

Fisheries Enforcement and the Concepts of Compliance and Monitoring, Control and Surveillance

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Introduction

The trend in the production of global marine fisheries resources presents an alarming concern for sustainability. Fisheries resources which were initially regarded as inexhaustible are now either seriously depleted or overexploited.¹ According to the Food and Agriculture Organization (FAO), 28.8 per cent of global fish stocks are overfished and 61.3 per cent are fully fished.² Most of the ten most productive species in the world are fully fished and have no potential for increase in production.³ Similarly one third of the commercially significant tuna species are already overfished.⁴ Although catches in some regions such as the Western Central Pacific and the Eastern Indian Ocean are increasing and some stocks are showing signs of recovery in response to improved management, a number of fishing regions in the world are still subject to stress leading to a rapid decline in global fisheries.

The depletion of fisheries resources may be attributed to a number of factors, such as industrialisation, overfishing, environmental factors affecting stock productivity, the open access nature of many fisheries, and overcapacity in the world fishing fleet. Illegal, unreported and unregulated (IUU) fishing remains as “one of the greatest threats to fish stocks and marine ecosystems and continues to have serious and major implications for the conservation and management of ocean resources, as well as the food security and economies of many States, particularly developing States.”⁵ It is estimated that about one third of the total catch in some important fisheries is subject to IUU fishing representing an overall cost to developing countries of between USD2 to USD15 billion a year.⁶ IUU fishing is associated with a gamut of issues, including ineffective flag State control and lack of capacity of States to adopt fisheries management plans that set sustainable limits based on scientific advice.⁷

Fish is the most internationally traded food commodity and plays a crucial role in food security. It is predicted that the demand for fish may reach 180 million tonnes in 2030 and neither aquaculture nor any terrestrial food production would be able to supplement the need for protein production provided by marine capture fisheries.⁸ The World Bank also estimates the economic loss of USD51 billion from global fisheries between 1974 to 2007, with 2004 as the base year suggests the need for greater stakeholder awareness and comprehensive fisheries governance reform.⁹

There are a number of measures recommended to respond to the decline of fisheries, such as reduction of catch, restriction of fishing effort, designation of marine protected areas, and certification of sustainable fisheries.¹⁰ Most of these measures have been developed within domestic laws and policies, regional conservation and management measures, and global binding and non-binding fisheries instruments. The FAO recommends that effective fisheries management should be conditioned by resource considerations, environmental constraints, ecological factors, technological development and socio-economic considerations.¹¹ Similarly, the governing legal framework should also address a broad range of issues relating to the conservation and management of fisheries.

The legal regime for fisheries has progressively developed since the 1990s and States have continuously adopted measures to control fishing activities. This has led to the gradual erosion of freedom of fishing supplanted by increased regulation of fishing activities and shared access under the 1982 United Nations Convention on the Law of the Sea (LOSC).¹² While the decades directly following the LOSC may be considered as an era of strengthening fisheries regulation, the succeeding period including the current one can be deemed as an important phase for fisheries enforcement. This is because key global fisheries agreements have now been established for a number of years providing sufficient time for individual States and regional organisations to amend relevant measures in line with international rights and obligations.

This chapter focuses on the enforcement of fisheries regulations, particularly the rights and obligations of States under international law and provides examples of State practice for analysis. It examines the fisheries enforcement framework under the LOSC and other global fisheries agreements in zones of sovereignty, zones under sovereign rights, and on the high seas. It also discusses port State enforcement as a supplement to flag State enforcement and an effective means to prevent the landing or transshipment of illegally caught fish. The chapter analyses the concept of monitoring, control and surveillance as an overarching concept of fisheries enforcement and contrasts it with the element of fisheries compliance. It concludes with a discussion of some of the emerging issues in fisheries that continuously challenge the fisheries enforcement capabilities of States.

International legal framework for fisheries enforcement

The international legal framework for fisheries enforcement comprises legally binding agreements, in particular the LOSC,¹³ the 1993 FAO Compliance Agreement,¹⁴ 1995 UN Fish Stocks Agreement,¹⁵ and the 2009 FAO Port State Measures Agreement.¹⁶ These agreements adopt the key principle of promoting equitable, efficient utilisation and conservation of living resources both in areas under national jurisdiction and on the high seas.¹⁷ The LOSC provides the basic framework that outlines the general prescriptive rights and obligations of States in each maritime zone which in turn form the basis for exercising the enforcement powers of States. The limited provisions of the LOSC particularly with respect to fishing on the high seas and fishing for straddling and highly migratory stocks are strengthened by the FAO Compliance Agreement and the UN Fish Stocks Agreement.

The 1993 FAO Compliance Agreement was an effort to solve the problem of “reflagging of fishing vessels into flags of convenience to avoid compliance with agreed conservation and management measures”.¹⁸ It applies to all fishing vessels, including support vessels used or intended for fishing on the high seas, except for vessels of 24 metres or less in length¹⁹ subject to certain conditions.²⁰ The application of this agreement is not restricted to specific species of fish. The FAO Compliance Agreement reiterates the provisions of the LOSC with respect to the effective

control of fishing vessels and promotes the concept of compliance and enforcement. It focuses on the role of flag States to ensure the compliance of their vessels with international conservation and management measures on the high seas.

The UN Fish Stocks Agreement provides for the conservation and management of straddling and highly migratory fish stocks. Similar to the FAO Compliance Agreement, it emphasises the need for States to adopt effective mechanisms for compliance and enforcement of conservation measures on the high seas and due to the migratory nature of species subject to the agreement promotes the need to apply compatible measures in the exclusive economic zone (EEZ) and on the high seas.²¹ In addition to flag State duties, the UN Fish Stocks Agreement emphasises the role of port States in promoting fisheries conservation measures.²² The agreement also provides for international cooperation, through the creation of subregional and regional fisheries management organisations (RFMOs) and arrangements²³ and implementation of enforcement mechanisms such as high seas boarding and inspection.²⁴

The FAO Port State Measures Agreement was negotiated and agreed by States more than ten years after key global fisheries instruments had been adopted post the LOSC. It outlines in greater detail the role of States in exercising their sovereignty over ports located in their territory as a means to ensure the long term conservation and sustainable use of living marine resources and ecosystems.²⁵ The FAO Port State Measures Agreement applies to foreign vessels seeking entry into port, with the exception of vessels of a neighbouring State that are engaged in artisanal fishing for subsistence and container vessels that are not carrying fish or, if carrying fish, only those with fish that have not been previously landed.²⁶ It elaborates on specific measures that may be applied by port States to combat IUU fishing, such as designation of ports, advance request of port entry, use of ports, inspections, and enforcement actions such as denial of port entry and prohibition of catch landing. Similar to the UN Fish Stocks Agreement, the FAO Port State Measures Agreement underscores the need for cooperation between flag and port States, as well as exchange of information with relevant States, RFMOs, the FAO and other international bodies.²⁷

As examined in the succeeding sections, the LOSC has limited provisions on fisheries enforcement actions that may be undertaken by States. Apart from the enforcement powers of States under Article 73 of the LOSC in relation to the exercise of sovereign rights for the purpose of exploring, exploiting, conserving and managing living resources, much of the guidance on fisheries enforcement in other maritime zones may only be drawn from other global fisheries agreements. Non-binding fisheries instruments such as the FAO Code of Conduct for Responsible Fisheries²⁸ and the four International Plans of Action (IPOAs)²⁹ reiterate some of the enforcement related measures that may be implemented by States under the concept of monitoring, control and surveillance (MCS). The IPOA to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) for example, provides that States should undertake comprehensive and effective MCS from the commencement of fishing, through the point of landing to the final destination.³⁰ The MCS measures provided under the IPOA-IUU encompass compliance and enforcement actions found in the LOSC, FAO Compliance Agreement and the UN Fish Stocks Agreement, such as authorisation to fish, record of fishing vessels, observer programme, vessel monitoring system, and boarding and inspection.

