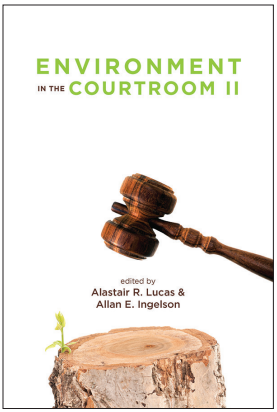
UNIVERSITY OF CALGARY
Press



ENVIRONMENT IN THE COURTROOM II

Edited by Alastair R. Lucas & Allan E. Ingelson

ISBN 978-1-77385-380-2

THIS BOOK IS AN OPEN ACCESS E-BOOK. It is an electronic version of a book that can be purchased in physical form through any bookseller or on-line retailer, or from our distributors. Please support this open access publication by requesting that your university purchase a print copy of this book, or by purchasing a copy yourself. If you have any questions, please contact us at ucpress@ucalgary.ca

Cover Art: The artwork on the cover of this book is not open access and falls under traditional copyright provisions; it cannot be reproduced in any way without written permission of the artists and their agents. The cover can be displayed as a complete cover image for the purposes of publicizing this work, but the artwork cannot be extracted from the context of the cover of this specific work without breaching the artist's copyright.

UNIVERSITY OF CALGARY
Press
press.ucalgary.ca

Acknowledgement: *We acknowledge the wording around open access used by Australian publisher,* **re.press**, *and thank them for giving us permission to adapt their wording to our policy* http://www.re-press.org

3

Protection of the Marine Environment: The International Legal Context

Suzanne Lalonde[1]

> The protection of the marine environment is an area where the jurisdictional rules of the law of the sea and the objectives, principles and approaches of international environmental law meet and influence each other to form the "international environmental law of the sea."[2]

Schiffman characterizes the increasing concern for the status of the marine environment[3] in the latter half of the twentieth century as one of "the most remarkable developments in the field of international law."[4] This new consciousness has led to a proliferation of legal rules and arrangements to address key threats to ocean health: overfishing, vessel and land-based pollution, the introduction of invasive species, the destruction of habitats, and the loss of biodiversity among other significant challenges. However, the legal regime for the protection of the marine environment, as Frank explains, has a distinct character compared to the one governing the protection of the terrestrial environment. At sea, states are not as free to impose protective measures as they are on land; they must respect the jurisdictional rules of the law of the sea.[5] "These rules place certain constraints on the capacity of coastal States to unilaterally control the environmental impact of sea-based activities."[6]

This chapter begins by identifying some of the most important soft law and conventional law instruments aimed at the protection and preservation of the marine environment. The chapter then considers the prescriptive and enforcement powers that exist to ensure compliance with those rules.

The Environmental Law of the Sea

The international regime for the protection of the marine environment is based on two separate but interdependent bodies of law that interact and complement each other to create a dynamic and effective system.[7] They include (A) an umbrella framework that sets out general principles and rules of global application, and (B) a regulatory regime composed of tailored instruments with technical standards to implement the general principles or rules.

AN UMBRELLA FRAMEWORK

The output of some highly influential international conferences and organizations, together with the *1982 Convention on the Law of the Sea* (*UNCLOS*), form the foundation upon which rests the environmental law of the sea.

The *1972 United Nations Conference on the Human Environment* (*UNCHE*) (Stockholm, Sweden)

Described as the "conceptual cornerstone of modern international environmental law,"[8] the *1972 United Nations Conference on the Human Environment* (*UNCHE*) and one of its key declarations, the *Declaration of the United Nations Conference on the Human Environment* (*Stockholm Declaration*),[9] enunciated principles and recommendations of direct relevance for the marine environment. Principle 7 of the declaration provided that "States shall take all possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea."

Of perhaps even greater significance, principle 21 recognized "the sovereign right of States to exploit their own resources pursuant to their own environmental policies," while imposing upon them the correlative responsibility "to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States, or of areas beyond the limits of national jurisdiction."[10]

Though not legally binding, the *Stockholm Declaration* nevertheless exerted considerable influence on the subsequent development of new global and regional instruments addressing specific sources of marine pollution.[11] The *UNCHE* and its declaration of principles also provided a decisive impulse to the Third United Nations Conference on the Law of the Sea launched in 1973.

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

In 1982, after nearly ten years of negotiations, the *UNCLOS* was adopted to establish "a legal order for the seas and oceans" that would promote "the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment."[12] Birnie and Boyle wrote that at the time of its adoption, the *UNCLOS* was considered the "strongest comprehensive environmental treaty in existence or likely to emerge for quite some time."[13] Most legal authors and governments, including non-parties such as the United States, recognize that since they entered into force on 16 November 1994, the environmental provisions established by the convention have gained nearly universal acceptance and thus reflect customary law.[14]

Due to the intersectoral nature of marine issues, the *UNCLOS* addresses the environment in several different sections (e.g. Parts V and VII on the conservation and management of living resources in the exclusive economic zone (EEZ) and high seas or Part XIII on marine scientific research).[15] However, Part XII of the *UNCLOS* is specifically dedicated to the protection and preservation of the marine environment and establishes an overall framework of governing principles and general obligations.[16]

Article 192 of the *UNCLOS* illustrates the comprehensive nature of this regime by placing a general and unqualified obligation on states "to protect and preserve the marine environment." Franckx emphasizes that Article 192 represents the first time such a strong and broad obligation has been included in a general international treaty.[17] Echoing principle 21 of the *Stockholm Declaration*, Article 193 of the *UNCLOS* confirms that states "have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment." However, Roberts argues that by giving priority to the preservation of the environment over the sovereign right of states to exploit their natural resources, Article 192 is more strongly expressed than principle 21.[18]

The content of this general duty is clarified in Article 194. States are required to take all necessary measures to prevent, reduce, and control marine pollution[19] using the best practical means at their disposal and according to their capabilities.[20] They must also take all necessary measures to protect and preserve "rare and fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life" (Article 194,

para 5). Six main sources of pollution are identified and addressed in further detail in subsequent articles: pollution from land-based and coastal activities (Article 207), seabed activities within national jurisdiction (Article 208), activities in the area (Article 209), ocean dumping (Article 210), vessels (Article 211), and or through the atmosphere (Article 212).

