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MARITIME SECURITY: CURRENT CHALLENGES

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1. **INTRODUCTION**

The security of the maritime domain has become a topical area of concern, with threats thereto manifesting in multiple ways, ranging from military activities at sea to marine litter discharges and noise pollution. As an issue of common interest of the international community, maritime security has ignited some commendable initiatives both internationally and regionally, aimed at setting up new legal and institutional frameworks of cooperation. However, current regimes have proved to be ill-suited to address the globalised maritime challenges of today. By and large, a sustained common vision on how to better serve the common interest is currently lacking, owing in part to an intricate North-South divide over both rights and obligations regarding ocean governance. It is thus still necessary to merge the priorities of the various stakeholders into a comprehensive maritime security architecture.

This policy brief purports to illustrate this state of affairs through a brief analysis of major themes related to maritime security. The selection of issue areas is based on a Colloquium on the current challenges in maritime security organised by the Leuven Centre for Global Governance Studies on March 2013, and is further expanded to include prominent topics related to the environmental dimension of maritime security. Rather than addressing issues of entitlement to ocean space and use, the present paper concentrates on the question of how to conceive a responsible use of the maritime domain. For its purposes, the analysis in this paper is of course more illustrative than comprehensive and is intended to highlight current challenges and issues that should be taken into account by policymakers in the regulation of emerging seas uses.

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1 The speakers at this colloquium, sponsored by the Centre for Ethics of KU Leuven, were, apart from a welcome address by Prof. Dr. Jan Wouters, Jean Monnet Chair, Director of the Leuven Centre for Global Governance Studies and Full Professor of International Law and International Organizations at KU Leuven: Mr. Gaetano Librando, Senior Deputy Director and Head Legal Affairs of the International Maritime Organization (IMO), who addressed the topic of Maritime Security Initiatives of the International Maritime Organization; Dr. Markus Houben, Action Officer Regional Maritime Capacity Building of the European External Action Service (EEAS); who presented General Policy Principles of EU Action in the Field of Maritime Security; Lt Cdr Martin Fink, Royal Netherlands Navy (NL), Netherlands Defense Academy, who spoke about Maritime Embargoes and Naval Interdiction; and Prof. Dr. Erik Franckx, Professor of International Law, Free University of Brussels, whose topic was The Influence of Various Maritime Claims on Maritime Security, in the South China Sea in Particular. The event was chaired by Prof. Dr. Cedric Ryngaert, Associate Professor of International Law at KU Leuven and Utrecht University.
2. THE CONCEPT OF MARITIME SECURITY – A FEW INITIAL REMARKS

The many challenges currently faced in the maritime domain have broadened our understanding of the concept of maritime security. While traditionally linked to military State interests, maritime security has come to involve economic, political, societal and ecological concerns, thereby encompassing a broader range of activities and events. Certainly, maritime threats do not only stem from intentional illicit conduct but also from unintended harm linked to natural navigation risks. Identifying what activities these are and which interests are at stake is essential in the design of sustained responses to any perceived maritime security threat.\(^2\)

Security of whom? As elusive as the term may be, the security of the maritime domain can ultimately be interpreted as that of the entirety of mankind: for one, illegal, unreported and unregulated fishing (IUU), apart from affecting the marine environment and resources, my raise food security concerns to all. On another account, piracy and terrorism significantly impact upon the security of oil tankers and support boats, trade and maritime economic activities in general. The sources of threats evolve over time and, arguably, the main reason why the concept of maritime security is not a static one relates to its economic dimension: informed by geopolitical dynamics, it entails ‘constantly scanning the horizon for changing maritime trade patterns and their significance.’\(^3\) The economic uses of the oceans in the past two decades have contributed to an era of overwhelming and accelerated change, whereby a wide range of interconnected effects over the marine environment have come to pose significant challenges in every sector of the marine economy.

Who, then, is to ensure security? Exclusive assertions of regulatory power over the maritime domain have been put forward by States to ensure the protection of their own maritime security interests. The structure of the Exclusive Economic Zone (hereinafter EEZ), for instance, provides the necessary margin for coastal States to do so. In the high seas, flag States have exclusive jurisdiction over their vessels. While nationally focused interests will always be maintained, a balance must necessarily be reached between these and the interests that are shared by the international community, for an overall accommodation of competing maritime uses to be achieved. The transnational character of maritime security threats calls for increased international cooperation. Hence, the pertinence of strengthening the role played by international actors in the protection of the maritime domain, ranging from the International Maritime Organization (IMO) and the UN Security Council to the South Pacific Forum Fisheries Agency.

Strengthened maritime security measures may be seen as encroachments on the fundamental principle of _mare liberum_. However, maintaining the paradigm of non-interference risks losing its legitimacy if it proves to jeopardize the interests of the international community as a whole. In this sense, maritime security measures become necessary for the very freedom of the seas to be safeguarded.


3. VIOLENCE AT SEA

In order to make it possible for any stakeholder to actually start implementing a policy conceived by domestic policymakers or decision-makers on an international level with regard to the responsible use of the maritime domain, it is clear that a *conditio sine qua non* would be that all criminal activities in the maritime environment should cease to exist.

Maritime security is very much related to the use of ships. Even though the natural environment of all vessels, the sea, is not without danger for the shipping industry in general or for a specific crew in particular. Indeed, a ship and its cargo can be subjected to a violent attack by criminals on board of another ship, whom for their own private reasons want to steal the goods on board or hijack the crew to obtain a ransom. Traditionally, these acts are referred to as acts of maritime piracy. Piracy as such is the original universal jurisdiction crime, meaning that universal jurisdiction for piracy is one of the oldest and least controversial rules of international law. Unfortunately, according to international law, not all crimes in the maritime domain can be referred to as piracy.

The present chapter aims to clearly explain a number of relevant distinctions that can and are to be made by policymakers with regard to violent crimes involving ships, cargo and their crews perpetrated in the maritime domain. Additionally, a factual background is provided to the reader, as well as an introduction to the applicable rules of international law which define the various violent crimes in the maritime domain. This chapter will also address some of the main legal issues and relevant current debates. Special attention will be given to recent Belgian developments in domestic criminal legislation with regard to piracy. Finally, this chapter will briefly look into the important contributions of international organisations to the fight against maritime violent crimes.

I. FACTUAL BACKGROUND

- Maritime Piracy

In the past years, a considerable number of incidents related to maritime piracy have been discussed in the news. Whereas about ten years ago, most of those incidents took place in the Strait of Malacca, more recently the problems seem to have been shifting to the African Continent. Especially in the waters surrounding Somalia, the threat of piracy or armed robbery to commercial shipping seems to be predominantly present. On 31 January 2012, according to the Piracy Reporting Centre of the International Maritime Bureau (IMB PRC), there were no less than 10 vessels and

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5 For the most recent information, visit the website of the Piracy Reporting Centre (PRC), subdivision of the International Maritime Bureau (IMB), part of the International Chamber of Commerce (ICC), available in: http://www.icc-ccs.org/piracy-reporting-centre/combinednewsfigures.

6 The IMB Piracy Reporting Centre (IMB PRC) is the world’s only manned centre receiving and disseminating reports of piracy and armed robbery 24 hours a day, across the globe. As part of the ICC, it is an independent body set up to monitor attacks, free of political interference. IMB strongly urges
159 hostages held by Somali pirates. The international community has been active in this domain by committing a considerable fleet of warships to the fight against piracy since 2008.