Fisheries enforcement in areas under sovereignty

The LOSC does not contain specific provisions that require States to conserve fisheries resources in areas under sovereignty. Consequently the Convention does not regulate fisheries enforcement in internal waters, territorial sea and archipelagic waters as these waters are subject to the

full sovereignty of coastal States. In general the enforcement power of a State in areas under sovereignty under the LOSC largely encompasses the prevention of fishing by foreign vessels engaged in archipelagic sea lanes, innocent, and transit passages.³¹

Article 21 of the LOSC provides that a coastal State may adopt laws and regulations relating to innocent passage through the territorial sea in respect of a number of matters, including the conservation of living resources and prevention of infringement of fisheries laws and regulations of the coastal State.³² Any fishing activity by a foreign fishing vessel in the territorial sea may be considered as a passage that is prejudicial to the peace, good order and security of a coastal State, and hence non-innocent.³³ This provision is clearly demonstrated in State practice as most coastal State legislation on the territorial sea categorises fishing activities by foreign vessels as passage that is not innocent.

In archipelagic waters the only reference to fisheries is with respect to traditional fishing. Article 51(1) of the LOSC provides that archipelagic States shall recognise traditional fishing rights of an immediately adjacent neighbouring State in areas falling within archipelagic waters. The terms and conditions associated with the exercise of traditional fishing rights are regulated by bilateral agreements between the archipelagic and neighbouring State and may not be transferred to or shared with a third State.³⁴ As an example Indonesia has concluded bilateral agreements with Malaysia and Papua New Guinea in recognition of traditional fishing rights.³⁵ Indonesia has imposed some requirements on neighbouring States exercising traditional fishing in Indonesian waters, such as the condition that the fishing practices must have been carried out for at least four generations, the use of fishing gears that are not prohibited under Indonesian law, and that the fishing activities may only be carried out by individuals rather than corporations.³⁶

Fisheries enforcement in areas under sovereign rights

Similar to navigation, the LOSC considers competing interests relating to the exploitation and conservation of fisheries resources in an attempt to achieve a balance between the power of coastal States over resources in their areas under jurisdiction and freedom of fishing as part of the freedom of the high seas. Coastal State powers over resources in the EEZ include control over the activities of foreign fishing vessels accessing such resources, while the freedom of the high seas encompasses rights of foreign States and their nationals to conduct activities in the EEZ which may not be fisheries related, such as the exercise of the freedom of navigation. However the continuous decline of commercial fish stocks and stricter fisheries regulations have raised questions as to the balance of these rights tipping in favour of conservation, and increasingly limiting the rights of foreign fishing vessels in the EEZ and consequently on the high seas. In the South Pacific for example, small island States do not allow foreign vessels to fish on the high seas as a condition of access to adjacent EEZ fisheries.³⁷ These measures have subsequently led to fisheries closure in high seas pockets of the Western and Central Pacific ocean between 2010 and 2012, as well as an ongoing requirement for vessels transiting designated high seas areas to submit entry and exit information.³⁸

Fisheries enforcement in the EEZ

As discussed in another chapter of this Handbook, the development of the legal regime of the EEZ marked a significant change in the law of the sea.³⁹ This is in particular reference to resource exploitation and management as the EEZ regime placed almost 90 per cent of fisheries

resources under the sovereign rights of coastal States,⁴⁰ otherwise subject to the freedom of fishing prior to the LOSC. Consistent with the sovereign rights of coastal States in conserving and managing living resources in the EEZ,⁴¹ the Convention confers on coastal States the discretion to develop measures that would carry out both its conservation and utilisation obligations under Articles 61 and 62, which includes adopting laws and regulations on foreign fishing access in the EEZ. These laws and regulations may relate to the licensing of fishers, fishing vessels and equipment; determining the type and amount of species to be caught and fixing quotas; regulating seasons and areas of fishing; fixing the age and size of fish and other species that may be caught; specifying information required of fishing vessels; placing of observers on board vessels; regulating conduct of research programmes; landing of catch; terms and conditions on joint ventures and other cooperative arrangements; training of personnel and transfer of fisheries technology; and enforcement procedures.⁴²

Article 73 of the Law of the Sea Convention is the key provision on fisheries enforcement in the EEZ that ensures implementation of terms and conditions of foreign fishing access. It provides:

Article 73

Enforcement of laws and regulations of the coastal State

1. The coastal State may, in the exercise of its sovereign rights to explore, exploit, conserve and manage the living resources in the exclusive economic zone, take such measures, including boarding, inspection, arrest and judicial proceedings, as may be necessary to ensure compliance with its laws and regulations adopted by it in conformity with this Convention.
2. Arrested vessels and their crews shall be promptly released upon the posting of reasonable bond or other security.
3. Coastal State penalties for violations of fisheries laws and regulations in the exclusive economic zone may not include imprisonment, in the absence of agreements to the contrary by the States concerned, or any other form of corporal punishment.
4. In cases of arrest or detention of foreign vessels the coastal State shall promptly notify the flag State, through appropriate channels, of the action taken and of any penalties subsequently imposed.

There are a number of components and issues related to fisheries enforcement based on Article 73. One issue relates to the boarding and inspection of vessels. Article 73 provides for the enforcement power of coastal States to board and inspect vessels to ensure compliance with the laws and regulations of coastal States. The issue of boarding of vessels is threefold: 1) which vessels can be boarded; 2) what offences warrant the boarding of vessels; and 3) who can board vessels.

Which vessels can be boarded

It is clear that a vessel subject to enforcement powers under Article 73 is a fishing vessel, which is defined “as 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”.⁴³ This definition however, does not unambiguously determine whether or not support ships such as bunkering vessels may be boarded for fisheries enforcement purposes. The response to this question relates to the type of offences that may warrant boarding of vessels which is further discussed below.

Where a vessel is licensed to fish in the EEZ of a coastal State, the flag State can be said to have conceded the right to inspect the vessel to that coastal State under the LOSC, as well as under any fisheries treaty between the two states. However Article 73 is not clear where the vessel is not licensed to fish but is exercising freedom of navigation through the EEZ of the coastal State. Article 73 does not state that only licensed or otherwise authorised vessels may be boarded and inspected. Rather, it grants the general right to enforce fisheries laws of the coastal State which may be interpreted by some as a blanket provision that all fishing vessels in the EEZ may be subjected to the exercise of this power simply because of their nature and usual purpose. On the other hand, it may be argued that transiting fishing vessels may exercise the freedom of navigation in the EEZ granted to all types of vessels; hence the right to navigate through the zone should be without any interference from the coastal State. Both are legitimate interpretations of the provision and an example of how opposing interests during the UNCLOS III negotiations attempted to balance jurisdiction of coastal States to protect their economic resources and freedom of navigation of foreign States in the EEZ. To address conflicting interpretations of this provision, some coastal States require the notification of entry and exit information by foreign fishing vessels transiting their EEZ, rather than providing for immediate boarding and inspection of these vessels for mere presence in the EEZ.