Finally, states are subject to a series of procedural obligations: the notification of imminent or actual damage (Article 198), the development of pollution contingency plans (Article 199), cooperation through scientific research (Articles 200–201) and technical assistance (Article 202), the monitoring of the risks or effects of pollution (Article 204), and the publication of the results of those monitoring activities (Article 205). In addition, Article 206 requires states "as far as practicable" to conduct environmental impact assessments (EIAs) of activities under their jurisdiction or control with the potential to cause substantial pollution or significant harm to the marine environment. Finally, Article 235 imposes a general duty to compensate for pollution damage and to cooperate in the development of international law relating to responsibility and liability.[21]

Release in 1987 of "Our Common Future"

In 1987, the World Commission on Environment and Development (WCED), which had been set up in 1983, published a report entitled "Our Common Future."[22] The document came to be known as the *Brundtland Report* after the WCED's Norwegian chairwoman, Gro Harlem Brundtland. Tasked with preparing an environmental perspective to the year 2000 and beyond, the *Brundtland Report* called for a global strategy that united economic and social development with the environment: "The 'environment' is where we live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable."[23]

Choy explains that in an attempt to mitigate the destructive environmental consequences of economic growth, "the report introduced a new growth model 'that is forceful and, at the same time, socially and environmentally sustainable', placing great emphasis on the need to manage and use natural resources wisely so as to uphold the principle of intergenerational equity."[24] The *Brundtland Report* thus emphasized the need to observe the biological constraints on or the physical foundation of economic activity.[25]

> The first [foundational principle] referred to the need to live within nature's limits. Development was sustainable, we said, if, at a minimum, it did not endanger the natural systems that support life on earth—the atmosphere, the waters, the soils and the living beings.[26]

The WCED also concluded that poverty was a significant cause and effect of global environmental problems and that "there was little hope of solving those problems unless and until members of the international community developed the will and the means to resolve problems of human development."[27]

To solve the interrelated problems of environmental degradation and economic/social development—while promoting equity, growth, and environmental stewardship—the *Brundtland Report* recommended a radical transformation of nations' goals and policies to support "sustainable development." Sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[28]

> One of the major purposes of the concept of sustainable development is to coordinate the relationship between resource uses and environmental protection. Under this concept, they are not contradictory, much less conflict, but can interplay mutually. Environmental protection is necessary to achieve the goal of resource uses which are sustainable, and economic benefits deriving from resources can provide the conditions in which environmental protection can best be achieved.[29]

The WCED's urgent call to global action was the impetus for the 1992 Earth Summit in Rio, which produced important and influential documents including the *Rio Declaration on Environment and Development* (the *Rio Declaration*), *Agenda 21*, and the legally binding *Convention on Biological Diversity* (*CBD*).[30] Choy writes that "Our Common Future" was "further cemented with an appreciable dose of authority with the adoption of the *Johannesburg Declaration* at the 2002 World Summit on Sustainable Development."[31]

The *1992 United Nations Conference on Environment and Development* (*UNCED*) also known as the Earth Summit (Rio de Janeiro, Brazil)

Sands has suggested that, in its significance, the Rio meeting is comparable to major multilateral peace conferences such as the 1919 Versailles Conference, given the significance placed on the "security of the planet" and the "risk to humans and other species."[32] One of the key objectives of *UNCED* was a comprehensive program to guide states in pursuing sustainable development. The major agreements reached at the Earth Summit include two binding instruments, the *CBD* and the *United Nations Framework Convention on Climate Change* (*UNFCCC*),[33] as well as three non-binding instruments including the *Rio Declaration*[34] and *Agenda 21*.[35]

The general principles embodied in the *Rio Declaration* are operationalized through detailed provisions, specific recommendations and guidelines in the forty chapters of *Agenda 21*, and *UNCED*'s plan of action. Chapter 17 on "Protection of the Ocean and All Kinds of Seas, including Enclosed or Semi-enclosed Seas, and Coastal Areas and the Protection, Rational Use and Development of their Living Resources" serves as a blueprint for the future development of the international environmental law of the sea. While the *UNCLOS* is referenced as providing the "international basis" for the protection and sustainable use of the marine environment, *Agenda 21* calls for a new approach to marine issues. The introduction to Chapter 17 asserts that this approach must be "integrated in content" and "precautionary and anticipatory in ambit."[36] In addition to promoting a precautionary approach to ocean preservation (17.22, para a), Chapter 17 urges states to conduct environmental assessments of all potentially hazardous activities (17.22, para b), to apply clean technologies, and to commit to the polluter-pays principle (17.22, para d).

States are also recommended to take measures to address marine degradation (not only pollution) from land-based activities (17.24–29) and to assess the need for additional measures to control sea-based activities such as shipping, dumping, offshore oil and gas platforms, and ports (17.30–35). Furthermore, Chapter 17 places a strong emphasis on monitoring, reporting, and financial and technical assistance (17.35–37, 17.41–42).

As Frank emphasizes, "[d]espite its legally non-binding nature, Chapter 17 had a decisive influence on the further development of the marine environmental regime and its principles and recommendations have worked as guidelines for states and international organizations in the implementation

of their commitments under the *LOSC* [*UNCLOS*]."[37] Birnie and Boyle stress that the "focus is no longer principally on the control of sources of marine pollution, but more broadly on the prevention of environmental 'degradation' and the protection of ecosystems."[38] According to the authors, the interplay between *Agenda 21* and the *UNCLOS* has effected substantive changes to the law of the sea and has led, for instance, to the rewriting of regional seas-agreements on the Mediterranean, the Baltic, and the Northeast Atlantic; revision of the *London Convention*; extension of treaty schemes on liability for pollution damage; and the adoption at Washington in 1995 of a declaration and Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.[39] In addition,

> [a] precautionary approach to the protection of marine ecosystems and biological diversity is now addressed in many of these treaties and in various other ways, in particular through the Conventions on Biological Diversity and Climate Change, the 1995 Agreement on Straddling and Highly Migratory Fish Stocks (UN Fish Stocks Agreement), the 2004 Ballast Water Convention, and the creation of specially protected areas by IMO [International Maritime Organization] and under regional seas agreements.[40]

The 2002 World Summit on Sustainable Development (*WSSD*) (Johannesburg, South Africa)

Ten years after the Earth Summit, the World Summit on Sustainable Development (WSSD) was held to review the progress made in the implementation of *Agenda 21* but dedicated only marginal attention to the world's oceans and seas. Indeed, the Plan of Implementation (WSSD Plan) only deals with the marine environment in paragraphs 29–34 of section IV on "Protecting and Managing the Natural Resource Base of Economic and Social Development" and most of the relevant provisions relate to fisheries.[41] Nevertheless, Frank insists that the contribution of the WSSD Plan to the preservation of the marine environment should not be underestimated.[42] The WSSD Plan reaffirms the commitments made under Chapter 17 (e.g. an integrated approach to ocean management), and, in regard to certain key obligations, it attaches clear targets and timetables (e.g. the application of an ecosystem approach by 2010 and the establishment of a network of representative

marine protected areas by 2012).[43] The WSSD Plan reaffirms in five separate paragraphs, the need to conduct EIA to achieve the goal of sustainable development[44] and attaches great importance to the transfer of marine science and technology.[45] In addition, the WSSD Plan urges the wide ratification and effective implementation of existing legal agreements and programs of action for the effective conservation and management of the oceans.