- Drugs Trafficking

The problem of drugs trafficking in the Caribbean region, mostly by means of small craft navigating from the coasts of the southern countries via small islands with relatively large territorial waters towards the coasts of the United States of America, has raised serious concerns for decades. It has, however, been under close investigation by the US Coast Guard and the international community from 2002 onwards. Since that year, several nations have deployed warships in the Caribbean Sea in the fight against illicit drugs trafficking.

- Maritime Terrorism

Apart from some isolated incidents, such as the USS Cole incident\(^7\) or the explosion of the oil tanker Limburg, the threat of maritime terrorism is not that visible to the general public. However, using a ship as a weapon to obtain results in a fight fought for political reasons is not hard to conceive of in current terrorist undertakings especially in consideration of the aggrandizement of damage of a massive explosion in a built-up area in the light of the events of 9/11.

Additionally, when considering the fact that most of the shipping nowadays is containerised,\(^8\) it is not unrealistic to envisage the scenario posited in 2002 by Commander Stephen Flynn of the US Coast Guard\(^9\) of a massive exploding device hidden in a container equipped with GPS and shipped in a distant port, passing through several intermodal transshipment points in different countries, in order to finally explode in a highly populated city or to be detonated at a major rail hub, such as Chicago,\(^10\) thus resulting in a major disruption to transportation in continental Europe, the United Kingdom or the United States of America.

Indeed, policymakers should take into account the fact that approximately two hundred million containers are moved between ports annually.\(^11\) Additionally, the number of eight thousand ships that make fifty-one thousand port calls each year in the United States alone illustrates without any doubt the vulnerability of Western States to attack by sea.\(^12\) Also, it should be noted that those ships deliver approximately seven and a half million containers yearly,\(^13\) of which only two percent

\(^8\) J.S. Mellor, *ibidem*, p. 348.
\(^9\) *ibidem*, p. 348.
\(^10\) *ibidem*, p. 350.
\(^11\) *ibidem*, p. 351.
\(^12\) *ibidem*, p. 342.
\(^13\) *ibidem*, p. 342.
are actually inspected. The issue of preventing acts of maritime terrorism is thus clearly important.

- Eco-piracy

Finally, there are fairly new cases of “eco-piracy”, where ships are used to attack other ships not for private reasons (as is the case of pirates) or for political reasons (as is the case of terrorists), but for “other” motives, in the so-called “general interest”. “Eco-piracy” does not amount to an act of “terrorism”: the latter is defined by the FBI as “the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population or any segment thereof, in the furtherance of political or social objectives.”

Indeed, environmental groups such as Greenpeace or organizations such as the Sea Shepherd, the latter well-known for its fight against Japanese whalers, which do not board ships as a pirate would do, but rather ram them, constitute a sort of vigilante movement, showing a profound conviction that the government and its agencies are not capable of enforcing the law in a particular area.

II. LEGAL ISSUES

- Public International Law

Piracy on the high seas is a serious crime that, in conformity with Article 105 of the International Convention on the Law of the Sea (UNCLOS), can be tried by any country since the principle of universal jurisdiction applies to it. However, policymakers should be fully aware that this principle is not to be misunderstood as universal prosecution. Indeed, being allowed to bring a case before a domestic criminal court is not the same as being allowed to hunt down and arrest suspected pirates in any part of the ocean. Moreover, not every act of violence is considered to be an act of piracy, and thus, not all acts of violence in the maritime domain can be tried according to the principle of universal jurisdiction. In fact, the offence of piracy is very strictly defined in international law. One of the limitations is to be found in Article 101 of UNCLOS which stipulates that the crime has to be committed “for personal reasons”.

The consequence is that acts perpetrated for political motives, such as maritime terrorism, are not comprised by the concept of piracy, which in turn implies that the principle of universal jurisdiction is not applicable to them. An additional important element to be taken into account is the fact that acts of violence committed on board

15 The most notorious pirate whaling ship was the Sierra, captained by a Norwegian and a Japanese crew that killed 1,676 whaling during a three-year period. The meat had been sold to the Japanese domestic market.
17 21 ILM (1982), 1261.
of any ship by members of its own crew or by some or all of its passengers, such as hijacking, theft or murder, are also not considered to be acts of piracy. The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, as amended in 2005 (hereinafter 2005 SUA Convention)\(^{19}\), solves some of the issues, such as the “private ends” and the “one ship-two ship” debates,\(^{20}\) but jurisdiction over the offences mentioned in Article 3(1) of this Convention is not universal.\(^{21}\) Moreover, according to Article 10 of the Convention, States have a positive obligation to either extradite or prosecute alleged pirates, but they are not required to find and arrest those pirates.

Finally, the 2005 SUA Convention is problematic in the sense that it is reactive in nature and not very specific in stating how a legal regime able to prevent maritime terrorism would look like.\(^{22}\)

- **Domestic Criminal Law: the case of Belgium**

In 2009, the Belgian federal legislator has taken a very interesting initiative, by adopting on 30 December the “Law with regard to the fight against piracy at sea”, published on 14 January of the following year. It contains legally binding definitions of the concepts of “piracy”, “pirate ship”, “pirate group” and “Belgian ship”. Additionally, the crime of “piracy” is defined according to national law and criminal punishments are established. Finally, the procedure for arresting and prosecuting pirates according to Belgian national law is clearly defined.

Interestingly, the law deals in an elegant way with the most common problems so far experienced in the fight against piracy. These are mainly related to bringing an alleged pirate before a judge in a timely manner or the authority of the Commanding Officer of a Belgian warship to arrest alleged pirates. Noteworthy is the fact that the authority to arrest alleged pirates is extended to the Commanding Officer of a Belgian military vessel protection detachment on board any merchant vessel. Also to be noted is the fact that violent attacks or attempts thereto committed by the crew of any private ship against any other ship for private ends, but not on the high seas, is still punishable and is to be regarded as “crimes of piracy”. Even mutiny on board of a warship, followed by acts of piracy committed by the crew that has taken control, can lead to prosecution for “crimes of piracy”. Finally, provisions are also made for the prosecution of any individual or organisation helping with the financing of or facilitation of piratical attacks, regardless of whether the activity has been deployed at sea or ashore.

As illustrated by the following excerpt of the Belgian newspaper ‘La Libre Belgique’, the Brussels Court of Appeals convicted a Somali pirate who had hijacked the Belgian commercial vessel Pompei\(^{23}\) and had later on been captured by a Belgian Navy Ship on November 29\(^{th}\) of 2010, and subjected him to ten years imprisonment under this new legislation: “Le jeune Somalien qui avait été capturé le 29 novembre

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\(^{19}\) 27 ILM 668 (1988), and Protocols thereto adopted on 14 October 2005.


\(^{21}\) *Ibidem*, p. 383.

\(^{22}\) *Ibidem*, p. 384.

\(^{23}\) Released after a few months of negotiations and payment of a ransom of 1,94 million US $. 

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III. OPERATIONAL ISSUES

- Maritime Security Initiatives of the International Maritime Organization

In the context of the Colloquium on the current challenges in maritime security, referred to in the introductory paragraph of this policy brief, Mr. Gaetano Librando, Senior Deputy Director and Head Legal Affairs of the International Maritime Organization (IMO) presented an overview of the various security initiatives undertaken by the IMO. More specifically, he mentioned IMO actions devised to implement the UN Security Council Resolution 1851 (2008), by which the Council had called on those States and international organisations able to do so, to actively participate in defeating piracy and armed robbery off Somalia’s coast, by deploying naval vessels and military aircrafts, and through seizure and disposition of boats and arms used in the commission of those crimes. The Council had even stated that States and regional organisations could undertake all necessary measures “appropriate in Somalia” (thus also on land), to interdict those using Somali territory to plan, facilitate or undertake such acts. This resolution had been adopted unanimously, following a letter of 9 December 2008 from the Transitional Federal Government urging for international assistance to counter the surge in piracy and armed robbery.