What offences are covered

Another issue that relates to the kind of fishing vessels subject to fisheries enforcement in the EEZ is the question of the type of fisheries offences that are covered by Article 73. This issue was addressed in the *M/V Saiga* case concerning an oil tanker flagged under the Saint Vincent and the Grenadines arrested by Guinean customs patrol vessels off the coast of Sierra Leone. One of the key issues raised in this case before the International Tribunal for the Law of the Sea (ITLOS) was whether bunkering or refuelling of a fishing vessel within the EEZ of a State is considered an activity which falls within the scope of a coastal State’s exercise of its sovereign rights to explore, exploit, conserve and manage the living resources.⁴⁴ This view was supported by the Guinean *Code of Maritime Fishing* which provided that supplying of vessels or logistical support to fishing vessels are “operations connected to fishing” subject to licence.⁴⁵

The view that refuelling is an activity ancillary to that of the refuelled ship is supported in State practice in the definition of driftnet fishing under the Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific, where driftnet fishing activities, include “transporting, transhipping and processing any driftnet catch, and co-operation in the provision of food, fuel and other supplies for vessels equipped for or engaged in driftnet fishing.”⁴⁶ On the other hand, it may be argued that bunkering at sea is an independent activity within the legal regime of freedom of navigation under Article 59 of the LOSC.⁴⁷ It may also be that States which have not adopted regulations concerning bunkering of fishing vessels do not regard refuelling as connected to fishing activities. In this debate the fundamental question becomes what constitutes fishing under domestic law.

Even though the LOSC does not provide a definition of “fishing”, other international fisheries agreements have defined the same. Fishing, under the FAO Port State Measures Agreement

means “searching for, attracting, locating, catching, taking or harvesting fish or any activity which can reasonably be expected to result in the attracting, locating, catching, taking or harvesting of fish.”⁴⁸ This agreement further defines fishing-related activities as “any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transshipping or transporting of fish that have not been previously landed at a port, as well as the provisioning of personnel, fuel, gear and other supplies at sea.”⁴⁹

Who can board fishing vessels?

Article 73 does not provide any guidance on what agency or entity should be responsible for fisheries enforcement. Under Article 101 of the LOSC, “only warships or military aircraft, or other ships or aircraft on government service especially authorised to that effect” may conduct hot pursuit, which may include pursuit of foreign vessels breaching fisheries regulations of coastal States. Various States utilise different enforcement agencies for fisheries. Some States deploy military or naval vessels to address illegal fishing by foreign vessels to protect resources in the EEZ as if it were part of national security. Some States designate a civilian agency like the coast guard to deal with environmental and resource related infringement in areas under national jurisdiction. Between military and para-military vessels, the general practice has been to use civilian force for fisheries violations in the EEZ because naval intervention can be deemed as a hostile act by other nations and can create disputes if not managed carefully. The use of military vessels has also been faced with strong objections especially in fishing zones around disputed territories in East Asian waters and the South China Sea. Some countries have a multi-agency approach to combine assets in addressing various threats in the EEZ ranging from illegal fishing, marine pollution, illicit trafficking of narcotics, and people smuggling. For most developing countries, the response to illegal fishing depends on a number of considerations such as the availability of military or coastguard assets, the size of the EEZ, and other political priorities.

Prompt release of vessels

One of the most controversial aspects of Article 73 relates to the prompt release of vessels. Article 73(2) provides that arrested vessels and their crew shall be promptly released upon posting of a reasonable bond or other security. A number of cases involving fishing vessels have been heard before the ITLOS on the issue of prompt release. The two key issues in this provision relate to what a “reasonable bond” means and when a release is considered “prompt”.

The LOSC does not define what is meant by a reasonable bond or other security. Although the ITLOS has not fixed the amount for a bond or financial security to be considered reasonable, it has identified a number of factors to be taken into account in determining the reasonableness of a bond. These factors include the amount, nature, and form of the bond or financial security,⁵⁰ gravity of the alleged offences, the penalties imposed or imposable under the laws of the detaining State, the value of the detained vessel and of the seized cargo, and the amount of the bond imposed by the detaining State and its form.⁵¹ The ITLOS has not provided a complete list of criteria nor has it laid down rules as to the exact weight that should be attached to each factor.⁵² The ITLOS has also ruled that non-financial conditions (e.g. good behaviour bond) cannot be considered components of a bond or financial security with respect to an alleged violation by a foreign fishing vessel in the EEZ of a coastal State.⁵³

The issue of prompt release is related to the forfeiture of vessels imposed by many coastal States. The ITLOS noted in the *Tomimaru* case that Article 73 does not make reference to the confiscation of vessels; however many States provide for this enforcement action in their legislation with respect to the management and conservation of marine living resources.⁵⁴ An example which has arisen in state practice is whether or not the automatic forfeiture of vessels adopted in Australia is contrary to the prompt release requirement of the LOSC. In the case of the *Vólga*, the Federal Court of Australia ruled that by operation of section 106A of the *Fisheries Management Act (Cth)* a transfer of title from the foreign fishing vessel owner to the Commonwealth occurred at the time when the fisheries offences were committed; hence when the pursuit, apprehension and forfeiture occurred, Australia was seizing its own vessel.⁵⁵ While the validity of section 106A of the *Fisheries Management Act* was upheld by the court, its legitimacy under international law still raises some issues.⁵⁶ For one the automatic forfeiture of a foreign vessel to the arresting country would cause the prompt release provision of the LOSC to be inoperable,⁵⁷ as it would simply render the application for the prompt release of a vessel without an object.⁵⁸

Another issue in relation to enforcement action under Article 73 of the LOSC is the practice by States of destroying fishing vessels, including burning or sinking of vessels found to have violated domestic fisheries law in the EEZ. This is similarly not provided for under the LOSC but has been incorporated in the domestic legislation of some States. Similar to automatic forfeiture of foreign vessels, the basis for the destruction of fishing vessels for the purpose of combating IUU fishing may be questioned in light of the application of the prompt release provisions of the LOSC.

Imprisonment and considerations of humanity

Article 73(3) of the LOSC provides that penalties of coastal States in the EEZ may not include imprisonment or any other form of corporal punishment, in the absence of agreement to the contrary by the States concerned. This can be contrasted with the treatment of fishing violations by foreign nationals in the territorial sea subject to the full sovereignty of States. While most countries provide for the imprisonment of foreign vessel masters and crew as a form of punishment for violations in waters under their sovereignty, criminal penalties for illegal fishing in the EEZ are constrained by the LOSC. Other administrative penalties, such as the confiscation of catch and gears and prohibition of fish landing are applied by coastal States for fisheries violations in the EEZ. The ITLOS has ruled that Article 73(2) must be read in the context of Article 73 as a whole.⁵⁹ It has stated that “(t)he obligation of prompt release of vessels and crews includes elementary considerations of humanity and due process of law. The requirement that the bond or other financial security must be reasonable indicates that a concern for fairness is one of the purposes of this provision”.⁶⁰

Fisheries enforcement on the continental shelf

Part V of the LOSC on the EEZ provides that sedentary species do not belong to the EEZ but instead are subject to the continental shelf regime. Article 77(4) of the LOSC defines sedentary species as organisms which are at the harvestable stage, either immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil. Examples of species that are part of the living natural resources of the continental shelf are corals, sea anemones, sponges, sea urchins, sea cucumbers, gastropods, and bivalve molluscs such as oysters, pearl shell, mussels, clams, and cockles.⁶¹

Similar to the provisions on areas under sovereignty, the LOSC is silent on the need to conserve and utilise sedentary species.⁶² But unlike the provisions on the EEZ, the sovereign rights given to the coastal State with respect to the continental shelf are exclusive.⁶³ Thus a coastal State is under no obligation to grant access to foreign nations to such species. Regulations on the use of sedentary species are generally covered under the domestic law of States. There is also no specific provision in the LOSC on enforcement relating to the conservation and management of sedentary species. Coastal States generally apply the fisheries enforcement regime in the EEZ to sedentary species on the continental shelf.