The Tenth Meeting of the Conference of the Parties to the Convention on Biological Diversity and the Aichi Biodiversity Targets[46]

In 2010, a "Strategic Plan for Biodiversity 2011–2020" was adopted by the Conference of the Parties to the *CBD* (194 state parties), with the vision that "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."[47] The strategic plan includes twenty ambitious conservation targets, known as the Aichi Biodiversity Targets. Together, they set out the global framework for priority actions on biodiversity conservation.[48]

Strategic Goal C aims "to improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity" and in terms of the marine environment, includes Target 11:

> By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.[49]

The state parties agreed to translate this overarching framework into revised and updated national biodiversity strategies and action plans and also committed to periodically report on their progress.

2030 Agenda for Sustainable Development

In September 2015, at a historic United Nations Summit, 193 world leaders adopted the 2030 Agenda for Sustainable Development,[50] which embraces the three dimensions of sustainability defined in the *Brundtland Report*: economic, social, and environmental. Described in the introduction to the

declaration as "a set of universal and transformative Goals and Targets," they aim to achieve "a more sustainable, equitable, prosperous and peaceful planet."[51]

> The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries—developed and developing—in a global partnership.[52]

A "Technical Note" drafted by the Secretariat of the *CBD* emphasizes that the 2030 Agenda is entirely consistent with other international commitments including the "Strategic Plan for Biodiversity" adopted at the Tenth Conference of the Parties in 2010. "The SDGs and the Strategic Plan are mutually supportive and reinforcing, and therefore the implementation of one contributes to the achievement of the other."[53]

SDG 14, captioned "Life Below the Water," represents the first time that the oceans and seas have been the subject of an SDG in United Nations discussions.[54] Defined as the need to "[c]onserve and sustainably use the oceans, seas and marine resources," SDG 14 identifies "careful management of this global resource as a key feature of a sustainable future." To promote ocean health, the 2030 Agenda advocates more effectively managed and better-resourced marine protected areas together with the adoption of regulations to reduce overfishing, marine pollution, and ocean acidification.

SDG 14 is broken down into distinct targets with specific "indicators" to assist states in measuring their progress.[55] They include Target 14.1: "By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution." The corresponding indicator (14.1.1), or statistical data to be gathered in support, is an "[i]ndex of coastal eutrophication and floating plastic debris density." Target 14.4 requires that by 2020, states "effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans." Indicator 14.4.1 recommends that data be gathered on the "[p]roportion of fish stocks within biologically sustainable levels." Echoing Strategic Goal C (Target 11) from 2010, Target 14.5 exhorts states to "conserve at least

10 percent of coastal and marine areas, consistent with national and international law." Indicator 14.5.1 encourages states to report on the "[c]overage of protected areas in relation to marine areas."

In June 2017, the member states of the United Nations gathered at the first-ever global Ocean Conference[56] and committed to a set of ambitious measures to support the implementation of SDG 14. The outcome declaration, *Our Ocean, Our Future: Call for Action*, underlined the need to integrate SDG 14 and its interrelated targets "into national development plans and strategies, to promote national ownership and to ensure success in its implementation by involving all relevant stakeholders, including national and local authorities, members of parliament, local communities, indigenous people, women and youth, as well as the academic and scientific communities, business and industry."[57] It also affirms in paragraph 11, the "need to enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea."[58]

A REGULATORY REGIME

The Third Law of the Sea Conference (1973–1982) was not considered the appropriate forum to devise operational provisions that, by their very nature, are normally highly technical and require significant expertise. In addition, several international regulatory instruments with specialised standards were already in place. In light of these considerations, the participating delegations agreed to establish a broad jurisdictional framework and to rely, by means of rules of reference, on the various operational standards adopted by relevant organizations. As a result, various articles of the *UNCLOS* require that contracting parties give effect to the generally "accepted" or generally "applicable" international rules and standards defined by the "competent international organizations."[59]

These "competent international organizations" are not specifically identified in the *UNCLOS*. However, Article 2(2) of Annex VIII of the convention, which provides that the lists of experts composing the special arbitral tribunal must be established by the "competent organization" in specified fields, provides some guidance: in the field of fisheries, by the Food and Agriculture Organization (FAO) of the United Nations; in the field of protection and preservation of the marine environment, by the United Nations Environment Programme (UNEP); in the field of marine scientific research,

by the Intergovernmental Oceanographic Commission; and in the field of navigation, including pollution from vessels and by dumping, by the IMO. Generally accepted international rules and standards, however, can also be adopted by organizations other than those referred to in Article 2(2) of Annex VIII. Frank refers to the International Atomic Energy Agency (IAEA), for instance, as the competent international organization for the adoption of global standards for the safe transport of nuclear materials.[60] These and other international organizations and agencies have developed technical guidelines and legal measures to give effect to general conservation commitments. The following list is *not* exhaustive but is merely indicative of the varied sources that operationalize the "international environmental law of the sea."

- *International Convention for the Regulation of Whaling*, 1946 (International Whaling Commission [IWC])
- *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*, 1969 (IMO)
- *Convention on the International Regulations for Preventing Collisions at Sea* (COLREG), 1972 (IMO)
- *Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter*, 1972 (and the *1996 Protocol*) (IMO)
- *International Convention for the Prevention of Pollution from Ships* (*MARPOL*), 1973 (as modified by the *Protocol of 1978* and by the *Protocol of 1997*) with its six technical annexes (I: Regulations for the Prevention of Pollution by Oil; II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk; III: Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form; IV: Prevention of Pollution by Sewage from Ships; V: Prevention of Pollution by Garbage from Ships; and VI: Prevention of Air Pollution from Ships) (IMO)
- *International Convention on Standards of Training, Certification and Watchkeeping for Seafarers* (*STCW*), 1978 (IMO)
- *International Convention on Oil Pollution Preparedness, Response, and Cooperation*, 1990 (IMO)
- *Code of Conduct for Responsible Fisheries*, 1995 (FAO)

- *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas*, 1995 (FAO)
- *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management*, 1997 (IAEA)
- *Strategy for the Implementation of the Code of Conduct for Responsible Fisheries*, 1999 (FAO)
- *Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances*, 2000 (IMO)
- *International Convention on the Control of Harmful Anti-fouling Systems on Ships*, 2001 (IMO)
- *International Convention for the Control and Management of Ships' Ballast Water and Sediments*, 2004 (IMO)
- *The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*, 2009 (IMO)
- *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*, 2010 (FAO)
- *Regulations for the Safe Transport of Radioactive Material*, 2012 (IAEA)
- *International Code for Ships Operating in Polar Waters* (*Polar Code*), 2017 (IMO)
- *Guidelines for Conducting Integrated Environmental Assessments*, 2019 (UNEP)
- *Guidelines for the Monitoring and Assessment of Plastic Litter and Microplastics in the Ocean*, 2019 (UNEP)