Pursuant to UN Security Council Resolution 1851, the Contact Group on Piracy off the Coast of Somalia (CGPCS) was created on 14 January 2009. This voluntary, ad hoc international forum brings together countries, organisations, and industry groups, all of which share the interest of combating piracy. Participating States seek to coordinate political, military, and other efforts to bring an end to piracy off the coast of Somalia, and to ensure that pirates are brought to justice. The Group meets three times a year at the UN, while its five Working Groups meet regularly around the world to develop and implement national counter-piracy policies and programs. Nearly 70 countries and several international organisations participate in the CGPCS, including the African Union, the Arab League, the EU, the IMO, NATO, and various departments and agencies of the UN.

Mr. Librando mentioned the important fact that, according to the IMO data on maritime piracy, the number of actual piracy attacks and attempts for the first trimester of 2013 had reached the lowest level in 11 years. Indeed, according to Mr. Librando, since its creation, the CGPCS contributed to a marked reduction in the volume of pirate attacks and hijackings. More specifically, over the last three years, the number of successfully pirated ships dropped from 47 in 2010, to 25 in 2011.

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24 La Libre Belgique, ‘Dix ans pour le pirate somalien’, 16 February 2012.

English translation: “The young Somali who had been captured on November 29th of 2010 by the crew of the Louise-Marie, the Belgian frigate that was taking part in the fight against piracy in the Indian Ocean under the supervision of the European Operation Atalanta, has been convicted by the Brussels Court of Appeals.”

25 See Mr. Librando’s conference notes, included in this policy brief as Appendix 1.
down to 5 in 2012. The Contact Group quite logically welcomes this progress, but recognizes that the underlying causes of piracy remain and that pirate action groups are still active. The lecturer mentioned that, for this reason, the IMO has recently sent letters to a number of States urging them to keep the same level of naval forces present in the region.

- Maritime Embargoes and Naval Interdiction

According to Mr. Martin Fink, Lieutenant-Commander of the Royal Netherlands Navy (NL) and lecturer at the Netherlands Defense Academy, the world today faces the challenge of how to ensure the smooth, secure, unimpeded flow of maritime traffic through sea lanes and ports at a competitive cost, in light of UNCLOS. As noted by the lecturer, in a UN report of 2008 on ‘Oceans and the law of the sea’, the Secretary General referred to a number of threats that can minimize maritime security. Interestingly, situations of armed conflict or peace security operations are not within the scope of maritime security.

Mr. Fink explained that maritime interdiction operations (hereinafter MIO), performed by the navies of the world, are one of the tools used to strengthen maritime security at sea, but also noted the lack of a real definition of both maritime security and maritime interdiction. The first reference to MIO can be found in a statement of the Minister of Foreign Affairs in the 1990 Iraq-Kuwait crisis, stipulating that they are naval operations that include the possibility of boarding a merchant vessel.

With regard to the legal basis of MIO, the lecturer discussed the possibility of seeking consent, namely by asking another State whether it would be possible to come on board. According to Fink, this would of course be an option, but then it would still remain unclear whether such consent should be given by the master of the vessel or an official body of the flag State. From a practical perspective, it is logical that the master should be asked for permission, however, the master does not usually have the nationality of the ship. While consent based boarding can fill the gap when it comes to finding a legal basis to board a ship, it nevertheless falls short in creating a legal regime that defines what actions can be taken by a naval officer once the ship is boarded.

- The Use of Naval Forces

On an operational level and in order for national governments to be able to implement international regulations on the high seas, their only option is to appeal to the power projection capabilities of modern navies. Indeed, a well-established, well-equipped and well-trained coast guard would be an option to guard ports and to monitor fishing and other activities within the territorial seas and the EEZ, but certainly not in the high seas. Moreover, when the necessary infrastructure or the means of the coastal States to effectively deploy a coast guard in a region affected with piracy or activities related to drugs trafficking or maritime terrorism are simply

26 See Mr. Fink’s conference notes, included in this policy brief as Appendix 2.
not present or are clearly insufficient, the only option for the international community is to turn to the military.

In this context, and as noted by Fink, NATO’s Allied Maritime Strategy illustrates the commitment to support maritime security through the use of naval forces. Indeed, as he states, NATO has identified new threats in relation to which it can play a role: these do not solely relate to the collective defense of the territory, but encompass as well aspects such as global trade, freedom of navigation and the flow of valuable resources. This means that NATO is evolving from an Article 5 organisation assuring collective defense of the allied territory to an organisation that performs non-Article 5 operations, and ultimately, to an organisation that is fighting economic threats.

IV. RELEVANT CURRENT DEBATES

- Preventing maritime terrorism

With regard to preventing maritime terrorism, the most obvious solution would be to intercept any threat offshore. Yet, since it is not feasible to impose an important delay on a large merchant vessel carrying up to 6,500 containers in order to inspect each and one of these, Commissioner Robert C. Bonner of the US Customs Service had indicated that the favored solution in the United States would be “to push the U.S. borders outward.” Of course, this concept raises the important issues of State sovereignty, though the United States seems to have already received permission to place customs officials in the ports of Rotterdam, Antwerp and Le Havre.

- Private or military vessel protection detachments

There is also an intense debate regarding the legal consequences of private or military vessel protection detachments on board merchant vessels taking action against pirates, as illustrated by this recent article in the Belgian newspaper “La Dernière Heure”: “Le navire de croisière « Costa Delizia » effectue un tour du monde de trois mois en passant par l'Océan indien. Cette zone étant infestée par des pirates, un plan de sécurité a été organisé à bord. L’Union européenne s’est engagée à combattre la piraterie en créant la mission Atalanta. La Belgique y participe et enverra pour la troisième fois une frégate au large de la Corne de L’Afrique. Notre pays propose également à tous les navires battant pavillon belge de bénéficier d’une protection d’une équipe VPD (Vessel Protection Detachment) composée de soldats d’élite. Seul un navire y avait fait appel. Le coût de cette protection serait de 115.000 euros/semaine. Jugée trop coûteuse par les navires civils, ceux-ci préfèrent faire appel à des sociétés de gardiennage nettement moins chères.”

28 J.S. Mellor, op.cit. supra, p. 354.
31 La Dernière Heure, ‘Contre la piraterie’, 27 March 2012.

English translation: "The cruise ship « Costa Delizia » is making a three month world tour sailing through the Indian Ocean. Since this zone is infected by pirates, a security plan was made up on board. Committed to fight piracy, the European Union has created the operation Atalanta. Belgium is taking part and will for the third time send a frigate to the Horn of Africa. Our country also offers the possibility..."
• Policing by naval forces

From a legal point of view, and as explained by Fink, the fact that naval forces will continue to execute regular maritime security operations, will lead to major consequences that have to be resolved. Indeed, according to the lecturer, it implies the introduction of the legal paradigms of law enforcement for ships that would not normally have a policing task, and that, strictly speaking, would not simply be able to navigate the high seas and perform policing tasks.

With regard to the EEZ, it may well no longer remain an economic zone, only to become a security zone. The question is thus raised whether this entails that naval operations in the future will not be allowed anymore within the EEZ.

• Human Rights

Traditionally, navies have focused on the implementation of embargoes, which merely relate to goods. However, since the introduction of maritime security operations, naval warships are required to deal with human beings. The importance of human rights in the maritime domain is, according to Fink, a real revolution and implies taking into account the human rights regime in maritime interdiction operations.