Difficulties arise for the enforcement of regulations on sedentary species in areas where the water column and seabed boundaries between adjacent States do not overlap due to the vagueness of the continental shelf regime in relation to sedentary species. Examples of these areas are shared boundaries between Australia and Indonesia in the Timor Sea and between Australia and Papua New Guinea in the Torres Strait. In the Timor Sea, the Australian continental shelf extends under the Indonesian water column; hence Australia cannot enforce its sovereign rights over the sedentary species on its continental shelf without access to the Indonesian water column. The different legal regimes also create confusion for Indonesian fishermen who may be fishing using an open access licence for pelagic fish in the water column of Indonesia and simultaneously catch sedentary species on the Australian continental shelf.

Fisheries enforcement for sedentary species in the extended continental shelf

The LOSC does not provide any guidelines on coastal State regulatory and enforcement powers on the extended continental shelf. Similar to challenges in enforcing fisheries regulations in shared maritime areas, there may be concerns in the future when sedentary species in the extended continental shelf are accessed by fishing vessels exercising the freedom of the high seas in the water column above. A clear international regulatory framework would need to be developed in order to address this issue, including the impact of fishing on vulnerable marine ecosystems on the seabed.⁶⁴

Fisheries enforcement in the contiguous zone

The contiguous zone of a coastal State forms part of the EEZ for purposes of conservation and management of living resources. While the LOSC specifically provides that a coastal State can exercise control to prevent infringement of laws and regulations within its territory or territorial sea only in relation to customs, fiscal, immigration or sanitary laws,⁶⁵ the power of coastal States in the contiguous zone has been critical in terms of enforcing fisheries legislation. As an example, multi-agency cooperation between customs and fisheries officers has been crucial in apprehending illegal fishers. Immigration laws are used to issue deportation orders to foreign nationals onboard illegal fishing vessels. Similarly, customs regulations may apply in case of refuelling of fishing vessels.

Fisheries enforcement on the high seas

The LOSC provides for the exclusive jurisdiction of flag States over ships on the high seas,⁶⁶ except for certain illicit activities such as piracy and slave trading which require cooperation and are subject to universal jurisdiction. Part of exercising effective jurisdiction and control over

vessels is the duty to take enforcement action against vessels that have not observed generally accepted international regulations and procedures. The development of the role of flag States in effective compliance and enforcement has led to the emergence of flag State duties or responsibilities that have specific application in fisheries. The need for cooperation to address IUU fishing has also led to the development of an enforcement mechanism that allows non-flag State authorities to conduct boarding and inspection on the high seas.

Flag state enforcement

Consistent with the principle of flag State responsibility under the LOSC, international fisheries specific instruments provide that a flag State whose vessels fish on the high seas shall take measures to ensure that its vessels comply with subregional and regional conservation and management measures.⁶⁷ In order to emphasise the responsibility of the flag State over the actions of its vessels, post LOSC fisheries agreements provide that a flag State shall authorise a vessel to fish on the high seas only where it is able to exercise its responsibilities with respect to such vessel.⁶⁸ A significant element in the exercise of this responsibility is flag State compliance and enforcement.

Article 19 of the UN Fish Stocks Agreement provides for the duty of a flag State to enforce subregional and regional conservation and management measures irrespective of where the violations occur. The flag State also has the duty to investigate immediately and fully any alleged violation and cooperate with other States including requiring its flagged vessel to give information to an investigating authority relating to fishing operations on the high seas. If sufficient evidence is available on the alleged violation by its vessel, the flag State is required to refer the case to its authorities with a view to instituting proceedings without delay in accordance with its laws, and to detain the vessel if appropriate.⁶⁹ It has the obligation to carry out investigations and judicial proceedings expeditiously and ensure that the vessel does not engage in fishing operations on the high seas until such time as all outstanding sanctions imposed by a flag State in respect of the violation have been complied with. Some of the sanctions for fisheries violations on the high seas that may be imposed by the flag State include the withdrawal, suspension or cancellation of the authorisation to fish,⁷⁰ or refusal to issue an authorisation to fish for a period of time.⁷¹ The UN Fish Stocks Agreement and the FAO Compliance Agreement provide that sanctions should be adequate in severity to secure compliance, discourage violations, and deprive offenders of the benefits accruing from illegal activities.⁷²

High seas boarding and inspection in fisheries

In general exclusive flag State jurisdiction means no interference from third States. The fisheries laws of coastal States over foreign vessels do not have application beyond the EEZ. Hence the powers of fisheries enforcement officers are limited to violations in the fisheries jurisdiction which include areas under sovereignty and sovereign rights. There are three exceptions to the limitation of this coastal State power on the high seas. One is in relation to the right of visit under Article 110 of the LOSC which does not apply to fisheries offences. The second relates to the right of hot pursuit under Article 111 of the LOSC. The third exception relates to high seas boarding and inspection under the UN Fish Stocks Agreement. Articles 21 and 22 of the UN Fish Stocks Agreement can be deemed as an exception to Article 92(1) of the LOSC which provides that ships are subject to the exclusive jurisdiction of the flag State on the high seas.

The framework for high seas boarding and inspection was developed under the UN Fish Stocks Agreement in Articles 21 and 22 to promote cooperation in fisheries enforcement. The high seas boarding and inspection regime outlines the procedure for boarding and inspection, and the rights and obligations of the inspecting State, authorised inspectors, flag States, and the vessel master. It also provides for actions that may be taken in the event that the master of a vessel refuses to be boarded and inspected on the high seas. The scope of application of this regime is the high seas areas covered by an appropriate RFMO⁷³ and includes vessels flying the flag of Parties to the UN Fish Stocks Agreement, vessels flying the flag of Parties to the UN Fish Stocks Agreement and members of relevant RFMOs, as well as vessels without nationality. Therefore a non-Party to the UN Fish Stocks Agreement that is also a non-member to a relevant RFMO and has otherwise not agreed to be bound by high seas boarding and inspection arguably cannot be subject to the regime in accordance with Article 36 of the Vienna Convention on Treaties.⁷⁴

A Party to the UN Fish Stocks Agreement can be an inspecting State and should notify all States whose vessels fish on the high seas. It should ensure that vessels used for boarding and inspection are clearly marked and identifiable as being on government service, and should issue identification to duly authorised inspectors.⁷⁵

The procedure for high seas boarding and inspection commences with an inspecting authority suspecting an alleged serious violation by a fishing vessel of a conservation and management measure established by a relevant RFMO or arrangement. A serious violation based on the UN Fish Stocks Agreement means:

- Fishing without a valid licence, authorisation or permit issued by the flag State;
- Failing to maintain accurate records of catch and catch-related data, as required by the relevant subregional or regional fisheries management organisation or arrangement, or serious misreporting of catch, contrary to the catch reporting requirements of such organisation or arrangement;
- Fishing in a closed area, fishing during a closed season or fishing without, or after attainment of, a quota established by the relevant subregional or regional fisheries management organisation or arrangement;
- Directed fishing for a stock which is subject to a moratorium or for which fishing is prohibited;
- Using prohibited fishing gear;
- Falsifying or concealing the markings, identity or registration of a fishing vessel;
- Concealing, tampering with or disposing of evidence relating to an investigation;
- Multiple violations which together constitute a serious disregard of conservation and management measures; or
- Such other violations as may be specified in procedures established by the relevant subregional or regional fisheries management organisation or arrangement.⁷⁶

