 794.

⁷⁸ UNCLOS, Article 226 (1).

⁷⁹ Nordquist, *Virginia Commentary*, Vol. II, 795.

unduly interfered.

It is a considerable challenge for coastal States to maintain effective surveillance and enforcement of its vast EEZ, especially for developing States.⁸⁰ Hence many States have engaged in increasing cooperation through regional or international fishery management organizations to share information, conduct joint surveillance or reciprocal enforcement.⁸¹ In the South Pacific region, for example, 17 States established the Forum Fisheries Agency (FFA) in 1979 to provide “monitoring control and surveillance activities, policy and services, for members to strengthen national capacity and regional solidarity” to achieve sustainable use of fisheries.⁸² The Operation Kurukuru 2009, a coordinated surveillance operation hosted by the FFA covering an area of approximately 10 million square kilometers, resulted in eight boarding of vessels and one arrest of vessel with further investigation in port.⁸³

Such enforcement measures will predictably affect the activities of foreign vessels in the EEZ, be it fishing or navigation. In order to minimize the potential impact, UNCLOS has laid down detailed safeguards for coastal States exercising enforcement jurisdiction. Coastal States are obligated to promptly notify the flag State of an arrest or detention of its vessels, and, where violations are established, penalties may not include imprisonment without the agreement of the States concerned or any other forms of corporal punishment.⁸⁴ Coastal States must also promptly release the arrested vessels and their crews upon the posting of reasonable bond or other security.⁸⁵ Moreover, the prompt release requirement is subject to the compulsory dispute settlement procedure of Article 292, which gives ITLOS *prima facie* jurisdiction unless the parties have agreed to submit the dispute to another court or tribunal.⁸⁶ Up until 2011, nine of the cases brought to ITLOS since it was established were related to the prompt release.⁸⁷ These cases have assisted in establishing the procedure and requirements of the prompt release, and providing judicial remedies for flag States to avoid unreasonable detention

⁸⁰ Churchill and Lowe, *Law of the Sea*, 293.

⁸¹ FAO Fisheries and Aquaculture Department, Regional Fishery Bodies, available at: <http://www.fao.org/fishery/rfb/en> (Visited on 19/08/2012).

⁸² The Pacific Islands Forum Fisheries Agency, available at: <http://www.ffa.int/about> (Visited on 19/08/2012).

⁸³ Operation Kurukuru, available at: http://www.ffa.int/operation_kurukuru (Visited on 19/08/2012).

⁸⁴ UNCLOS, Article 73 (3), (4).

⁸⁵ UNCLOS, Article 73 (2).

⁸⁶ UNCLOS, Article 292 (1).

⁸⁷ International Tribunal for the Law of the Sea, List of Cases, available at: <http://www.itlos.org/index.php?id=35&L=0> (Visited on 19/08/2012).

of their vessels.

4. Protection of Marine Habitats and Ecosystem

Given that the marine environment provides habitats for marine species, conservation and management measures of the living resources are closely related to those for the protection and preservation of the marine environment. As reflected in Article 194 of UNCLOS, States are obliged to individually and jointly take all measures consistent with the UNCLOS to prevent, reduce and control pollution of the marine environment, including “those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.”⁸⁸

4.1 Designation of Specially Protected Areas

Measures to protect and preserve ecosystem and habitats of related flora and fauna along with other natural features would improve the conditions and quality of the marine environment for the living species.⁸⁹ Designating a specific area of the EEZ as a marine protected area coupled with special protective measures is a common approach for this purpose.⁹⁰ The rationale of designating such areas is that the general standards of protection may be inadequate due to the ecological or biological vulnerability of certain marine areas, hence, a tailored regime with higher protection may be desirable.⁹¹ Coastal States would need to provide hydrographic evidence, traffic and accident statistics, ecological data, and other oceanographic information to showing the vulnerabilities of the proposed area when seeking designation as a protected area.⁹²

Where the generally accepted international rules and standards are inadequate to meet special circumstances in relation to “its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic,” coastal States may, through IMO, apply special protective measures to a particular, clearly defined area of its EEZ.⁹³ Coastal States have two options for prescribing more stringent measures for these areas, they may adopt applicable special mandatory measures that have already been developed by the IMO, or they

⁸⁸ UNCLOS, Article 194 (1), (5).