In the field of the protection and preservation of the marine environment, UNEP's Regional Seas Programme, launched in the wake of the 1972 *UNCHE*, has been one of its most significant achievements. Both the *UNCLOS* and Chapter 17 of *Agenda 21* place a strong emphasis on regional cooperation,[61] considered in many cases to be a more efficient response to specific geographic, oceanographic, and ecological challenges. Frank also points out that regional agreements between states sharing similar interests "result in a

lower level of compromise, stronger commitments and higher environmental standards compared to global instruments."[62] As a result, in nearly all major regional seas, from the Caribbean to the South Pacific Ocean, the ocean framework regime has been implemented by means of regional conventions adopted under the auspices of UNEP.[63]

The development of marine environmental rules and technical standards has also taken place within the framework of several multilateral environmental agreements that extend their scope to oceans and seas: for example, the *Convention on Wetlands of International Importance* (*Ramsar Convention*), 1971; the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (*World Heritage Convention*), 1972; the *Convention on the Conservation of Migratory Species of Wild Animals* (*Bonn Convention*), 1979; the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, 1989; and the aforementioned *CBD*, 1992.

As for the regulation of fishing activities, the fundamental obligation in the *UNCLOS* that states should cooperate to ensure the conservation and optimal utilization of fisheries, both within and beyond the EEZ,[64] has been operationalized through the adoption of the 1995 Fish Stocks Agreement[65] and the establishment of regional fisheries management organizations or arrangements (RFMO/As). Now established in the majority of high seas areas that have major deep-sea fisheries,[66] RFMO/As are usually tasked with collecting fisheries statistics, assessing resources, making stock management decisions, and monitoring activities. As emphasized by the FAO, they play "a pivotal role in facilitating intergovernmental cooperation in fisheries management"[67] and are increasingly guided by the ecosystem approach to fisheries.

On December 24, 2017, following a two-year preparatory committee process, the United Nations General Assembly (UNGA) adopted Resolution 72/249 to convene an intergovernmental conference (IGC) to develop an international legally binding instrument on marine biodiversity in areas beyond national jurisdiction (ABNJ).[68] The first three sessions of the IGC took place in New York from September 4 to 17, 2018, March 25 to April 5, 2019, and August 19 to 30, 2019. Unfortunately, by Resolution 74/543 of March 11, 2020, and due to the COVID pandemic, the UNGA decided to postpone the fourth session and consideration of the revised draft of the agreement to a later date.[69]

Nearly two-thirds of the ocean lies in ABNJ.[70] While several instruments and institutions already promote the conservation and sustainable use of marine biodiversity in ABNJ,[71] Tladi argues that they "bear no real relationship to one another and operate independent of each other without an overarching framework to ensure structure, consistency and coherence."[72] This fragmentation, according to experts at IDDRI,[73] has left gaps in the framework: "not all human activities in ABNJ are adequately regulated; not all regions are covered; and some organizations exercise their mandate with limited reference to modern governance principles, such as the ecosystem approach, the precautionary principle, or the need for transparent and open decision-making processes."[74]

The new treaty will be an "implementing" agreement under the *UNCLOS* to adapt the convention's general provisions on the protection of the marine environment to the specific threats to, and use of, marine biodiversity in ABNJ.[75] The negotiations have thus far focused on four thematic areas: marine genetic resources (MGRs), area-based management tools including marine protected areas, EIAs, capacity-building, and the transfer of marine technology. Questions to be resolved include whether access to MGRs in ABNJ should be regulated (and if so, how) and whether benefits derived from their use or commercialization should be shared (and if so, with whom and how).[76] Negotiations will also touch upon the respective roles of global and regional bodies in EIA processes and whether rules or guidance should be developed on when activities in ABNJ trigger the need for an EIA, the type and amount of information to be included in EIAs, and whether the new treaty should cover strategic environmental assessments. Other key issues and responsibilities, many of them highly contentious, remain to be negotiated and finalized.[77]

The Jurisdictional Regime

In customary international law of the sea, the flag state alone was responsible for ensuring that ships complied with internationally accepted standards in respect of safety at sea and the protection of the marine environment. Article 91 of the *UNCLOS* recognizes the sovereignty a state exercises over its vessels, and Article 94 identifies several obligations that flow from this attribution of nationality. Every flag state must effectively exercise its jurisdiction and control in administrative, technical, and social matters over ships flying its flag. In particular, the flag state must take all necessary measures to ensure that

all of its ships are seaworthy (Article 94, para 3a), are regularly inspected by a qualified surveyor (Article 94, para 4a) and are manned by a qualified crew fully conversant with the applicable international regulations concerning the safety of life at sea; the prevention of collisions; and the prevention, reduction, and control of marine pollution (Article 94, para 4c). In taking the measures called for in paragraphs 3 and 4, the flag state is required to "conform to generally accepted international regulations, procedures and practices and to take any steps which may be necessary to secure their observance" (Article 94, para 5, and Article 217).

Unfortunately, as König reports, several flag states do not fulfil their obligations under the *UNCLOS*, a problem "aggravated by—but by no means confined to—so-called 'flags of convenience' where less scrupulous operators register their ships under the flags of states which they know will not require full compliance with international standards."[78] To fill the gap, port states and coastal states have been entrusted by the convention with additional prescriptive authority (the capacity of states to adopt legislation, including environmental rules) and enforcement powers (the capacity of states to bring about compliance with those rules and punish violations).

Port states have the right to impose national standards as a condition of entry of foreign vessels into their ports, internal waters, and offshore terminals (Article 211(3) of the *UNCLOS*). Since these areas are part of the port state's sovereign territory, where the right of innocent passage does not exist, its prescriptive jurisdiction is not restricted. As a result, the coastal state can even impose construction, design, equipment, and manning standards (CDEM standards) that are stricter and more costly for shipowners than the recognized international standards.[79] As for their enforcement powers, Article 220(1) provides that port states have the right to enforce their national rules and standards against foreign vessels that are voluntarily within their ports or offshore terminals when an illegal discharge has occurred in their internal waters, territorial sea, or EEZ.[80]

To strengthen the protection of the marine environment in other states' maritime zones and on the high seas, König explains that port states have been entrusted by Article 218(1) with the additional right to enforce "applicable international rules and standards," that is, *MARPOL* standards, against a foreign vessel in case of any illegal operational discharge. "If the discharge violation occurs in a third state's maritime zones, the port state may not institute proceedings unless requested by that state (Article 218, para. 2). That

coastal state may step in and take over the investigation and proceedings at any time (Article 218, para. 4)."[81] When instituting proceedings against a foreign vessel and its crew for a discharge violation that occurred on the high seas, the port state must have due regard to procedural safeguards such as the right of the flag state to take over the proceedings at any time and the obligation to release the vessel and crew upon the posting of a reasonable bond.