Boarding and inspection procedure on the high seas has been developed within the context of generally accepted international obligations, namely: taking into account the safety of the vessel and crew; conduct that would not constitute harassment of any fishing vessel; minimal interference with fishing operations; and avoiding action which would affect the quality of catch on board. Duly authorised inspectors of an inspecting State have the authority to inspect the vessel, its licence, gear, equipment, records, facilities, fish, fish products, and documents necessary to verify compliance with relevant conservation and management measures.⁷⁷ In the

course of boarding and inspection, authorised inspectors have the duty to present credentials to the master of the vessel, produce a copy of the relevant conservation and management measure in question, initiate notice to the flag State at the time of boarding, and provide a copy of the report to the master and authorities of the flag State.⁷⁸ Inspectors also have the duty not to interfere with the master's ability to communicate with the authorities of the flag State and note any objection or statement which the master wishes to include in the report. Authorised inspectors have the obligation to avoid the use of force except when and to the degree necessary, only to ensure the safety of inspectors and where the inspectors are obstructed in the execution of their duties. If required, the degree of force to be used should not exceed that reasonably required under given circumstances.⁷⁹ Flag States on the other hand, have the obligation to ensure that vessel masters accept and facilitate prompt and safe boarding by inspectors, cooperate with the inspectors, and allow the inspectors to communicate with flag State authorities. Vessel masters should also provide reasonable facilities to the inspectors, not obstruct, intimidate, or interfere with the inspectors in the performance of their duties, and facilitate their safe disembarkation.⁸⁰

Inspectors are required to promptly leave the vessel following completion of the inspection if they find no evidence of a serious violation.⁸¹ However, where following a boarding and inspection there are clear grounds for believing that a vessel has engaged in an activity contrary to a relevant conservation and management measure, the inspecting State shall secure evidence and promptly notify the flag State of the alleged violation.⁸² The flag State has the obligation to respond within three working days, and can do either of two options: one, investigate the matter and if evidence warrants, take enforcement action with respect to the vessel, in which case it needs to promptly inform the inspecting State of the results of the investigation and the enforcement action taken; or two, authorise the inspecting State to investigate.⁸³ If the flag State fails to respond or take action, the inspectors may remain on board and secure evidence and may require the master to assist in further investigation, including where appropriate, by bringing the vessel to the nearest port.⁸⁴ The inspecting State shall also immediately inform the flag State of the name of the port to which the vessel is to proceed. The inspecting State would need to inform the flag State and the relevant regional organisation or arrangement and its members or participants of the results of any investigation.⁸⁵ The flag State may, at any time during this course of investigation, request the inspecting State to release the vessel to the flag State along with full information on the progress and outcome of its investigation.⁸⁶

In the event that the master of a vessel refuses to accept boarding and inspection in accordance with Articles 21 and 22 of the UN Fish Stocks Agreement or a similar regime established by the relevant RFMO, the flag State would need to direct the master of the vessel to submit immediately to boarding and inspection.⁸⁷ The exception to this would be if it is necessary to delay boarding and inspection due to issues relating to safety at sea. If the master does not comply with such direction, the flag State shall suspend the authorisation to fish of the vessel and order it to return immediately to port.⁸⁸

The actions that may be taken by flag States against their vessels may vary and can include judicial proceedings and imposition of penalties. The UN Fish Stocks Agreement provides that actions that may be taken by States other than the flag State shall be proportionate to the seriousness of the violation.⁸⁹ It further provides that States shall be liable for damage or loss attributable to them arising from action taken which is unlawful or exceeds that reasonably required in the light of available information to implement the boarding and inspection procedure of the UN Fish Stocks Agreement.⁹⁰

Port State enforcement

All fishing vessels have to land or tranship their catch, or refuel and reload provisions in port.⁹¹ Port State measures are therefore considered to be an effective means of addressing illegal fishing as they augment the shortcomings of flag States in exercising control and jurisdiction over vessels. There are two major roles of port States in combating IUU fishing. First, a port State may adopt measures to supplement the prescriptive and enforcement measures taken by both flag and coastal States. Second, a port State can adopt measures that would ensure that IUU vessels which have escaped detection from flag and coastal States and have entered or are about to enter their ports are made liable for their actions and reported to the concerned States.

The LOSC provides for the full sovereignty of a State with respect to ports in its territory. Part of this right is to take necessary steps to prevent any breach of the conditions associated with a port call.⁹² It may also undertake investigations or institute proceedings with respect to any vessel discharge in violation of applicable rules of international law when a vessel is voluntarily in its port or offshore terminal.⁹³ These provisions however, are not enforcement powers directly related to fisheries.⁹⁴

It is in the UN Fish Stocks Agreement that the role of port States in fisheries enforcement and compliance has been clearly established. Article 23(1) of the UN Fish Stocks Agreement provides for both the right and duty of a port State to take measures to promote the effectiveness of subregional, regional, and global conservation and management measures. A port State has the right to inspect documents, fishing gear and catch on board fishing vessels when it is in port or offshore terminals.⁹⁵ The UN Fish Stocks Agreement also allows a port State to undertake enforcement actions such as the prohibition of landing and transshipment if it has been established that the catch has been taken in a manner which undermines the effectiveness of a conservation and management measure on the high seas.⁹⁶ As opposed to an exercise of full sovereignty over ports, which can mean the adoption of either no or very strict regulations at the discretion of port States, the emphasis on both the right and a duty has given port States an important role in promoting conservation and management measure for straddling and highly migratory stocks. The FAO Code of Conduct for Responsible Fisheries and the IPOA-IUU also emphasise the role of port States in promoting sustainable fisheries.⁹⁷

The FAO Port State Measures Agreement elaborates on the various measures adopted under the IPOA-IUU and the Model Scheme on Port State Measures,⁹⁸ in order to ascertain whether the vessel requiring entry has actually engaged in IUU fishing. This is done through vessel inspection and the requirement to submit information that will assist port States in determining the compliance of a vessel with relevant regulations. The key enforcement action that may be taken by port States is provided for in Article 18(1) of the FAO Port State Measures Agreement. Similar to the provisions of the UN Fish Stocks Agreement and the IPOA-IUU, Article 18 provides that if there are clear grounds for believing that a vessel has engaged in IUU fishing or fishing activity in support of such fishing following an inspection, the port State shall:

“ . . .

- (a) promptly notify the flag State and, as appropriate, relevant coastal States, regional fisheries management organizations and other international organizations, and the State of which the vessel's master is a national of its findings; and
- (b) deny the vessel the use of its port for landing, transshipping, packaging and processing of fish that have not been previously landed and for other port services, including, *inter*

alia, refuelling and resupplying, maintenance and drydocking, if these actions have not already been taken in respect of the vessel, in a manner consistent with this Agreement, including Article 4.⁹⁹

Reporting of findings to the flag State and other relevant States and RFMOs is consistent with the duty to cooperate between States provided not only under the FAO Port State Measures Agreement but also in other global fisheries agreements. The FAO Compliance Agreement for example provides that when a fishing vessel is voluntarily in its port and there are reasonable grounds for believing that the fishing vessel has been used for an activity that undermines the effectiveness of international conservation and management measures, the port State is required to promptly notify the flag State.¹⁰⁰ The flag and port States may enter into arrangements that would allow the port State to conduct investigations as may be considered necessary to establish the violation by the fishing vessel.¹⁰¹

Prohibition of landing and transshipment of fish is the most common enforcement action adopted by many port States against foreign vessels. The enforcement action on prohibition of fish landing has been subject to objections from States because it also takes the form of a market or trade restriction. In the dispute between Chile and the European Union on swordfish in the Southeastern Pacific Ocean, the EU claimed that Chile had prescribed and implemented a measure in a discriminatory manner when it prohibited the unloading of swordfish in its ports.¹⁰² The dispute was settled amicably; however the burden to prove that the measure applied is non-discriminatory in nature rested on Chile as a port State. Therefore it is crucial that port States prescribe clear domestic regulations in taking enforcement actions against fishing vessels that have engaged in IUU fishing.