⁸⁹ Dux, *Specially Protected Marine Areas*, 37.

⁹⁰ *Ibid*, 23.

⁹¹ *Ibid*, 19, 35.

⁹² IMO, Resolution A.982 (24), para.5.

⁹³ UNCLOS, Article 211 (6) (a).

may adopt additional laws and regulations with the approval of IMO.⁹⁴ The regime of special areas seems to have a considerable potential to enhance the level of stringency for vessel-source pollution in comparison with the normal regime in the EEZ, but, so far, no States has established special areas on the basis of Article 211 (6).⁹⁵

If the significance, “for recognized ecological, socio-economic, or scientific attributes,” of an area “may be vulnerable to damage by international shipping activities,” coastal States may designate it through IMO as a “Particularly Sensitive Sea Area (PSSA)” where associated protective measure could be adopted to “prevent, reduce, or eliminate the treat or identified vulnerability.”⁹⁶ PSSA can be designated in the EEZ “with the view to the adoption of international protective measures regarding pollution and other damage caused by ships.”⁹⁷ However, coastal States do not have unilateral legislative jurisdiction in the PSSA, any proposed protective measures must be “already available under an existing IMO instrument,” or, could become developed within the competence of IMO or pursuant to Article 211 (6) of special areas.⁹⁸ Measures for the designation of PSSAs must be adequate and clearly linked with the vulnerability of the designed areas that may include the designation of Special Areas under MARPOL, ships’ routing and reporting systems, areas to be avoided, pilotage schemes and other vessel traffic management systems.⁹⁹

Currently there are thirteen designated PSSAs.¹⁰⁰ For instance, the entire western coasts of the United Kingdom, Ireland, Belgium, France, Spain and Portugal, covering large areas of the territorial sea and the EEZ, were designed as a single PSSA in 2004.¹⁰¹ In addition to the existing protective measures in this area, including various deep-water routes, areas to be avoided, traffic separation schemes, ships routing measure, a mandatory ship reporting system was adopted for “every kind of oil tanker of more than 600 tonnes deadweight” carrying heavy crude oil, heavy fuel oils, bitumen and tar and their

⁹⁴ UNCLOS, Article 211 (6) (a), (c).

⁹⁵ Dux, *Specially Protected Marine Areas*, 209.

⁹⁶ IMO, Resolution A.982 (24), para.1.2.

⁹⁷ *Ibid*, para.4.3.

⁹⁸ *Ibid*, para.7.5.2.3.

⁹⁹ *Ibid*, para.6.1, 7.5.2.1, 7.5.2.4.

¹⁰⁰ IMO, Particularly Sensitive Sea Areas, available at:

<http://www.imo.org/OurWork/Environment/PollutionPrevention/PSSAs/Pages/Default.aspx>
(Visited on 18/08/2012).

¹⁰¹ IMO, MEPC.121(52), Designation of the Western European Waters as a Particularly Sensitive Sea Area, 15 October 2004, Annex 1, Description of the PSSA, available at:

[http://www.imo.org/blast/blastDataHelper.asp?data_id=15724&filename=121\(52\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=15724&filename=121(52).pdf)
(Visited on 18/08/2012).

emulsions.¹⁰²

There are also safeguards to preserve navigational freedoms in the designated PSSAs. For example, when delineating ships' routing systems, coastal States must ensure that routes follow existing patterns of traffic flow as closely as possible and should allow optimum use of aids to navigation; as for the reporting system, information required by coastal States must be limited to that which is essential to achieve the objectives of the system.¹⁰³ These protective measures taken within PSSAs should aim at promoting the safety of passage with minimized interference with navigation. The efforts of many coastal States seeking designation of PSSA to protect the coastal resources provides a strong support that it is acceptable, if not yet legitimate, to restrict maritime freedoms to protect and conserve the living resources of the EEZ.¹⁰⁴