In addition, port states can enforce "applicable international rules and standards relating to the seaworthiness of vessels" (CDEM standards) to prevent severe damage to the marine environment by substandard ships. To this end, Article 219 allows the port state to take administrative measures to prevent such a vessel from sailing or order it to proceed to the nearest repair yard.[82] Thus, as König emphasizes,[83] the *UNCLOS* empowers port states to utilize their enforcement powers not only in their interest but also in the international community's interest, a development Wolfrum described as a "profound modification of international law."[84] However, several important reasons have hampered the effective exercise of port states' jurisdictional authority. States are not always willing to act and invest precious financial and personnel resources when their interests are not directly affected. In addition, port states that undertake strict controls are afraid of putting themselves at a competitive disadvantage compared to neighbouring countries. To address these and other challenges and wield their enforcement powers more efficiently, port states in various parts of the world have established *regional* port state control (PSC) regimes.[85]

For their part, coastal states must respect the limits imposed by the *UNCLOS* on their capacity to control the activities of foreign vessels in waters under their sovereignty and jurisdiction. The level of control exercised by a coastal state varies according to the kind of activity involved and the maritime zone concerned.[86] It also, generally, decreases as the distance from the shoreline increases.

Internal waters (i.e. all waters on the landward side of the baselines[87] including ports) are treated just like land territory and are under the full sovereignty of the coastal state.[88] Recognized as an integral part of a state's national territory, international law thus provides that internal waters are subjected to the full force of the coastal state's legislative, administrative, judicial, and enforcement powers. As such, the coastal state is free to apply national laws and determine conditions of entry for foreign vessels. It is in the exercise of this sovereign authority that the United States, following the *Exxon Valdez*

tragedy, banned all single-hull oil tankers from entering its ports (1990) without seeking prior approval from the IMO, and that the European Union introduced a similar ban following the sinking of the *Prestige* (2002). However, Birnie et al noted that in the interests of comity and freedom of navigation, most states have shown restraint in the unilateral regulation of foreign ships within their internal waters.[89]

As Article 2 of the *UNCLOS* declares, the sovereignty of a coastal state extends to its territorial sea up to 12 nautical miles from its baselines. The *UNCLOS* and other international treaties recognize the coastal state's right to ensure the environmental protection of its territorial waters. According to Birnie and his colleagues, this right includes three important powers: "the designation of environmentally protected or particularly sensitive sea areas, the designation and control of navigation routes for safety and environmental purposes, and the prohibition of pollution discharges."[90]

In the exercise of each of these powers, the coastal state enjoys a substantial measure of freedom; it can, for example, impose stricter pollution discharge standards than the international standards defined by the *MARPOL* convention. However, Article 21(2) of the *UNCLOS* excludes from the coastal state's jurisdiction the right to adopt laws or regulations in regard to the design, construction, manning, or equipment of foreign vessels unless such rules give effect to international standards (essentially the standards set by the *MARPOL* and the *International Convention for the Safety of Life at Sea* [*SOLAS*]). Article 21(4) also refers to "generally accepted international regulations" in regard to national legislation for the prevention of collisions at sea. Paragraphs 2 and 4 reflect the important limitation that is placed upon the control exerted by a coastal state in its territorial sea: the right of innocent passage that by virtue of Article 17, is conferred upon the ships of all nations, both civilian and military. To protect freedom of navigation, Article 24 of the *UNCLOS*, together with other provisions, commands that "[t]he coastal state shall not hamper the innocent passage of ships through the territorial sea except in accordance with this Convention."

What then, asked Birnie et al, can a coastal state "legitimately do when a foreign vessel is found violating international pollution regulations in the territorial sea, or when it poses a risk of accidental pollution or environmental harm?"[91] What enforcement powers does a coastal state wield in its territorial waters? Without doubt, a coastal state is not authorized to deny or suspend the right of innocent passage of a ship merely because it is carrying

dangerous or environmentally risky cargo. In such circumstances, the international legal regime merely confers upon the coastal state the right to take certain precautionary measures to minimize the environmental threat. It may, for example, require ships carrying nuclear or other inherently dangerous or noxious substances to carry specific documents and observe special precautionary measures approved by the IMO and the IAEA or established by international agreements such as *MARPOL*.[92] Article 22(2) of the *UNCLOS* also allows coastal states to confine the passage of "tankers, nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances" to specific sea lanes in the interests of "safety, the efficiency of traffic and the protection of the environment."[93]

State practice, together with special areas protocols[94] and the designation of particularly sensitive sea areas [PSSAs] by the IMO, also recognize the right of coastal states to regulate the passage of ships through designated environmentally sensitive areas to minimize the risk of adverse impacts or serious pollution. Mandatory ship reporting is a common element of such schemes, but additional measures may also be imposed with IMO's approval. For example, under the *1972 Marine Protection, Research and Sanctuaries Act* and as approved by the IMO, the United States designated the Florida Keys as an "area to be avoided" and prohibited the operation of tankers in those waters. However, as Birnie et al emphasized, though ships may be required to avoid certain areas, "the right of innocent passage is not lost."[95]

The mere violation of a coastal state's laws and regulations will not necessarily deprive a foreign vessel of its right of innocent passage. As Article 19(2) specifies, the passage of a foreign ship is only considered to be prejudicial to the peace, good order, or security of the coastal state (and therefore not innocent) if it engages in "(h) any act of wilful and serious pollution contrary to this Convention." This provision, therefore, necessarily excludes any right of intervention in cases of accidental pollution and even if operational pollution is often deliberate, it is seldom "serious" and may be justified by weather or distress. Thus, the strong wording of Article 19(2)(h) ensures that ships causing operational pollution will rarely cease to be exercising innocent passage. Nor will a violation of construction standards be considered, in and of itself, a threat to the peace, good order, or security of the coastal state, depriving a ship of its right of innocent passage. And yet, as Birnie et al confirmed, "[o]nly when they lose this right can their entry into territorial waters be denied,

or their right of passage terminated by eviction or arrest."[96] In most cases, enforcement by port states will be the preferable and more efficient solution.[97]

In the EEZ, which extends up to 200 nautical miles from the baselines, coastal states have sovereign rights over living and mineral resources and jurisdiction over the protection and preservation of the marine environment.[98] This zone does not exist automatically but must be claimed, and in the case of pollution jurisdiction, Birnie et al stated that legislation will usually be necessary for the coastal state to acquire the required competence.[99]

Regarding the conservation of living resources, coastal states are required under Article 61 of the *UNCLOS* to determine the allowable catch of the living resources in their EEZs, and, through "proper conservation and management measures," ensure their maintenance and avoid their over-exploitation. Paragraph 3 of Article 61 further provides that conservation measures "shall also be designated to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield." Article 73(1) provides for the enforcement of such laws and measures: "[t]he coastal State may . . . take such measures, including boarding, inspection, arrest and judicial proceedings, as may be necessary, to ensure compliance." Procedural safeguards are however provided in the other paragraphs of Article 73: arrested vessels and their crews must be promptly released upon the posting of a reasonable bond or other security (para 2); coastal state penalties for violations of fisheries laws and regulations may not include imprisonment, in the absence of specific agreements, nor any other form of corporal punishment (para 3); and in cases of arrest or detention of foreign vessels, the coastal state must promptly notify the flag state (para 4).