A distinctive port enforcement action against foreign fishing vessels only available under the FAO Port State Measures Agreement is the denial of port entry. Based on the information requested by a port State in advance from vessels intending to enter its port, a port State may deny the entry of a vessel if it believes that the vessel has engaged in IUU fishing or fishing activities in support of such fishing, especially if such vessel is included on an IUU list developed by a RFMO.¹⁰³ In the case of denial of entry, a Party to the FAO Port State Measures Agreement is required to communicate its decision to the flag State of the vessel, and where appropriate to the relevant coastal State, regional or international organisation.¹⁰⁴ The only exclusion from the application of the denial of port entry is *force majeure* or distress, consistent with international law.¹⁰⁵

Even though the denial of port access is not expressly set out in the LOSC and other global fisheries agreements, a number of States had adopted this measure as an exercise of sovereignty over their ports prior to the development of FAO Port State Measures Agreement.¹⁰⁶ Another area of cooperation between the port State and other States is provided in the UN Fish Stocks Agreement in relation to high seas boarding and inspection. When an inspecting State deems it necessary to bring the vessel to the nearest port and the flag State has failed to respond or take actions against the vessel, the port State has the obligation to render its assistance to the inspecting State, including taking all necessary steps to ensure the well-being of the crew.¹⁰⁷ The exchange of port inspection information with the flag State is also a crucial component of cooperation as it enables the flag State to take punitive or corrective actions against its vessel. An example is the de-registration of the vessel *Paloma V* from the Namibian registry on the basis of the information obtained from the port inspection conducted by New Zealand authorities which proved that the vessel had been involved in IUU fishing.¹⁰⁸

Monitoring, control and surveillance

Monitoring, control and surveillance (MCS) is a term developed by the FAO in 1981¹⁰⁹ which is now widely accepted as a key principle in sustainable fisheries management and identified as the “best hope in preventing, deterring and eliminating IUU fishing”.¹¹⁰ According to FAO, monitoring is the continuous requirement for the measurement of fishing effort characteristics and resource yields. This involves the collection, measurement, and analysis of fisheries data such as species composition, fishing effort, bycatch, discards, and areas of operation. Control is defined as the regulatory mechanism under which the exploitation of the resources may be conducted, such as the terms and conditions under which resources can be harvested which are normally embodied in national fisheries legislation and regional agreements. Lastly, surveillance is the degree and types of observations required to maintain compliance with the regulatory controls imposed on fishing activities.¹¹¹

MCS has three spatial components: land, sea, and air.¹¹² The land component of MCS serves as the base of operations and involves the coordination of MCS activities and deployment of available resources. The sea component of MCS includes the surveillance of the maritime zones of a coastal State, and may include the use of radar, sonar, and vessel platforms. The air component includes air surveillance and also includes the use of satellite-based technology to identify possible fisheries violations.¹¹³ The right combination of land, sea, and air assets based on the resources and capability of States determine success in responding to illegal fishing incidents in areas of national jurisdiction and on the high seas.

MCS has a wider scope than traditional fisheries enforcement in which patrol vessels mainly conduct surveillance operations and arrest of fishing vessels for alleged violations. MCS includes data collection and analysis, enactment of legislative instruments and implementation of management plans. There are a number of MCS tools provided in international instruments that may be used by States in support of fisheries enforcement, such as fishing licensing systems, record of fishing vessels, vessel monitoring systems (VMS), dockside monitoring, observer programmes, boarding and inspection regimes, catch certification, acquisition, storage and dissemination of MCS data, and port State measures.¹¹⁴ These MCS tools may be applied to monitor compliance with fisheries regulations from the commencement of the fishing activity to the final destination of the fish.¹¹⁵

MCS tools such as VMS and observer programmes help enhance enforcement activities of States resulting from the limited coverage of fisheries patrols. For example, satellite-based VMS required for most vessels fishing on the high seas provides monitoring agencies with accurate locations, speed, and identity of fishing vessels at periodic time intervals. This information may be used to detect illegal fishing in closed or restricted areas or during closed seasons. It may also ascertain a potential fisheries violation based on the position and movement of a vessel, i.e. a considerable time being spent on the EEZ by a transiting vessel may be an indication that the vessel is fishing. In the South Pacific, the Pacific Island Forum Fisheries Agency describes the role of VMS as support to existing surveillance assets such as patrol vessels, surveillance flights and regional observers that currently operate in the Western and Central Pacific Ocean.¹¹⁶

Observer programmes are conducted for purposes of fishery science and compliance. Implementation of an observer programme for fishery science purposes involves the estimation of total catch and biological sampling.¹¹⁷ However observers may also be given the task of validating logbooks, observing catch landing and inspecting relevant documents for purposes of compliance with fisheries regulations. Observer programmes allow for the verification of fisheries

data which is an effective means of detecting unreported fishing. Observer reports may also be required as evidence in court for the prosecution of fisheries offenders.

Although there are limitations to the scope and application of VMS, observer programmes and other MCS tools, they assist authorities to identify potential violations which would otherwise be undetected by traditional fisheries enforcement. Second, these MCS tools are established within a domestic and regional legal framework which fishing vessels are required to adhere to as a condition for fishing. On the high seas, a breach of relevant regional conservation and management measures is considered a serious fisheries violation and provides a trigger to initiate other MCS tools such as boarding and inspection.

MCS, compliance, and enforcement

As described above, the broad concept of MCS suggests that various tools may be considered as fisheries enforcement measures. These MCS tools, although not referred to as such in global fisheries agreements such as the FAO Compliance Agreement also form part of the compliance and enforcement mechanisms developed under this agreement. The concept of compliance under the FAO Compliance Agreement centres on the role of the flag State to ensure that vessels abide by agreed conservation and management measures on the high seas. It calls for States to take effective action, consistent with international law, to deter reflagging of vessels to other nations as a means of avoiding compliance with conservation and management measures.¹¹⁸ The agreement also calls upon States to join or enter into understanding with subregional or regional organisations with a view to achieving compliance with international conservation and management measures.¹¹⁹ To this end the FAO Compliance Agreement provides a number of MCS-related measures that may be undertaken by flag States, such as record of fishing vessels, licensing system and imposition of sanctions of adequate severity.

The UN Fish Stocks Agreement contains similar provisions but specifically refers to its Part IV as 'Compliance and Enforcement'. It provides for compliance and enforcement mechanisms by flag States in the context of high seas enforcement, as well as international cooperation in high seas boarding and provision of assistance in terms of "monitoring, control, surveillance, compliance and enforcement".¹²⁰ In addition to these measures, the UN Fish Stocks Agreement provides for compliance and enforcement measures that may be taken by port States under Article 23. A number of regional fisheries management organisations such as the Western and Central Pacific Fisheries Commission (WCPFC) have developed a compliance mechanism where States are required to regularly report the measures they have adopted to implement agreed conservation and management measures;¹²¹ however there is no sanction associated with the failure of States to adopt appropriate domestic measures. The WCPFC aims to adopt a graduated response to non-compliance by its members, cooperating non-members and participating territories by taking into account the type, severity, degree, and cause of the non-compliance in question.¹²²

The relationship between MCS, compliance and enforcement is further outlined in the FAO Code of Conduct for Responsible Fisheries which provides that "States should ensure compliance with and enforcement of conservation and management measures and establish effective mechanisms, as appropriate, to monitor and control the activities of fishing vessels and fishing support vessels."¹²³ It also provides that these effective mechanisms are for "fisheries monitoring, surveillance, control and enforcement to ensure compliance with [their] conservation and management measures . . ."¹²⁴ These provisions suggest the close inter-relationship between the concepts of MCS, enforcement and compliance.

However while these agreements focus on the application of the three concepts to ensure that vessels comply with agreed conservation and management measures, State practice has also evolved to ensure that compliance is not limited to the imposition of sanctions but also incentives that will encourage obedience among fishing vessels. It further involves the inclusion or participation of the fishing industry in decision-making in order to enhance the level of compliance, resource stewardship, and legitimacy of management authorities. This type of self or voluntary compliance is an effective means to supplement traditional fisheries enforcement and improve the success of MCS measures.