V. A FEW REMARKS ON THE WAY FORWARD

As a conclusion to the issues raised in this chapter, and as food for thought for any policymaker in the maritime domain, it is only prudent to state that it is important to be fully aware of the new developments and associated risks with regard to violent crimes such as piracy and maritime terrorism as well as of the various legal issues raised by these phenomena.

Mr. Librando expressed the opinion that the decrease in number of attacks was the consequence of the presence of naval authorities fighting piracy operations, combined with the implementation of self-defense measures on ships, and more effective action both by the Somali authorities and the international community. The lecturer considers it to be vital to enhance coordinated efforts to eliminate the scourge of piracy, in order to consolidate this still fragile success. According to Mr. Librando, the ultimate solution for piracy lies onshore. He concluded by recalling the fact that in 1991 Somalia had become a failed State, and that there is now a new central government elected in Somalia, which brings hope for the future.

Of course, a great deal of issues are still fairly new to the international community and thus policymakers must take action with urgency. Indeed, members of military forces, albeit proven very effective in the fight against pirates, are not trained police officers and alleged pirates are not warriors in the traditional sense. As clearly stated

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to all commercial vessels showing the Belgian flag to benefit from a protective team called VPD (Vessel Protection Detachment), composed by elite soldiers. Only one vessel has asked for this protection. The cost of this protection would be 115,000 euros/week. Judged to be too costly by the civil vessels, these prefer to ask for the help of private security companies that are significantly less expensive.”
by Fink, maritime interdiction operations aimed at avoiding that goods enter a certain maritime zone raise concerns that are quite different from those arising in a context where policing tasks involve human beings with human rights. In the future, it is very well conceivable that any operation in the maritime domain will be judged not by the traditional standard of victory at sea or on the battlefield on land, but by the actual number of convictions in Court. For these reasons, and although traditional legal principles such as State sovereignty - often put forward by countries in the southern part of the world - remain very important in these modern times to all members of the global community. The only way to deal with the above mentioned crimes on a global level is to fully cooperate on different levels, including the civilian and military authorities of all States, their law enforcement agencies and the global shipping industry.

4. ENVIRONMENTAL CHALLENGES IN THE MARITIME SECURITY DOMAIN

Maritime security in the environmental domain is a matter of pressing concern in the international community. Not only the diversity inherent in geopolitical identities but also the heterogeneity of interests among coastal States, between them and port and flag States unavoidably create policy dilemmas and explain, for instance, the slow progress of the discussions in the framework of the IMO for the adoption of a binding Polar Code for shipping in the Arctic; why maritime spatial planning in the EU is intricate; or why adequate cooperative governance structures are lacking in the southern Atlantic to address the current challenges in that area. Undoubtedly, the interest based pressures of powerful private stakeholders add further complexity to policy and decision-making in maritime affairs.

The present chapter addresses current normative and governance challenges in various issue areas of relevance to the environmental security of the maritime domain, namely, marine pollution, shipping, fisheries and climate change. Notwithstanding the clear interlinkages between these sectors, it is still possible to sketch out particular policy imperatives associated with each of them. The last section is intended to serve as a synthesis of the brief analysis undertaken, and to put forward a few overarching policy recommendations in the field of maritime environmental security.

I. MARINE POLLUTION

In a UN General Assembly Resolution from 2011, it was recognised that marine pollution constitutes a ‘serious threat to human health and safety, endangers fish stocks, marine biodiversity and marine and coastal habitats and has significant costs to local and national economies.’ Marine litter, accidental discharge of noxious substances, onshore and offshore oil installations, shipping, land-based activities or dumping, all constitute pollution sources posing increasing threats to a healthy marine environment. Below, a brief analysis will be undertaken of prominent issues raised by some of these maritime security threats.

32 UN General Assembly Resolution, A/RES/65/38, 30 March 2011, p. 4.
Land-based pollution

Land-based pollution (stemming, for example, from industrial effluent, sewage, urban or river run off) is by far the principal source of marine pollution, reflecting an imbalance between population growth and increasing industrialisation, on the one hand, and the limited capacity of the marine environment to take up the wastes produced thereof, on the other hand.

The current framework established in UNCLOS is limited to providing general guiding principles and a global agreement dealing specifically with the topic is still lacking. This is mainly owed to the fact that, by implication, the activities responsible for land based pollution are located within the territorial sovereignty of each State, and thus, the establishment of a global detailed regime is hampered by the difficulties inherent in the geographical, economic and technological discrepancies in the world.\(^3\)

In the development of policies in this sector, it is important to keep in mind that land based pollution is closely connected to poor living conditions, particularly in coastal communities of developing countries where there is, for instance, a lack of basic sanitation. Hence, the emphasis placed by the UNEP/Global Programme of Action (GPA) on the importance of acknowledging the interlinkages between sustainable development of coastal and marine resources, poverty alleviation and the protection of the marine environment.\(^3\) The design of strategic programmes on the basis of a holistic integrated management approach has thus been advocated by the GPA, with the aim to ‘achieve the effective sustainable management of land-based activities, including the incorporation of the value of ecosystem services into planning processes.’\(^3\)

Marine oil pollution

Marine oil pollution mainly stems from petroleum consumption spills on land and, to a lower extent, from spills linked to regular shipping operations. Although offshore oil and gas exploration does not lie among the main contributing causes, the likelihood of a major accident, with possible extreme consequences, still poses considerable concerns to the security of the maritime domain. Offshore oil extraction is intensifying and, despite being greatly secured, there are no international safety standards apart from those defined by each company.\(^3\) For one, the BP oil rig blast in the Gulf of Mexico that occurred in 2010 reminded the world that it should remain watchful of the serious risks linked to this activity.

The 2010 disaster ignited important initiatives at the regional level - the 2011 European Commission proposal for a Regulation on safety of offshore oil and gas

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prospection, exploration and production activities\textsuperscript{37} being a case in point. It was designed to cover the whole lifecycle of all exploration and production activities, covering varied aspects such as risk mitigation, emergency preparedness and effective responsiveness to accidents, and the establishment of adequate liability provisions.

Given that many oil and gas companies operate at a global scale, it is clear that international solutions in this field are required as well. Regrettably, discussions in international fora such as the IMO, the G20 or OSPAR have so far suggested a rather slow progress in this regard.

- Vessel-source pollution

A prominent position in worldwide shipped tonnage is occupied by sea borne transport of oil products. The predicted rise in maritime transport, in fleet capacity and in the number of oil tankers points to concomitant heightened risks associated with such shipping operations. As noted by Scheiber, poorly maintained oil tankers flying flags of convenience raise considerable concern in this regard, but even ships following high standards of construction and operation can become the cause of major accidents, as the Exxon Valdez spill demonstrated.\textsuperscript{38}

Apart from oil spills, pollution related to shipping activities is generated by various other sources, ranging from discharge of sewage from passenger ships to accidental discharges of noxious substances. All these are generally regulated in important international instruments such as the London Convention and MARPOL, and corresponding annexes. However, in the presence of the serious dangers posed by shipping generated pollution, the current regulatory regime still reveals shortcomings related to an insufficient number of ratifications and a low efficacy in enforcement and compliance.\textsuperscript{39}

UNCLOS marked a paradigm shift in the regulation of marine pollution, from the principle of freedom to pollute to an obligation to prevent pollution. The primary responsibility for the regulation of vessel-source pollution lies with the flag State (Article 211 UNCLOS). However, and as will be seen in more detail below with regard to IUU fishing, combating unregulated dumping at sea or pollution from ships is, to a large extent, hampered by the practice of re-flagging. The spread of flags of convenience vessels debilitates the effectiveness of international regulation in a twofold manner: the standards (of construction, operation and safety, pollution control, and labour conditions) applied by flag of convenience States are low, thereby heightening the risk of accidents; when accidents occur, it is hardly possible to determine ownership and liability.\textsuperscript{40} In this context, port State control (prescribed in Article 218 UNCLOS and various international treaties in the field, including SOLAS


\textsuperscript{39} Ibidem, pp. 91, 92.