Within the EEZ, coastal states are granted the power to regulate pollution from seabed activities under their jurisdiction (Article 208), dumping (Article 210), and vessel source pollution (Article 211, para 5). In regard to seabed activities and dumping, the *UNCLOS* provides that coastal state laws and regulations "should be no less effective than international rules, standards and recommended practices or procedures."[100] However, both Articles 208 and 210 encourage states, acting through competent international organizations or diplomatic conferences, to harmonize their policies and devise "global and regional rules, standards and recommended practices and procedures." As for the prevention, reduction, and control of pollution from vessels, a coastal state's regulatory jurisdiction is limited to the application

of "generally accepted international rules and standards" established by the competent international organization (Article 211, para 5).

In this context *MARPOL* regulations and other international standards adopted by the IMO thus represent the normal limit of coastal state competence and act as a necessary restraint where there is evident potential for excessive interference with shipping.[101]

Mandatory reporting or routeing schemes require IMO's approval if they extend to the EEZ and must be supported by scientific and technical evidence.[102] The designation of special areas or PSSAs by the IMO under Article 211(6) does not confer any power on coastal states to set national construction or equipment standards for ships entering their EEZs. However, it does allow them to apply national standards relating to pollution discharges or navigational practices in those special areas. The only other exception to the *UNCLOS*'s marked preference for international standards and regulations within the EEZ is found in Article 234. This article, the outcome of strong diplomatic pressure from Canada and Russia, applies to ice-covered waters within the limits of the EEZ. It allows coastal states a broad discretion to adopt national standards for pollution control, provided that such measures have "due regard to navigation" and are non-discriminatory.

Coastal states are not given full jurisdiction to enforce international pollution regulations against ships passing through their EEZ. As we have seen, they can do so if the vessel voluntarily enters their ports or offshore terminals, but as Birnie et al explained, in other cases their powers are graduated according to the likely harm.[103] The constraints placed on the coastal state's enforcement powers are summarised by König:

> They range from asking a vessel to disclose information on its identity, itinerary and other relevant information in order to establish whether a violation has occurred (article 220, para. 3, LOSC), to undertaking physical inspection in the case of a substantial discharge causing significant pollution if the vessel has refused to give information at all, or if this information is manifestly wrong (article 220, para. 5, LOSC). Only if the illegal discharge is causing or threatening to cause major damage to the coastline or to any resources of the coastal State's territorial sea or EEZ, may that State institute proceedings, including the detention of the vessel.[104]

In situations where a foreign vessel has been detained, Articles 223 to 233 of the *UNCLOS* impose certain procedural safeguards, including the obligation to release the ship and its crew as soon as a reasonable bond has been posted (Article 226, para 1(b)). König also highlights the power conferred upon coastal states by Article 221 of the *UNCLOS* to take and enforce measures to prevent actual or threatened damage to their coastline—"or related interests, including fishing"—as a result of a maritime casualty.[105]

On the continental shelf, which extends up to 200 nautical miles from the baselines and in certain cases, even beyond that limit,[106] coastal states have sovereign rights for the purpose of exploring and exploiting its natural resources. According to Molenaar, these sovereign rights seem to include prescriptive and enforcement powers to manage and conserve the living resources on the continental shelf (sedentary species).[107] Coastal states can also take "reasonable measures" for the prevention, reduction, and control of pollution from pipelines, but cannot impede the laying or maintenance of cables or pipelines by other states.[108] As noted above, Articles 208 and 210 grant coastal states pollution jurisdiction as far as sea-bed activities and dumping are concerned but encourage the development of "global and regional rules" through competent international organizations and conferences. As for the enforcement of such rules, the location of the offending ship, within the EEZ (as described above) or on the high seas (port state and flag state enforcement), will dictate the extent of the coastal state's powers.

As Frank emphasizes, the *UNCLOS*'s jurisdictional provisions were drafted to achieve a balance between coastal states' extended environmental interests and the rights of other states to exercise their traditional freedoms,[109] especially the freedom of navigation. As a matter of compromise, the *UNCLOS* gives precedence to multilateral cooperation either among states directly, through the adoption of tailored legal instruments and arrangements, or within competent international organizations or general diplomatic conferences.

NOTES

1 PhD (Cantab), Faculty of Law, Université de Montréal.

2 V Frank, *The European Community and Marine Environmental Protection in the International Law of the Sea* (Leiden: Martinus Nijhoff Publishers, 2007) at 11 [Frank].

3 *Ibid* (according to Frank, "it is commonly agreed that the term 'marine environment' refers to the ocean space taken as a whole i.e., the surface of the sea; the water column;

the subsoil; the seabed and the atmosphere above them and everything comprised in that space, both physical and chemical components, including marine life" at 13).

4 HS Schiffman, "International Law and the Protection of the Marine Environment" in A Schwabach & AJ Cockfield, eds, *International Law and Institutions* (Oxford: EOLSS Publishers Co. Ltd., 2009) 213 at 213.

5 Frank, *supra* note 2 at 11.

6 *Ibid*.

7 *Ibid*.

8 J Roberts, *Marine Environment Protection and Biodiversity Conservation—The Application and Future Development of the IMO's Particularly Sensitive Sea Area Concept* (Berlin: Springer, 2007) at 17 [Roberts].

9 *Declaration of the United Nations Conference on the Human Environment* [*Stockholm Declaration*], 16 June 1972, 11 ILM 1416. For a comprehensive overview of the outcomes of the Conference and a detailed analysis of the Declaration, see LB Sohn, "The Stockholm Declaration" 14 Harv In'l LJ (1973) 423.

10 Roberts, *supra* note 8 at 19.

11 *Ibid* at 20 (according to Roberts, it was in response to the recommendations of the Stockholm Conference that an intergovernmental conference was convened in London and adopted the *Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter*, 29 December 1972, in force 30 August 1975, 11 ILM (1972) 1294) at n 37.