4.2 Regulation of Vessel-Source Pollution

Essentially vessel-source pollution is caused by either operational (intentional) discharges, "such as cleaning of tanks or de-ballasting," or accidental (unintentional) discharges.¹⁰⁵ Measures combating such pollution are consequently divided into two categories: standard-setting relating to the characteristics of the vessel to regulate operational discharges, and, methods to regulate navigation to prevent and counter accidental discharges.¹⁰⁶ Coastal states are given the right to adopt laws and regulations "conforming to and giving effect to generally accepted international rules and standards established through the competent international organization or general diplomatic conference" to prevent, reduce and control vessel-source pollution in the EEZ.¹⁰⁷

The specific notion of "generally accepted international rules and standards" represents an attempt to harmonize the different interests of the need to protect the marine environment and the desire to preserve the freedom

¹⁰² IMO, MSC.190(79), Adoption of Mandatory Ship Reporting System in the Western European Particularly Sensitive Sea Area, 6 December 2004, available at: [http://www.imo.org/blast/blastDataHelper.asp?data_id=15566&filename=190\(79\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=15566&filename=190(79).pdf) (Visited on 18/08/2012).

¹⁰³ IMO, MSC/Circ.1060, Ships' Routing and Reporting Systems, para.3.4, 6.2.

¹⁰⁴ Markus Detjen, "The Western European PSSA – Testing a Unique International Concept to Protect Imperiled Marine Ecosystems," *Marine Policy* 30 (2006): 453.

¹⁰⁵ Philippe Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge 2003), 438.

¹⁰⁶ Erik Jaap Molenaar, *Coastal State Jurisdiction over Vessel-Source Pollution* (Kluwer Law International, 1998), 21-25.

¹⁰⁷ UNCLOS, Article 211 (5).

of navigation in the EEZ.¹⁰⁸ Instead of reserving the exclusive jurisdiction to the flag State, or leaving blanket authority in the hands of the coastal State, UNCLOS operates as a “framework convention” which enshrines only concrete obligations with referential provisions that need to be “supplemented by operative regulations in other international agreements.”¹⁰⁹ The phrase “conforming to” and “giving effect to” in Article 211 (5) established an obligation for coastal States to apply rules and standards established by IMO instruments.¹¹⁰

Various approaches have been advanced under the IMO framework to prevent, reduce and control vessel-source pollution. The first approach is to set construction, design, equipment, and manning [CDEM] standards to ensure adequate quality of the vessel itself, the equipment it uses and the crew by which it is operated.¹¹¹ Coastal States may not directly apply their national CDEM standards in the EEZ, but may cooperate through IMO to develop new international standards.¹¹² This process is demonstrated by the IMO’s legislative process with regard to the double hull requirement for oil tankers. Although design changes were previously introduced by MARPOL 73/78, the double hull amendments were very much dictated by domestic development in the United States following the *Exxon Valdez* incident of 1989, and, by French and European Commission demands for more stringent regulations following the sinking of the tankers *Erika* and *Prestige* in 1999 and 2002 respectively.¹¹³ Other IMO conventions that contain CDEM standards include the 1974 SOLAS¹¹⁴ and the 1978 STCW.¹¹⁵ By eliminating substandard ships¹¹⁶

¹⁰⁸ Erik Franckx, *Vessel-Source Pollution and Coastal State Jurisdiction: The Work of the ILA Committee on Coastal State Jurisdiction Relating to Marine Pollution (1991-2000)* (Kluwer Law International, 2001), 11.

¹⁰⁹ IMO, LEG/MISC.7, Implications of the United Nations Convention on the Law of the Sea for the International Maritime Organization, 19 January 2012, available at: <http://www.imo.org/OurWork/Legal/Documents/Implications%20of%20UNCLOS%20for%20IMO.pdf> (Visited on 20/08/2012): 8.

¹¹⁰ Ibid, 10.

¹¹¹ Molenaar, *Coastal State Jurisdiction*, 23.

¹¹² UNCLOS, Article 197.

¹¹³ Alan Khee-Jin Tan, *Vessel-Source Marine Pollution: The Law and Politics of International Regulation* (Cambridge, 2006), 139-155.

¹¹⁴ SOLAS.