\textsuperscript{40} Ibidem, p. 90.
and MARPOL) has considerable potential in safeguarding compliance with the relevant normative framework. In order to strengthen the efficiency of port State control, coordinated action among port States is desirable, for the risks of “port shopping” to be avoided.

The capacity to detect, identify and counter illegal discharges from ships is of utmost importance. While, for instance, enhanced surveillance systems in the North Atlantic (combined with effective means of action against offenders) have progressively contributed to reducing the negative environmental impacts associated with shipping operations, the situation is quite disparate in the South Atlantic. This is mainly owed to the limited size and training of coastguard units, as well as to the lack of a tangible legal framework to address such activities. Hence, the need to foster more concerted action between North and South, particularly aimed at promoting capacity building with regard to the latter.

In general, inasmuch as marine pollution easily spreads beyond maritime delimitation boundaries, international and regional cooperation is critical in quelling this maritime threat. In order for maritime security in this field to be enhanced, it is important to devise an appropriate distribution of competences (among States) to minimize environmental harm.

In what regards the design of new policies, special anti-pollution measures such as the establishment of marine protected areas (MPAs) appear as important management tools in need of further development. This sort of spatially based management encompasses activities of multiple sectors, and thus, has the potential to enhance the protection of the marine environment, not only in the EEZ but also in high seas zones. For these systems to be set in place, attention at policy level should be drawn to developing scientific and technical guidance on the identification of ecologically or biologically significant marine areas requiring protection, especially in areas beyond national jurisdiction. Finally, the successful outcome of MPAs relies on effective management, attentive to the socio-economic needs of stakeholders and the idiosyncrasies of the various sectors involved.

II. SHIPPING

More than 90 percent of global commercial exchanges are carried out by international shipping. Albeit one of the safest and cleanest means of transport, shipping brings with it various threats to the environment. In the previous section, reference was made to oil spills, accidental discharges and marine litter, but other threats include greenhouse gas emissions, noise pollution and the transfer of alien potentially invasive species.

41 Y. Tanaka, op. cit. supra, p. 308.
42 X. Gorce and A. Salvy, op. cit. supra, p. 63.
43 In the context of shipping, other concepts are applied by the IMO, such as ‘sensitive sea areas’ and ‘special areas’.
44 In a UN General Assembly report, ‘Oceans and the law of the sea’, Doc. A/66/70, 22 March 2011, it was noted that there has been a significant increase in coverage of protected areas over the past decade but that many ecological regions, particularly in marine ecosystems, remained underprotected and presented variable tracks of management effectiveness (see p. 45).
Effective means to address the environmental impacts of shipping are all the more required given the expected increase in maritime transport associated with the intensification of trade flows in such diversified areas as the Arctic and the South Atlantic: new navigable areas will be opened up to regular shipping in the Arctic Ocean due to loss of ice, providing shorter alternative routes between East Asia and Eastern North America and Europe; in the Atlantic Basin, new dynamics will be provided by the opening of an enlarged Panama Canal in 2014, and the operationalisation of the Açú port, an immense industrial and port complex in Brazil.

As the prime international organisation for regulating international marine shipping, the IMO has put in place a global regulatory framework that covers almost every facet of the shipping industry, including the prevention and control of pollution from ships. The international character of maritime transport calls, indeed, for such an international scope. Concerns have nevertheless been raised as to the slow pace of ratification of IMO environment related conventions, which not only jeopardises the protection of the environment due to a delayed implementation, but may also lead to unilateral, and thus uncoordinated, State action in the field.45

Apart from the global normative regime set up in UNCLOS and IMO Conventions, it is noteworthy that complementary regulatory initiatives can be taken by States to enhance environmental protection. Port State jurisdiction over foreign ships (which is barely referred to in UNCLOS) assumes particular relevance in this regard. Through coordinated action, port States have indeed the potential to promote higher environmental standards, thereby contributing to the common interest in maritime security.46

Specific regulatory measures may also be required to account for the concerns emerging in concrete regions. The Arctic is one of those cases where particular governance issues in the maritime security domain have been raised. As mentioned above, a substantial increase in (trans)Arctic shipping is predicted, posing significant threats to a region that has already manifested significant signs of fragility. In a study from 2009 entitled ‘Arctic Marine Shipping Assessment’,47 oil spills and accidental discharges of other toxic chemicals were identified as, possibly, the main sources of concern with regard to the growth of marine activity in the region.

Article 234 of UNCLOS, regarding the polar regions, is particularly significant in allowing for coastal State regulation of vessel-source pollution in ice-covered waters in the EEZ. Despite the potentially major role to be played by coastal States, coastal

46 In this context, the EU plays an important role in the regulation of shipping, and has in fact already adopted extensive legislation prescribing port-State requirements. See H. Ringbom, ‘Regulatory Layers in Shipping’, in The World Ocean in Globalisation: Climate Change, Sustainable Fisheries, Biodiversity, Shipping, Regional Issues, Martinus Nijhoff Publishers, 2011, particularly pp. 355-361.
regulations alone will not suffice in adequately addressing the challenges presented by Arctic shipping.\(^{48}\)

Given that, at the moment, only few mandatory international standards apply specifically to this region, it is necessary that the international community as well as the Arctic States fill this gap. Hence, the adoption of a comprehensive legal framework focusing on the Arctic region is required. The IMO is particularly in a position to do so and has been in fact discussing the adoption of a binding polar code for navigation in ice-covered waters, which will be based on an existing set of IMO Guidelines. The code is meant to devise appropriate standards of maritime safety, pollution prevention, and damage control. Despite widespread agreement on the significance of adopting the polar code, discussions have been dilatory due to the diverging interests at stake. More effort should thus be expended into reaching an agreement, keeping in mind that any solutions require the collaborative efforts of the Arctic States, and ensuring the participation of the indigenous peoples of the Arctic as well as stakeholders involved in maritime activities in the area.

The disclosure of scientific data on the various environmental impacts associated with shipping in the Arctic, as in any other part of the globe, emerges as an important pressuring tool for policy and decision-makers to adopt measures and programmes aimed at preventing or at least minimizing those risks.

Among the various environmental concerns associated with shipping, the emission of greenhouse gases from ships has probably become the main threat to the marine (and atmospheric) environment in need of further international attention. Recognizing this, the IMO commissioned a study on the topic, which was concluded in 2009,\(^{49}\) as a basis to commence discussions on the adoption of a coherent and comprehensive regulatory framework.

As remarked in the study, an important question to resolve within the IMO was whether a greenhouse gas regime for international shipping should be designed in light of the principle of “common but differentiated responsibility”, espoused by the Kyoto Protocol, or rather the IMO’s basic principle of “no more favourable treatment.”\(^{50}\) An answer to this question would determine whether emissions reduction related to shipping would be voluntary for developing countries or would rather apply to all ships, regardless of their flag (i.e. that of a developed or a developing country). The IMO embraced the second position and has adopted specific technical and operational reduction measures in July 2011, which are now contained in – the already in force -Annex VI of the MARPOL Convention. This

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50 Ibidem, p. 21.
means that port States will be able to apply emissions standards in a uniform manner to all ships arriving at their ports.