Australia has adopted the Australian Fisheries Management Authority (AFMA) Domestic Compliance and Enforcement Policy based on risk management that aims to achieve an “optimum level of compliance”, defined as “the level of non-compliance at an acceptable level, which can be maintained at a reasonable cost, while not compromising the integrity and sustainability of the resource”.¹²⁵ This policy distinguishes between compliance, voluntary compliance, deterrence, and enforcement. The AFMA Domestic Compliance and Enforcement Policy provides for enforcement as one type of deterrence and compliance as a function of both voluntary compliance and deterrence. Although voluntary compliance is not the key focus of the policy, it is recognised as one of the many tools that can be used by fisheries officers to improve compliance.¹²⁶

Emerging issues in IUU fishing

There are a number of issues in fisheries that are not sufficiently addressed by the limited prescriptive and enforcement powers of States under the LOSC and global and regional fisheries agreements. Hence they require the development of more innovative measures at the domestic level and strengthened and wider collaboration between States, including facilitation of exchange of information and cooperative enforcement mechanisms.

The lack of adequate fisheries management frameworks for specific fisheries and fishing activities give rise to the inability of States to address issues at the enforcement level. These fisheries management concerns include fishing for non-tuna resources on the high seas, illegal fishing for associated species such as sharks and other marine mammals, fishing for deep sea species and their impact on vulnerable marine ecosystems, and fishing activities as a hazard to navigation. As a response to these issues, tuna RFMOs have adopted measures making it illegal to catch or use certain gears that catch non-target species such as sharks, seabirds, dolphins, and sea turtles. Regional organisations have also been created to manage non-tuna and deep sea resources such as the South Pacific Regional Fisheries Management Organisation (SPRFMO). These organisations have further developed measures that prohibit members from trading with vessels or States whose vessels have engaged in or supported IUU fishing.

There are also issues that directly challenge traditional fisheries enforcement and MCS and are not addressed by specific global or regional agreements. Examples include illegal fishing perpetrated by transnational criminal groups or ‘fisheries crime’, such as trafficking of people for purpose of forced labour in the fishing industry and use of vessels for acts of terrorism and other criminal activities. As a response to fisheries crime, INTERPOL launched an initiative in 2013 called Project Scale whose objectives are to: (a) raise awareness regarding fisheries crime and its consequences; (b) establish National Environment Security Task Forces to ensure cooperation between national and international agencies; (c) assess the needs of vulnerable member countries to effectively combat fisheries crimes; (d) conduct operations to suppress crime, disrupt

trafficking routes, and ensure the enforcement of national legislation. A Fisheries Crime Working Group was established under this initiative to develop the capacity and capability of member countries to effectively address fisheries crime.¹²⁷ A number of countries have cooperated and called upon INTERPOL to issue Purple Notices to illegal fishing vessels. INTERPOL's Purple Notices are used to seek or provide information on the *modus operandi*, objects, devices, and methods used by criminals associated with fishing. Where there are suspected illegal fishing activities involving elements of crime, a binding or a non-binding resolution may be adopted by members of RFMOs to refer the matter to the INTERPOL Fisheries Crime Working Group and encourage members to provide relevant information.

At a regional level, 25 West and Central African countries have adopted The Code of Conduct Concerning the Repression of Piracy, Armed Robbery Against Ships and Illicit Maritime Activity in West and Central Africa in 2013. The Code of Conduct recognises IUU fishing as a “transnational organised crime in the maritime domain” together with other well-established transnational criminal activities.¹²⁸ The Code of Conduct provides a framework for cooperation for sharing and reporting of information, interdiction, apprehension and prosecution of suspected vessels, as well as the facilitation of care, treatment, and repatriation of people subjected to transnational crime in the maritime domain.¹²⁹

Conclusion

While the LOSC provides the basic framework for fisheries regulation and enforcement in the different maritime zones, the adoption of international agreements post LOSC has fortified the prescriptive and enforcement powers of States. The FAO Compliance Agreement, UN Fish Stocks Agreement and the FAO Port State Measures Agreement have introduced measures that address unique fisheries concerns. In sum, the strengthening of flag State responsibility through compliance mechanisms, high seas boarding and inspection, and port State jurisdiction in fisheries are three key aspects of relevant global agreements that have helped influence international fisheries enforcement. The emphasis on cooperation between States in modern international fisheries law has also led to bilateral, subregional, and regional agreements on MCS, compliance and enforcement that shape State practice to address IUU fishing.

The close relationship between the concepts of MCS, enforcement and compliance give States a range of tools and measures that may be adopted to address specific fisheries issues in the EEZ, on the continental shelf and on the high seas. However concerns in fisheries are continuously evolving and the lack of adequate management frameworks for certain species and fishing activities give rise to the inability of States to address such issues effectively. There are also issues that challenge traditional fisheries enforcement or revolve around broader political problems and require the development of more innovative measures beyond the scope of fisheries. These issues may be the subject of future fisheries enforcement mechanisms or arrangements between States.

Notes

- 1 Richard Ellis, *The Empty Ocean: Plundering the World's Marine Life* (Washington: Island Press, 2003), cf. Thomax Huxley, ‘The Fisheries Exhibition’, 28 *Nature* (1883), pp. 176–177.
- 2 Food and Agriculture Organization (FAO), *The State of World Fisheries and Aquaculture: Opportunities and Challenges* (Rome: FAO, 2014), p. 37.
- 3 *Ibid.*, p. 38.

- 4 Ibid.
- 5 United Nations General Assembly (UNGA), Sixty-ninth session, Agenda Item, 74(b), Sustainable fisheries, including through the 1995 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 and related Instruments, *Resolution Adopted by the General Assembly on 9 December 2014, A/RES/69/109*, 06 February 2015, para. 56.
- 6 Marine Resources Assessment Group Ltd (MRAG), *Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries: Final Report*, (London, 2005), p. 44.
- 7 See Mary Ann Palma, Martin Tsamenyi, and William Edeson, *Promoting Responsible Fisheries: The International Legal and Policy Framework to Combat Illegal, Unreported and Unregulated Fishing* (Netherlands: Brill, 2010).
- 8 FAO, *State of World Fisheries and Aquaculture 2004* (Rome: FAO, 2004), p. 86; See also The World Bank, *Fish to 2030: Prospects for Fisheries and Aquaculture* (Washington: World Bank, 2013).
- 9 The World Bank, *The Sunken Billions: the Economic Justification for Fisheries Reform* (Washington: World Bank, 2009), p. 43.
- 10 *World Ocean Review: Living with the Oceans 2010* (Hamburg: Maribus, 2010), pp. 130–139.
- 11 Food and Agriculture Organisation (FAO), Fisheries Management, *FAO Technical Guidelines for Responsible Fisheries No. 4* (Rome: FAO, 1997), at 14.
- 12 Francisco Orrego Vicuña, *The Changing International Law on High Seas Fisheries* (Cambridge: University Press, 1999), pp. 8–13; See also Shigeru Oda, *International Control of Sea Resources* (Dordrecht: Martinus Nijhoff Publishers, 1989).
- 13 United Nations Convention on the Law of the Sea, Montego Bay, Jamaica, concluded on 10 December 1982, in force 16 November 1994, 1833 UNTS 3; 21 ILM 1261 (1982).
- 14 *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas*, signed 24 November 1993, 2221 UNTS 91 (entered into force 24 April 2003).
- 15 *United Nations Agreement for the Implementation of the Provision 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*, New York, concluded on 04 August 1995, in force 11 December 2001, 34 ILM 1542 (1995); 2167 UNTS 88.
- 16 FAO, *Agreement on Port State Measures to Prevent, deter and Eliminate Illegal, Unreported and Unregulated Fishing*, signed 22 November 2009 [2010] ATNIF 41.
- 17 LOSC, Preamble.
- 18 David Balton, 'The Compliance Agreement' in Ellen Hey, (ed.), *Developments in International Fisheries Law* (Hague: Kluwer Law International, 1999) p. 34.
- 19 *FAO Compliance Agreement*, Art. I(a) and II(2).
- 20 Article III of the FAO Compliance Agreement provides that in a fishing region where bordering coastal States have not yet declared EEZs, or equivalent zones of national jurisdiction over fisheries, such coastal State Parties to the agreement may agree to establish a minimum length of fishing vessels below which the agreement shall not apply.
- 21 UN Conference on Straddling and Highly Migratory Fish Stocks, Fourth Session, *Statement Made by the Chairman of the Conference at the Closing of the Fourth Session, on 26 August 1994, A/CONE.164/24*, para 5, in Jean-Pierre Lévy and Gunnar G Schram, *United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Selected Documents* (Hague: Martinus Nijhoff Publishers, 1996).
- 22 *UN Fish Stocks Agreement*, Art. 23.
- 23 *UN Fish Stocks Agreement*, Art. 8.
- 24 *UN Fish Stocks Agreement*, Arts. 21 and 22
- 25 *FAO Port State Measures Agreement*, Art. 2.
- 26 *FAO Port State Measures Agreement*, Art. 3.
- 27 *FAO Port State Measures Agreement*, Art. 6.
- 28 Food and Agriculture Organization (FAO), *Code of Conduct for Responsible Fisheries*, FAO Conference, 28th sess (31 October 1995).
- 29 The four International Plans of Action developed under the FAO Code of Conduct are International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds) 1999, International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks) 1999, International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity) 1999, and the