¹¹⁵ International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (entry into force 28 April 1984), available at: [http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Standards-of-Training,-Certification-and-Watchkeeping-for-Seafarers-\(STCW\).aspx](http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Standards-of-Training,-Certification-and-Watchkeeping-for-Seafarers-(STCW).aspx) (Visited on 20/08/2012).

¹¹⁶ IMO, Res. A.787(19), Procedures for Port State Control, 23 November 1995, para.1.6.9: “Substandard ship: A ship whose hull, machinery, equipment, or operational safety is substantially below the standards required by the relevant convention or whose crew is not in conformance with the safe manning document.” Available at:

navigating in the EEZ, it naturally diminishes the likelihood of incidents, and, thereby marine environmental pollution.

Another approach is to set discharge and emission standards by specifying allowable concentrations in certain voyage or area, which are supposedly low enough to be adequately dissipated by the marine environment.¹¹⁷ MARPOL 73/78, for example, is the main international convention regarding prevention of pollution by oil, noxious liquid substances, harmful substances in packaged form, sewage, garbage, and air pollution from ships.¹¹⁸ Where the discharge of harmful substances by ships when operating compliant with the international standards becomes unacceptable in a certain area due to its oceanographic and ecological conditions, the coastal State may, through IMO, define such area as Special Areas under MARPOL where special mandatory methods would apply.¹¹⁹

The third approach is to adopt ships' routing systems to minimize the threat of accidents as discussed above.¹²⁰ These systems must be adopted through IMO to be made voluntary or mandatory for ships of all kinds, ships of certain categories, or ships with certain cargoes in the designed sea areas.¹²¹

In all cases, coastal States' laws and regulations must be in conformity with IMO rules and standards, they may not be less demanding or more stringent, and, hence, their prescriptive jurisdiction is essentially limited to the implementation of generally accepted international rules and standards.¹²²

4.3 Enforcement Powers

It is significant that coastal States are given enforcement jurisdiction over vessel-source pollution in the EEZ. This represents an attempt to respond to the ineffectiveness of a regime based on exclusive flag State enforcement.¹²³ In general, coastal States are given a graded enforcement competence depending on the amount of the discharge, and the perceived or anticipated

http://www.imo.org/blast/blastDataHelper.asp?data_id=22559&filename=A787.pdf

(Visited on 20/08/2012).

¹¹⁷ Molenaar, *Coastal State Jurisdiction*, 21-22.

¹¹⁸ International Convention for the Prevention of Pollution from Ships (MARPOL), 1973/1978 (entry into force 2 October, 1983, Annexes I and II), available at:

[http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx) (Visited on 20/08/2012).

¹¹⁹ IMO, Res. A.927(22), Guidelines for the Designation of Special Areas under MARPOL 73/78 and Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas, 29 November 2001, Annex 1, para.2.1-2.6, available at:

[http://www.imo.org/blast/blastDataHelper.asp?data_id=24553&filename=A927\(22\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=24553&filename=A927(22).pdf)

(Visited on 20/08/2012).

¹²⁰ UNCLOS, Article 211 (1).

¹²¹ IMO, MSC/Circ.1060, Ships' Routing and Reporting Systems, para.2.1.

¹²² Molenaar, *Coastal State Jurisdiction*, 363.

¹²³ Nordquist, *Virginia Commentary*, Vol. IV, 282.

severity of the damage to the marine environment. As clearly stated in Article 111, the right of hot pursuit applies to violations in the EEZ of environmental laws and regulations.¹²⁴

The first step in exercising enforcement jurisdiction is to require a foreign vessel navigating in the EEZ to give information of its identity and course if the coastal State has “clear grounds for believing” that the vessel has committed a violation of applicable laws and regulations in its EEZ.¹²⁵ Where the vessel has failed to provide such information, and the coastal State has “clear grounds for believing” that such violation “resulting in a substantial discharge causing or threatening significant pollution of the marine environment,” it may conduct physical inspection of the vessel.¹²⁶ If the inspection leads to a “clear objective evidence” that the violation is “resulting in a discharge causing major damage or threat of major damage to the coastline or related interests of the coastal State, or to any resources of its territorial sea or [EEZ],” the coastal State may “institute proceedings, including detention of the vessel, in accordance with its laws.”¹²⁷ These measures apply to violations of applicable international rules and standards, and domestic laws and regulation that implement such rules and standards.¹²⁸ These would cover violations of CDEM standards, discharge control, ships’ routing systems, and other operational practices.