12 *United Nations Convention on the Law of the Sea*, adopted 10 December 1982, in force 16 November 1994, 1833 UNTS 3, preamble.

13 PW Birnie & A Boyle, *International Law and the Environment*, 2nd ed (Oxford: University Press, 2002) at 348 [Birnie & Boyle].

14 See Frank, *supra* note 2 at 16, n 33.

15 *Ibid* at 17.

16 Roberts, *supra* note 8 at 21–22.

17 E Franckx, "Regional Marine Environmental Protection Regimes in the Context of UNCLOS" 13 Int'l J Mar & Coast L (1998) 307 at 310–311.

18 Roberts, *supra* note 8 at 23. See also Birnie & Boyle, *supra* note 13 at 350.

19 This positive duty involves protecting the marine environment from harm in areas under coastal states' jurisdiction (Article 194 paragraph 1) but also in areas beyond their jurisdiction or control (paragraph 2) as well as in regards to other states and their environment (paragraph 2).

20 However, Article 194(1) of the *UNCLOS* encourages states to harmonize their national policies.

21 Frank, *supra* note 2 at 20.

22 World Commission on Environment and Development, *Our Common Future*, 4 August 1987, transmitted to the General Assembly as an Annex to Document A/42/427, online (pdf): <sswm.info/sites/default/files/reference_attachments/UN%20WCED%201987%20Brundtland%20Report.pdf> [perma.cc/6HRL-DX4H] [*Brundtland Report*].

23 *Ibid* at 14.

24 YK Choy, "28 Years into 'Our Common Future': Sustainable Development in the Post-Brundtland World" 2 *Sustainable Development* (2015) 1197, at 1197–98, quoting the *Brundtland Report*, *supra* note 22 at 14 [Choy].

25 *Ibid* at 1198.

26 Quote from Jim MacNeill, the lead author of the *Brundtland Report*, reflecting on the state of the world twenty-five years after its publication, quoting the report, *supra* note 22, at 55, para 9. J MacNeill, "Brundtland Revisited," 4 February 2013, available on the OpenCanada.org website at <www.opencanada.org/features/brundtland-revisited/>.

27 J Lemons, "Sustainable Development and Environmental Protection: A Perspective on Current Trends and Future Options for Universities" 19:2 Environmental Management (1995) 157 at 157.

28 *Brundtland Report*, *supra* note 22 at 24, para 27.

29 K Zou, "Introduction" in K Zou, ed, *Sustainable Development and the Law of the Sea* (Leiden: Brill/Nijhoff, 2017) 1 at 2.

30 *Convention on Biological Diversity*, adopted 22 May 1992, in force 29 December 1993, 1760 *UNTS* 143.

31 Choy, *supra* note 24 at 1198.

32 PH Sands, "UNCED and the Development of International Environmental Law" 3 YB Int'l Env L (1992) 3.

33 *United Nations Framework Convention on Climate Change*, adopted 9 May 1992, in force 21 March 1994, 1771 *UNTS* 107.

34 *Rio Declaration*, adopted 14 June 1992, UN Doc. A/Conf.151/5/REV.1, 31 *ILM* (1992) 874.

35 *Agenda 21*, adopted 14 June 1992, UN Doc. A/Conf.151/26 (1992). The other non-binding instrument was the *Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests*.

36 See paragraph 17.1, Chapter 17, *Agenda 21*, online: <www.un.org/Depts/los/consultative_process/documents/A21-Ch17.htm> [perma.cc/B5D6-XB2A].

37 Frank, *supra* note 2 at 23–24.

38 Birnie & Boyle, *supra* note 13 at 384.

39 *Ibid*.

40 *Ibid* at 384–385.

41 The Plan of Implementation is available, online (pdf): <www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf> [WSSD Plan].

42 Frank, *supra* note 2 at 23.

43 WSSD Plan, *supra* note 41, paras 30(b) and (d) and 32(c).

44 WSSD Plan, *supra* note 41, paras 19(e), 36(c), 62(h), 97(d) and 135.

45 WSSD Plan, *supra* note 41, paras 36(a).

46 The Tenth Meeting of the Conference of the Parties to the Convention on Biological Diversity was held from 18–29 October 2010 in Nagoya, Aichi Prefecture in Japan.

47 Decision X/2 adopted 29 October 2010 by the 194 State Parties, UNEP/CBD/COP/DEC/X/2 (29 October 2010), online (pdf): <www.cbd.int/doc/decisions/cop-10/full/cop-10-dec-en.pdf> [perma.cc/7TSF-JLSW].

48 Convention on Biological Diversity, "Biodiversity and the 2030 Agenda for Sustainable Development—Technical Note" (last visited 22 June 2021) at 1–25, online (pdf): *Convention on Biological Diversity* <www.cbd.int/development/doc/biodiversity-2030-agenda-technical-note-en.pdf> [perma.cc/9PC3-T7FL] [Biodiversity and the 2030 Agenda].

49 Convention on Biological Diversity, "Aichi Biodiversity Targets" (2010), online: *Convention on Biological Diversity* <www.cbd.int/sp/targets/> [perma.cc/SN5Y-HY6J].

50 General Assembly Resolution 70/1, *Transforming Our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1 (2015).

51 Fondation Tara Océan "The Sustainable Development Goals: A To Do List for the Planet" (last visited 17 June 2020), online: *Fondation Tara Océan* <oceans.taraexpeditions.org/en/m/environment/les-objectifs-de-developpement-durable-odd/> [perma.cc/2VYB-BKQD] [Fondation Tara Océan].

52 "Sustainable Development Goals" (last visited 17 June 2020), online: *Sustainable Development Goals Knowledge Platform* <sustainabledevelopment.un.org/sdgs> [perma.cc/CT83-59X2].

53 "Biodiversity and the 2030 Agenda," *supra* note 48.

54 Fondation Tara Océan, *supra* note 51.

55 The global indicator framework was developed by the Inter-Agency and Expert Group on SDG Indicators and agreed to, as a practical starting point, at the 47th session of the UN Statistical Commission held in March 2016. See the Sustainable Development Goal Indicator website at <unstats.un.org/sdgs/> [perma.cc/44D3-7YJX].

56 United Nations "Our oceans, our future: partnering for the implementation of Sustainable Development Goal 14" (last visited 8 December 2021), online: *United Nations* <oceanconference.un.org/about> [perma.cc/PCV5-SH98].

57 United Nations, *Our Ocean, Our Future: Call for Action*, 30 June 2017, UNGA, 71st Sess, 2016–2017, A/71/L.74, online: <digitallibrary.un.org/record/1290893?ln=en> at para 9 [perma.cc/FDC9-Y5JJ].

58 *Ibid*.