International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (IPOA-IUU) 2001.

- 30 *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (IPOA-IUU), Adopted on 23 June 2001 at the 120th Session of the FAO Council. IPOA-IUU, para. 24.
- 31 LOSC, Arts. 19(2)(i), 20(1)(d) and (e), 25, and 42(1)(c), and 54.
- 32 LOSC, Art. 21(c) and (d).
- 33 LOSC, Art. 19(i).
- 34 LOSC, Art. 51(1).
- 35 Dysi Polite, 'Traditional Fishing Rights: Analysis of State Practice,' 5 *Australian Journal of Maritime and Ocean Affairs* (2013), 120, 126.
- 36 *Ibid.*
- 37 Parties to the Nauru Agreement, *A Third Arrangement Implementing the Nauru Agreement Setting Forth Additional Terms and Conditions of Access to the Fisheries Zones of the Parties*, Koror, 16 May 2008, amended 11 September 2010, Art. 3.
- 38 Western and Central Pacific Fisheries Commission, Conservation and Management Measure 2010–02, *Conservation and Management Measure for the Eastern High Seas Pocket Special Management Area*, Honolulu, 10 December 2010, para. 2.
- 39 See Chapter 1 of this volume.
- 40 Ellen Hey, 'The Fisheries Provisions of the LOS Convention' in Ellen Hey, (ed.), *Developments in International Fisheries Law* (Hague: Kluwer Law International, 1999), p. 27.
- 41 LOSC, Part V.
- 42 LOSC, Art. 62(4).
- 43 *FAO Compliance Agreement*, Art. 1(a).
- 44 International Tribunal for the Law of the Sea (ITLOS), *The M/V "SAIGA" Case* (Saint Vincent and the Grenadines v. Guinea), Case No. 1, Judgment of 04 December 1997, para. 56.
- 45 ITLOS, *The M/V "SAIGA" Case* No. 1, para. 64.
- 46 *Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific*, concluded on 24 November 1989, in force 17 May 1991, ATS 1992 No. 30, Art. 1.
- 47 ITLOS, *The M/V "SAIGA" Case* No. 1, para. 56.
- 48 *FAO Port State Measures Agreement*, Art. 1(c).
- 49 *FAO Port State Measures Agreement*, Art. 1(d).
- 50 ITLOS, *The "M/V Saiga" Case (Saint Vincent and the Grenadines v. Guinea) (Prompt Release)*, Case No. 1, Judgment of 04 December 1997, para. 82.
- 51 ITLOS, *The "Camuoco" Case (Panama v. France) (Prompt Release)*, Case No. 5, Judgment of 07 February 2000, para. 67.
- 52 ITLOS, *The "Monte Confurco" Case (Seychelles v. France) (Prompt Release)*, Case No. 6, Judgment of 18 December 2000, para. 76.
- 53 ITLOS, *The "Volga" Case (Russian Federation v. Australia) (Prompt Release)*, Case No. 11, Judgment of 23 December 2002, para. 77.
- 54 ITLOS, *The "Tomimaru" Case (Japan v. Russian Federation) (Prompt Release)*, Case No. 15, Judgment of 06 August 2007, para. 72.
- 55 *Olbers v Commonwealth of Australia* (No 4) [2004] FCA 229 at 80.
- 56 Warwick Gullett, 'Development of Australian Fisheries Law: Setting the Law of the Sea Convention Adrift?' 21 *Environmental and Planning Law Journal* (2004) 169, 174.
- 57 *Ibid.*, 175.
- 58 *The "Tomimaru" Case*, Case No. 15, para. 73.
- 59 ITLOS, *The "Juno Trader" Case (Saint Vincent and the Grenadines v. Guinea-Bissau) (Prompt Release)*, Case No. 13, Judgment of 18 December 2004, para. 77.
- 60 *Ibid.*
- 61 See for example Sedentary Organism Proclamation of the Governor-General of the Commonwealth of Australia in December 1995. Under section 12 of the *Australian Fisheries Management Act* 1991 (Cth), the Governor-General may declare an organism to be a sedentary organism to which the Act applies if he or she is satisfied that a marine organism of any kind, for the purpose of international law, is part of the living natural resources of the Australian continental shelf.
- 62 LOSC, Art. 77(4).

- 63 LOSC, Art. 77(2).
- 64 See FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas (Rome, 2009); See also a series of United Nations General Assembly Resolutions beginning with UNGA, Fifty-ninth session, Agenda Item 49(b), Resolution adopted by the General Assembly, Sustainable fisheries, including through the 1995 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, and related instruments, 17 January 2005, *A/RES/59/25*, para. 66.
- 65 LOSC, Art. 33.
- 66 LOSC, Art. 91(1).
- 67 *UN Fish Stocks Agreement*, Art. 19(1).
- 68 *UN Fish Stocks Agreement*, Art. 19(2).
- 69 *UN Fish Stocks Agreement*, Art. 19(1)(d).
- 70 *UN Fish Stocks Agreement*, Art. 19(2); *FAO Compliance Agreement*, Art. III(8).
- 71 *FAO Compliance Agreement*, Art. III(5)(b).
- 72 *UN Fish Stocks Agreement*, Art. 19(2).
- 73 An appropriate RFMO in this context means an organisation with competence in managing tuna resources, such as the Indian Ocean Tuna Commission (IOTC), International Commission for the Conservation and Atlantic Tunas (ICCAT), Inter-American Tropical Tuna Commission (IATTC), and Western and Central Pacific Fisheries Commission (WCPFC). Currently, only WCPFC, IOTC and ICCAT have developed boarding and inspection schemes.
- 74 *Vienna Convention on the Law of Treaties*, Vienna, Austria, concluded 23 May 1969, in force 27 January 1980, UN Doc. A/Conf.39/27; 1155 UNTS 331; 8 ILM 679 (1969); 63 AJIL 875 (1969), Art. 36.
- 75 *UN Fish Stocks Agreement*, Art. 21(4).
- 76 *UN Fish Stocks Agreement*, Art. 21(11).
- 77 *UN Fish Stocks Agreement*, Art. 22(2).
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- 89 *UN Fish Stocks Agreement*, Art. 21(16).
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