Coastal States can resort to this three-level enforcement measures with increasing impact on the freedom of navigation if a foreign vessel has committed a violation in the EEZ. The right to require information can be exercised based on having “clear grounds for believing” that the foreign vessel has committed a violation, but the right to conduct physical inspection and to institute proceedings requires that the violations have resulted in certain types of discharges, and have caused or are threatening to cause damage to the marine environment. Hence, coastal States’ environmental competence in the EEZ has a stringent character as it may not take any substantial actions other than requiring for information unless in a situation threatening or causing major damage to the marine environment.

It is worth noting that although coastal States are given additional prescriptive jurisdiction in the special areas adopted under 211 (6), there is no extra enforcement jurisdiction awarded.¹²⁹

In addition to the general enforcement jurisdiction, coastal States also

¹²⁴ UNCLOS, Article 111 (2).

¹²⁵ UNCLOS, Article 220 (3).

¹²⁶ UNCLOS, Article 220 (5).

¹²⁷ UNCLOS, Article 220 (6).

¹²⁸ UNCLOS, Article 220 (3).

¹²⁹ UNCLOS, Article 220 (8).

have the right to take and enforce proportionate measures to avoid pollution arising from accidental discharges due to maritime casualties pursuant to Article 221.¹³⁰ It seems this right would permit coastal States to deny entry in the EEZ of a vessel involved in a maritime casualty, or, expel it from the EEZ if such presence “may reasonably be expected to result in major harmful consequences.”¹³¹

On the other hand, UNCLOS laid down detailed procedural and other safeguards to ensure that the freedom of navigation in the EEZ is not unduly restricted.¹³² There are general obligations of coastal States to take measures to facilitate proceedings, to exercise its enforcement power by qualified ships and officials, to avoid adverse consequences of such power, to refrain from discrimination against foreign vessels, to duly notify the flag State and other States concerned, and, to be liable for damages arising from improper enforcement measures.¹³³ There are also more fundamental safeguards that reflect the dominant interests of the freedom of navigation over environmental jurisdiction of coastal States.

Article 226 contains the main procedures for investigating foreign vessels. The initial physical inspection provided in Article 220 (3) “shall be limited to an examination of such certificates, records or other documents as the vessel is required to carry.”¹³⁴ Further inspection is only permitted when “there are clear grounds for believing” that these documents are in veracious, or when they are inadequate or invalid.¹³⁵ Where the violation is confirmed thereafter, and the vessel is accordingly detained, coastal States are obliged to promptly release it upon the posting of bond or other financial security.¹³⁶ However, if the vessel is detained for serious violations of CDEM standards that rendered the vessel unseaworthy and posing a threat to the marine environment, the coastal State may refuse to release the vessel or make it conditional upon appropriate repair.¹³⁷ Additionally, the requirement that detailed investigating procedures should be developed by international cooperation further reduced the power of coastal States to apply domestic laws and avoided unnecessary inspection of foreign vessels.¹³⁸

¹³⁰ UNCLOS, Article 221. “Maritime casualty” means a collision of vessels, stranding or other incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo.

¹³¹ UNCLOS, Article 221 (1).

¹³² Nordquist, *Virginia Commentary*, Vol. IV, 321.

¹³³ UNCLOS, Article 223-225, 227, 231-232.

¹³⁴ UNCLOS, Article 226 (1) (a).

¹³⁵ UNCLOS, Article 226 (1) (a) (i)-(iii).

¹³⁶ UNCLOS, Article 226 (1) (b).

¹³⁷ UNCLOS, Article 219, 226 (1) (c).

¹³⁸ UNCLOS, Article 226 (2), Nordquist, *Virginia Commentary*, Vol. IV, 344.