It is important to note that, throughout the discussions, concerns were raised as to the need to invest in capacity building and promote the transfer of technology and information to States, in particular developing States. This steered the adoption of a Resolution by the IMO in May 2013. Compliance with these measures is essential for the envisaged greenhouse gas regime for international shipping to be effectively implemented, and will only be possible if States and industries alike acknowledge that combined efforts are necessary to halt climate change.

III. FISHERIES

The idea that marine fisheries require effective conservation in order to remain sustainable is fairly recent in international fisheries politics. Currently, there is an elaborate legal and policy framework addressing the extraction of fish, and yet statistics on fish stocks announce worrying numbers of marine capture. A report published by FAO in 2012 pointed to a worsening scenario, with 57.4 percent of fish stocks being fully exploited, and about 29.9 percent being overexploited in 2009. Fisheries management can be said to raise some of the bigger challenges in global marine governance.

The security (i.e. sustainability) of fisheries is negatively impacted upon for various reasons, ranging from IUU, climate change and poor fishery practices to other factors directly concerned with ineffective management policies, such as harmful fisheries subsidies and overcapacity. In a joint publication of the World Bank and the Food and Agriculture Organization (FAO), it was noted that ‘[a]chieving sustainable fisheries presents challenges not only of biology and ecology, but also of managing political and economic processes and replacing pernicious incentives with those that foster improved governance and responsible stewardship.’

A well-sustained security regime requires, first of all, effective mechanisms to ensure State compliance with, and enforcement of, existing rules of international law. Whilst flag States have the primary responsibility to exercise control over their fishing vessels, the reality is that this hardly materialises in relation to flag of convenience States, which often lack the capacity and even the willingness to regulate such vessels. Moreover, fishing vessels carrying these flags (which are usually engaged in IUU fishing in areas beyond the jurisdiction of the flag State, and are sometimes part of organised criminal groups) can easily evade flag State regulatory undertakings by simply re-flagging to another State. While improved flag State control is necessary, the role of third States in ensuring effective conservation

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52 FAO Fisheries and Aquaculture Department, ‘The state of world fisheries and aquaculture’, 2012, pp. 53, 59. The report also notes that effective management actions have been implemented in some areas, contributing to some progress in the restoration of overexploited fish stocks (see pp. 59 and 62).
Regimes should also be further explored through, for instance, inspection at sea and in ports of Contracting and non-Contracting Party vessels. Deference to flag State jurisdiction has been connoted as problematic, in that it has hampered law enforcement efforts towards the strengthening of maritime security. The importance of the role of port State authorities has thus been increasingly recognised, a significant development in this regard being the 2009 FAO binding Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (approved by the EU in 2011).

With respect to high seas governance, Article 118 UNCLOS requires States to cooperate with each other in the conservation and management of living resources in the high seas. To that end, and where appropriate, the setting-up of sub-regional or regional organisations is envisaged. In this light, Regional Fishery Bodies (RFBs) have been widely established. RFBs constitute the primary mechanism through which States currently collaborate in the governance of transboundary fisheries. Particularly important are those bodies with competence to adopt binding conservation and management measures, namely the Regional Fisheries Management Organizations, which should be introduced wherever they are lacking. In what regards IUU, most RFBs promote and implement measures to combat IUU fishing, ranging from awareness building and dissemination of information to aggressive port, air and surface surveillance programmes. Regrettably, RFBs have not been successful in achieving their goal of eradicating IUU, which is illustrated by the high incidence of IUU fishing and sophistication, and in the use of flags of convenience.

More fundamentally, apart from the problem of free-riding by non-participants, there are systemic inefficiencies in fisheries management due to shortcomings in transnational cooperation: significant gaps in the coordination between these organisations have been identified, mainly owing to a lack of political will by some of the organisations’ members. As has been rightly pointed out, the conservation of marine living resources is a matter where the protection of community interests is visibly at odds with the promotion of national interests. Opting-out clauses enabling States to avoid compliance with adopted measures provide further leeway for the protection of national interests. Hence, stricter rules should be envisaged as to the use of these procedures.

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54 See the inspection regime established in the 1995 UN Fish Stocks Agreement, Articles 18(3)(g)(i), 21 and 22.
55 A description of these mechanisms is made by Y. Tanaka, op. cit. supra, pp. 244-250.
56 N. Klein, op. cit. supra, p. 146.
58 FAO Fisheries and Aquaculture Department, op. cit. supra, p. 18.
60 See an enunciation of shortcomings usually identified with regard to RFBs in K. Gjerde, op. cit. supra, p. 227.
61 Y. Tanaka, op. cit. supra, p. 220.
Calls have thus been made for more concerted efforts by the international community and improved management of fisheries so as to ensure the long-term sustainability of shared fishery resources. Importantly, while maximum catches have been achieved in the North, due to intensive fishing in the coasts of developed countries, fisheries have been expanding to the South, increasingly targeting further offshore areas and deeper-water species. This trend provides an opportunity in high-seas governance to avoid in the South the mistakes previously made in the North.

On the basis of the current threats to the security of fisheries briefly described above, a set of – non-exhaustive – observations and recommendations can be put forward:

- IUU fishing remains a serious global challenge, and many efforts have been taken internationally and nationally to combat it. Apart from the need for stricter regulatory regimes, enforcement mechanisms and sanctions, as mentioned above, the development of new policies focused on capacity development, for instance through the training of staff and the harnessing of new technology, is highly necessary, particularly in developing port and coastal States.

- Combating IUU fishing efficiently warrants more sophisticated mechanisms for detection and surveillance, particularly in the high-seas. Sharing information is critical not only for preventive measures to be taken but also for law enforcement action.

- As rightly noted by FAO, solutions to the problem of overfishing pose longstanding regulatory challenges, requiring fishers to have clear ethical and financial reasons not to overexploit in their efforts to fish. Research on the environmental impacts of fishing and allowable catches would lead to more informed decisions on the side of management entities and fishers alike.

- The use of eco-labelling schemes for fisheries products in the global trade, constitute an interesting policy avenue to explore in combating overexploitation. Whilst concrete information is provided to consumers as to the - sustainably managed - origin of the product, or the criteria adhered to by the scheme’s originators, eco-labelling promotes sustainable resource use through consumer choices.

- In the UNGA Resolution 65/38, States were urged to ‘commit themselves to urgently reducing the capacity of the world’s fishing fleets to levels commensurate with the sustainability of fish stocks.’ The issue of over-capacity creates policy dilemmas in that it raises social and economic issues that often compete with sustainability considerations. It is however commonly accepted that improved discipline in respect of capacity enhancing fisheries subsidies (be it direct or indirect) is urgently required.

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63 FAO Fisheries and Aquaculture Department website: www.fao.org.
65 A real EU approach to the eco-labelling of fisheries products should thus be envisaged, resuming the debates already initiated in 2005, and which now seem to have reached a stalemate situation.
66 UN GA Resolution 65/38, 30 March 2011, para. 69.
In general, the ‘greening of fisheries’ in the design and implementation of marine conservation policies calls for the application of guiding principles such as the precautionary principle, sustainable development, and the ecosystem approach.\(^{68}\)

The creation of MPAs,\(^{69}\) for instance, constitutes an important tool for fisheries management devised in light of the ecosystem approach, and should be developed further. The EU has made commendable efforts in establishing conservational regimes, particularly by integrating the objectives of its Marine Strategy Framework Directive\(^{70}\) within its Common Fisheries Policy reform.\(^{71}\) As a result, fisheries ecosystem plans have been developed for major European Marine Regions.