59 See e.g., *UNCLOS*, arts 210(4) "Pollution by dumping" and 210(1) "Pollution from vessels."

60 Frank, *supra* note 2 at 25.

61 The *UNCLOS* calls for regional harmonization, for example, with regard to land-based pollution in art 207(3) and marine pollution from seabed activities within national jurisdiction under art 208(4).

62 Frank, *supra* note 2 at 29.

63 See e.g., the *Convention on the Protection of the Marine Environment of the Baltic Sea Area* [*Helsinki Convention*], 1992; the *Barcelona Convention for the Protection of the Mediterranean against Pollution*, 1976 (and related Protocols as amended); and the *Convention for the Protection of the Marine Environment of the North-East Atlantic* [OSPAR], 1992.

64 See e.g., *UNCLOS*, arts 63 and 118.

65 *The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, adopted 4 August 1995, entered into force 11 December 2001, 2167 UNTS 3.

66 RFMO/As include Northwest Atlantic Fisheries Organization (NAFO), North-East Atlantic Fisheries Commission (NEAFC), South East Atlantic Fisheries Organisation (SEAFO), Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), South Pacific Regional Management Organisation (SPRFMO), North Pacific Fisheries Commission (NPFC), Southern Indian Ocean Fisheries Agreement (SIOFA) and the General Fisheries Commission for the Mediterranean (GFCM). See "Regional Fisheries Management Organizations and Deep-sea Fisheries" (2020),

online: *Food and Agriculture Organization of the United Nations* <www.fao.org/fishery/topic/166304/en> [perma.cc/WMH9-YPS6].

67 *Ibid*.

68 For a brief account of the process leading up to the intergovernmental conference, see V De Lucia, "The BBNJ Negotiations and Ecosystem Governance in the Arctic" (2019) 103756 Marine Policy 1.

69 See 23 March–3 April 2020, UNGA, 4th Sess, 2020, A/CONF.232/2020/3, online: <undocs.org/en/a/conf.232/2020/3> [perma.cc/F5YL-AL5J].

70 These areas include the high seas (the water column beyond the EEZs of coastal states) and the area (the seabed and ocean floor, and subsoil thereof beyond their continental shelves).

71 See the general obligations identified in our discussion of the environmental provisions of the *UNCLOS*, including Articles 194(2) and 209. For a general overview, see Section 3 "Existing Framework for Conservation and Sustainable Use of Marine Biodiversity in ABNJ" in G Wright et al, "The Long and Winding Road: Negotiating a Treaty for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction" (2018) 8/18 IDDRI Studies at 23 [IDDRI Report].

72 D Tladi, "Ocean Governance: A Fragmented Regulatory Framework" in P Jacquet et al, eds, *Oceans: The New Frontier—A Planet for Life* (Delhi: TERI Press, 2011) 99 at 101.

73 Institut du développement durable et des relations internationales.

74 IDDRI Report, *supra* note 71 at 31.

75 The *UNCLOS* already has two other implementing agreements on mining in the deep seabed and on straddling and highly migratory fish stocks.

76 "Marine Biodiversity beyond National Jurisdiction" (last visited 17 June 2020), online: *New Zealand Foreign Affairs & Trade* <www.mfat.govt.nz/en/environment/oceans/marine-biodiversity-beyond-national-jurisdiction/> [perma.cc/2NQV-7GJW].

77 For a comprehensive discussion of the principal issues to be negotiated, see the IDDRI Report, *supra* note 71.

78 D König, "The Enforcement of the International Law of the Sea by Coastal and Port States" 62 ZaöRV (2002) 1 at 4 [König].

79 *Ibid* at 5.

80 *Ibid*.

81 *Ibid* at 6.

82 *Ibid*.

83 *Ibid*.

84 R Wolfrum, "Means of Ensuring Compliance with and Enforcement of International Law" 272 Rec des Cours (1988) 1 at 154.

85 Since 1994, Canada is a member of the Paris PSC regime created in 1982 by the Paris Memorandum of Understanding, which has now been accepted by 27 states.

86 Frank, *supra* note 2 at 17.

87 *UNCLOS*, art 8(1).

88 *UNCLOS*, art 2. See also *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v United States of America)*, Merits, Judgment, ICJ Rep 1986, 14 at 111 ("[t]he basic legal concept of State sovereignty in customary international law, expressed in, *inter alia*, Article 2, paragraph 1 of the United Nations Charter, extends to the internal waters . . . of every State and to the air space above its territory" at para 212).

89 P Birnie, A Boyle & C Redgwell, *International Law & the Environment*, 3rd ed (Oxford: Oxford University Press, 2009) at 414. See also RR Churchill & AV Lowe, *The Law of the Sea*, 3rd ed (Manchester: Manchester University Press, 1999), ch 3 [Birnie, Boyle & Redgwell].

90 Birnie, Boyle & Redgwell, *supra* note 89 at 414. The authors refer to, for example, chapter V of the *International Convention for the Safety of Life at Sea* (*SOLAS*) in terms of the right to devise "mandatory vessel traffic management" schemes in the territorial sea and Article 21(1)(f) of the *UNCLOS*, Article 4(3) of the 1972 *London Convention* and Article 4(2) of the 1973 *MARPOL* as sources of the coastal state's authority to prohibit pollution discharges in its territorial sea.

91 Birnie, Boyle & Redgwell, *supra* note 89 at 415.

92 *UNCLOS*, art 25.

93 Birnie, Boyle & Redgwell, *supra* note 89 at 415.

94 See e.g., the 1990 Kingston Protocol for Specially Protected Areas and Wildlife [SPAW] in the Wider Caribbean Region.

95 Birnie, Boyle & Redgwell, *supra* note 89 at 416.

96 *Ibid* at 417.

97 *Ibid*.

98 *UNCLOS*, arts 56 and 57 .

99 Birnie, Boyle & Redgwell, *supra* note 89 at 418.

100 Article 208(3) and 210(6).

101 Birnie, Boyle & Redgwell, *supra* note 89 at 419. See also König, *supra* note 78 at 4.

102 *SOLAS Convention, Regulation V/8 and V/8-1*. See J Roberts, "Protecting Sensitive Marine Environments: The Role and Application of Ships' Routing Measures" (2005) 20 Int'l J Mar & Coast L 135.

103 Birnie, Boyle & Redgwell, *supra* note 89 at 420.

104 König, *supra* note 78 at 5.

105 *Ibid*. Paragraph 2 of Article 221 defines "maritime casualty" as 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." The exercise of these powers is however regulated by the 1969 *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*.

106 *UNCLOS*, art 76(1).

107 EJ Molenaar, "Addressing Regulatory Gaps in High Seas Fisheries" 20 IJMCL (2005) 533 at 558.

108 *UNCLOS*, art 79(2).

109 Frank, *supra* note 2 at 19.