Article 228 implies that coastal States' disciplinary action in response to a violation relating to vessel-source pollution can be overridden by a later instituted flag State proceeding.¹³⁹ The flag State is however obliged to disclose its proceedings, and release "any bond posted or other financial security provided" thereof to the coastal State.¹⁴⁰ Additionally, if the violation has caused "major damage to the coastal State," or the flag State has "repeatedly disregarded" its enforcement obligation, the preemption does not stand.¹⁴¹ The reference of "major damage" echoes Article 220 (6) but has not been elaborated, and it is not clear what behavior would constitute "repeatedly disregarded," which has left ample room for differing interpretations.¹⁴² Article 228 indicates the intention to give priority to flag State jurisdiction, but integrated coastal States' interests by allowing them to hold the financial security to guarantee the potential compensation.

Furthermore, Article 230 requires that the punishment for violation of environmental laws in the EEZ is limited to monetary penalties.¹⁴³ Hence the foreign vessel and its equipment are not subjected to confiscation, and its crew cannot be imprisoned for causing damage to the marine environment.

It is recognized that the increasing volume of traffic posing serious threat to the coastal marine environment and may cause irreversible damage to marine habitats and the fragile ecosystems, and there are growing awareness and developments to prevent, reduce and control vessel-source pollution.¹⁴⁴ But the jurisdiction granted to the coastal State is onerous. It may only implement generally accepted international rules and standards under the auspices of the IMO, and undertake limited enforcement powers after fulfilling various conditions. Moreover, state practice indicates that most coastal States have only made a general claim to such jurisdiction, and few of them have enacted specific domestic laws, let alone undertaken enforcement actions.¹⁴⁵ These situations reflect the predominance of internationalism above unilateralism, and navigational interests over coastal States' environmental consideration. Nevertheless, the marginal coastal State jurisdiction provides an extra protection to its coastal marine environment, and may pressure flag States to ensure compliance by its vessels with the applicable international rules and standards.

¹³⁹ UNCLOS, Article 228 (1).

¹⁴⁰ UNCLOS, Article 228 (1).

¹⁴¹ UNCLOS, Article 228 (1).

¹⁴² Nordquist, *Virginia Commentary, Vol. IV*, 358-359.

¹⁴³ UNCLOS, Article 230 (1).

¹⁴⁴ Lindy S. Johnson, *Coastal State Regulation of International Shipping* (Oceana Publications, Dobbs Ferry, 2004), 17-19.

¹⁴⁵ Molenaar, *Coastal State Jurisdiction*, 398-399.

5. Conclusions

The extension of coastal State sovereign rights over living resources has represented a major change in the regulation of foreign activities in the 200nm EEZ which had formerly been high seas. On the one hand, the freedoms of other States are subject to modalities and restrictions to accommodate the coastal State's economic interests that coexist in the same area. Foreign vessels must not engage in any fishing or other ancillary activities without authorization, and must respect and comply with the applicable conservation and utilization laws and regulations of the coastal State.¹⁴⁶ Moreover, foreign vessels must obey coastal laws and regulations "conforming to and giving effect to generally accepted international rules and standards" for the prevention, reduction and control of vessel-source pollution.¹⁴⁷ Violations of these applicable laws and regulations will lead to the enforcement measures of the coastal State.¹⁴⁸

On the other hand, UNCLOS expressly provides safeguards to preserve the navigational freedoms in the EEZ. Coastal States have an obligation of having "due regard" to other States in exercising its rights and duties, which they must fulfill in "good faith" and must act "in a manner which would not constitute an abuse of right."¹⁴⁹ In other words, coastal States' conservation and utilization measures must be proportional and closely related to the objectives they pursued, and must not cause unreasonable interference with the navigational freedoms.

In sum, it is a recognized trend that, within the EEZ, the long standing freedom of navigation has been subject to increasing restrictions by expanded coastal State rights. But the legal framework established by UNCLOS and other implementation mechanisms have the capacity to maintain a delicate balance between the two sides.

¹⁴⁶ UNCLOS, Article 62 (4).

¹⁴⁷ UNCLOS, Article 211 (5).

¹⁴⁸ UNCLOS, Article 73 (1), 220 (3), (5), (6).

¹⁴⁹ UNCLOS, Article 56 (3), 300.