IV. CLIMATE CHANGE AND MARINE RENEWABLE ENERGY

Human induced climate change can be said to be a ‘new’ maritime security threat. While not treated as such in a 2008 Report of the UN Secretary General on ‘Oceans and the law of the sea’, there was indeed mention to the fact that climate change ‘may have important implications for maritime security’, thereby requiring a ‘new vision of collective security’.\(^{72}\)

Climate change is expected to emerge as a major driver of change in the maritime domain, whilst contributing to varied factors such as the rising of sea levels, extreme weather events, ocean acidification, and changes in the distribution patterns of marine species due to an increase of water temperatures. These factors not only impact upon ocean governance, but also raise new regulatory challenges. Taking the example of sea-level rise, it will most probably affect coastal communities, thereby requiring governance shifts towards the adoption of more holistic approaches (such as the implementation of the ecosystem approach, including MPAs); but it may also have significant legal impacts upon the delineation of the baselines of coastal states, as well as the outer boundaries of their EEZ claimed on the basis of such baselines.

Given the novel challenges at stake, it might therefore be necessary to adopt new approaches to the current legal framework, and shift the interpretation and application of ocean law. Undoubtedly, this is an all-encompassing area where solutions are to be found not only in the law of the sea but also other - deeply interconnected – areas of international law, inter alia, international human rights law, environmental law and trade law.\(^{73}\)

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\(^{68}\) The wide application of ecosystem approaches (rather than adopting a focus on specific species or ecosystem components) and the design of policies envisaging sustainable practices were among the main proposals put forward by FAO at the 2012 Rio+20 Conference. See: FAO Fisheries and Aquaculture Department, op. cit. supra, p. 16, 17.


\(^{71}\) See the Directorate-General for Maritime Affairs and Fisheries website for more information: http://ec.europa.eu/dgs/maritimeaffairs_fisheries/about_us/mission_statement/index_en.htm.

\(^{72}\) Op. cit. supra, paras. 40 and 41.

\(^{73}\) H. N. Scheiber, op. cit. supra, p. 68.
At the operational level, climate change warrants particular responses that take into account emerging ecological and social imperatives. As a means to mitigate climate change, many countries in the world have started to invest in programmes for energy production from renewable energy sources. Comprising more than 70 per cent of the Earth’s surface, the oceans have attracted increased attention in this regard, for their immense potential as a source for renewable energy.

With regard to offshore wind energy, Europe has by far registered the highest growth, with the UK being the biggest market in the world for offshore wind turbines. The vast potential of this source of renewable energy is widely recognised, but a few technical, logistical and financial challenges must still be overcome. Offshore wind energy raises particular management issues in that it entails an effective coordination of multiple uses (and the impacts thereof) of natural resources, as well as of conflicting norms from different sectors and jurisdictions. According to the European Wind Energy Association, maritime spatial planning is a fundamental tool to enhancing offshore wind development: it reduces conflicts among uses, and thus, provides stability and clarity for investors; it contributes to bringing down the costs of wind energy; and allows for cross-border coordination. Moreover, it promotes the preservation of critical ecosystem services, in order to meet economic, environmental, security and social aims.

The potential of ocean energy, (which stems from waves, tidal range, tidal currents, ocean currents, ocean thermal energy conversion and salinity gradients) is immense: according to some estimations, the world’s oceans contain more than 5 thousand times the current global energy demand. In general, ocean power technologies are still at an early stage of development with some technical advances registered, for instance, with regard to the conversion of tidal energy into electricity. Assessing the future role of ocean energy in mitigating climate change remains, however, highly uncertain, as a reduction of costs associated with technology development is necessary for the broad-scale deployment of ocean energy. The question does not lie so much on technical potential but rather on the conditions of local communities which, in the future, will have to select the available ocean technology that better suits their local resource characteristics.

Despite the increased concern for greener economies, and the upward trend in renewable energy investment, the reality is that the use of clean energy to meet specific local requirements in developing countries is still lagging behind. As noted

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78 P. Holthus, op. cit. supra, p. 148.
80 Ibidem.
by the UN Secretary-General's Advisory Group on Energy and Climate Change, several billion people 'experience severe energy poverty in terms of inadequate and unreliable access to energy services and reliance on traditional biomass'. Their pressing need for new power capacity therefore calls for expanded access to modern energy services, in a way that is 'economically viable, sustainable, affordable and efficient, and that releases the least amount of GHGs'.

Much more effort has to be placed by the international community on capacity additions in renewable energy, including marine renewable energy, to achieve the desired outcome of global reduction of greenhouse gas emissions. To this end, enabling policies, clear regulatory frameworks and financial incentives both at local and international levels are required. Next to this, Governments play an important role in promoting the sector, by creating a sense of stability and predictability for research and investment. Considering the particular needs of developing countries, it is important to ensure that access to (marine) renewable energy is prioritised in the development assistance of these countries and that action is taken to strengthen partnerships and enhance capacity building through the mobilisation of financial resources and technical know-how.

V. WAY FORWARD

The brief analysis undertaken in this policy brief illustrates how present and emerging challenges in the maritime environmental security domain may require a shift in the current law of the sea and in ocean governance in general.

An immediate point to emphasise is the interconnectedness of the topics addressed, with intertwining cause and effect relations that should be duly taken into account in maritime security policy and decision-making. A new paradigm informed by more effective, efficient and holistic solutions is thus called for. To this end, an integrated cross-sectoral response to maritime environmental security is key. This is the approach that has been enthusiastically pursued by the EU, in particular the European Commission: in its quest for “blue growth”, it has devised an Integrated Maritime Policy - comprising Maritime Spatial Planning and Integrated Coastal Management, Integrated Maritime Surveillance and Marine Knowledge – aimed at setting up a more coherent approach to maritime affairs, with strengthened coordination among different policy areas, including fisheries, energy, transport and the environment.

While the challenges described in this chapter are global in scope, it is undeniable that for effective solutions to be achieved, cooperative initiatives undertaken at the regional level, such as the EU’s Integrated Maritime Policy, remain essential, in that

82 Ibidem.
they take into account particular local environmental, social and economic conditions.

On the basis of the challenges sketched out above, a few overall recommendations can be put forward for consideration in relation to future policies regarding environmental maritime security:

- Firstly, it is important to keep in mind that the oceans are essential for sustainable development. It is thus a challenge for the international community to maintain the value of the seas as foundations for a sustained “blue growth”, so as not to compromise their ability to provide vital resources and critically important services.

- The precautionary principle plays an important role in future approaches to marine environmental protection. The use of the “best available knowledge” in decision-making, including both scientific and traditional knowledge, should be encouraged. It promotes risk assessment and management, and furthers the notion that even in cases where detailed scientific knowledge is lacking, decision-making should take place.\(^{85}\)

- An integrated natural resource management requires holistic solutions, which include the adoption of an ecosystem approach. In this context, the introduction of marine spatial planning and MPAs is encouraged, particularly in areas beyond the States’ national jurisdiction, in order to mitigate the cumulative impacts of sectoral activities taking place in those areas. While MPAs are usually associated with sustainable fisheries management, they are surely of relevance as well in the fight against marine pollution and climate change, as seen above.

- Improved monitoring to identify threats to the marine environment at the regional, national and local levels is necessary. The success of surveillance and control of illegal activities at sea would surely benefit from enhanced information sharing networks, involving a much needed coordination of efforts between flag States, port States and coastal States.

- Transparent and open decision-making processes are required. Moreover, it is important to involve stakeholders, organisations and strategic partners in the design and implementation of policies so as to ensure an effective multilateralism.

- Finally, building human and institutional capacity is critical to ensuring full and effective implementation of existing regulatory regimes. It is of utmost importance to strengthen, in particular, the capacity of developing countries in the development of national and regional programmes aimed at managing maritime security threats, and to provide them with tools, know-how and technology to implement such strategies.

\(^{85}\) FAO Fisheries and Aquaculture Department, op. cit. supra, p. 136.
5. CONCLUSION

The present policy brief has unveiled a complicated legal and policy environment when it comes to addressing issues of ocean governance. This state of affairs should not, however, detract policy and decision-makers from cooperating towards the delineation of new effective and politically acceptable responses to maritime security concerns.

With respect to the current legal framework in the maritime domain, it has been noted that considerable weight is attached to sovereign interests. A more constructive approach to maritime security would be to regard the threats thereof as threats affecting the collective interests of States. For instance, notwithstanding the importance of coastal States’ enforcement jurisdiction over their territorial sea with regard to IUU fishing or marine pollution, it is also true that these States are sometimes unable to tackle such issues, or simply do not prioritise them. These types of limitations lend themselves to multilateral collaborative efforts, a good example being the 2008 CARICOM Maritime and Airspace Security Co-operation Agreement. In light of Articles VII and VIII of the Agreement, the fifteen CARICOM member States are entitled to patrol and undertake law enforcement operations within the territorial waters of a State party in order to address activities which threaten the security of the Region or that of the State Parties. Regulatory regimes devised with regard to ocean space and use should therefore strive to accommodate, to the extent possible, national interests with the broader interests of the international community.

With particular regard to law enforcement powers, it should be recalled that deference to flag State authority on the high seas, as a corollary of the principle of freedom of the seas, has hampered efforts aimed at improving maritime security. As already noted, the problems linked to the phenomenon of flags of convenience cannot be overstated. Regulatory efforts towards the strengthening of the overall effectiveness of port State as well as coastal State control have taken place (for example, through the recognition of the right of visit), but only to a limited extent. Legal developments aimed at reallocating competences by particularly strengthening the role played by States other than the flag States should thus be more thoroughly considered in the future, as a cooperative endeavour that accounts for the common interest in furthering the security of the maritime domain.

Apart from the need to establish a robust regulatory regime and cooperation tools to combat the various maritime security threats already referred to, it should be noted that, currently, the operational dimension of maritime security is perhaps in more pressing need of development.

In this regard, one should reiterate at the outset the interconnectedness between the various issue areas of concern to today’s maritime security. Taking the case of the Gulf of Guinea as an example, violence prone flows are on the rise in the area, with illegal activities such as piracy, armed attacks at sea or drug trafficking meriting

86 See, for an account of different cooperative endeavours in this context, N. Klein, op. cit. supra, pp. 78-84.
87 As conveyed in the IMO’s 2012 Annual Report, the West African coast lies among the top tree
increased attention by international organizations such as the UN or the EU; at the same time - and not coincidently, as the main target of the attacks is the oil sector\textsuperscript{88} - the Gulf of Guinea’s hydrocarbon reserves are the second-biggest in the world. This makes it the biggest source of energy supply to the US, which, by 2015, might rise to 25 per cent.\textsuperscript{89} If we consider that, in the years to come, the operationalisation of renewable energy on and from the sea will most certainly affect current trading patterns, also in the area of the Gulf of Guinea, consequences will most certainly be felt with regard to the share of oil tankers crossing the seas and associated risks of oil spills.

The example of the Gulf of Guinea shows that the various threats to the maritime domain interact synergistically. This entails that policymaking in a specific area of maritime security should take into account the broader spectrum of security threats, challenges and developments manifested elsewhere. As noted by the UN Secretary-General, ‘[s]ince those threats are interconnected, the failure to address one threat may exacerbate the risk of another’.\textsuperscript{90} It is thus important to keep in mind that a shared and holistic system of ocean governance is required at international, regional and national levels.

Maritime surveillance and information sharing constitute an outstanding example of how one policy can entail such a diversified range of cross-sector ramifications, from the detection of piracy and IUU fishing, to the surveillance of oil spills and illegal discharges by vessels. While the North Atlantic is equipped with more sophisticated means to detect and track illegal activities, such as the CleanSeaNet service of the European Maritime Safety Agency, these do not exist in African coastal States. Using maritime surveillance as a common tool could do much in improving the security of the maritime domain: for instance, Northern countries concerned with the surveillance of piracy in the South Atlantic could cooperate with African States in curbing marine pollution (as well as other illegal activities) by providing to these countries satellite imagery of the main maritime routes off their coasts.\textsuperscript{91}

Illegal activities are particularly prominent in the South, where security arrangements are ‘to a great extent reactive and executed without much planning’.\textsuperscript{92} Efforts should thus be expended on the operationalisation of a well-sustained collective security architecture in the region. To this end, it is first of all essential to stimulate dialogue in the South, given the absence of a common agreement on the various challenges faced and the means to tackle them. Moreover, the setting up of more robust governance structures would surely benefit from increased cooperative endeavours of more developed countries.

From the above, it can be concluded that it has become critical to adopt shared legal and institutional frameworks addressing the implications of activities undermining the

\textsuperscript{88} X. Gorce and A. Salvy, op. cit. supra, pp. 61 and 62.
\textsuperscript{89} A. M. Guedes, op. cit. supra, p. 31.
\textsuperscript{91} See X. Gorce and A. Salvy, op. cit. supra, pp. 71-73.
\textsuperscript{92} A. M. Guedes, op. cit. supra, p. 50.
security of the sea. Moreover, and as already noted, the efficacy of these regimes is inextricably dependent upon the capacity of States to exercise the authority to enforce them. Capacity building efforts should thus be devised keeping such premises in mind.

Ocean governance, be it at the international, regional or national level, can only be truly meaningful if it is shared, and, for this to be achieved, it is first and foremost essential to foster a global consciousness about the current challenges threatening the security of the maritime domain.
I am very pleased to participate in this maritime colloquium, and I am grateful for the invitation from the Catholic University of Leuven.

IMO is the United Nations specialised agency with responsibility for the safety and security of shipping, the prevention of marine pollution by ships and the legal matters relating thereto.

Today I intend to present a brief overview of the IMO activity to address the problem of piracy.

Allow me to recall that Piracy has been a criminal activity for so long, that it is one of the few and earliest activities to be regarded as an international crime.

With regard to the fight to piracy, the United Nations Convention on the Law of the Sea (UNCLOS) reflects what was already customary international law, that is: every State has not only a right but also a duty to take action to curb piratical activities. Article 100 of UNCLOS provides that "all States shall co-operate to the fullest possible extent in the repression of piracy."

The traditional definition of piracy is to be found in Article 101 of UNCLOS, which states that piracy consists of any illegal acts of violence, detention or depredation committed for private ends by the crew or passengers of a private ship [or aircraft], and directed, on the high seas, against another ship [or aircraft] or persons or property on board; or against a ship, [aircraft,] persons or property in a place outside the jurisdiction of any State. Important elements of the offence are, therefore, the motive -a private end, not a political purpose; and place- on the high seas, and areas beyond the jurisdiction of any State.

Shipping carries more than 90% of the world trade on which all of us depend for our daily lives and is an integral component of today’s global society. Shipping has a direct bearing on people all over the world, taking food, fuel, raw materials and manufactured items from wherever they are produced to wherever they are needed. It is, therefore, in everybody’s interest to ensure that ships and the seafarers operating them are properly and effectively protected.

IMO has been addressing piracy since 1988. A key component of IMO’s strategy has been to foster the development of regional agreements. This has worked to considerable effect, most notably in the former piracy hot-spot of the Straits of Malacca, Singapore and the South China Sea, where the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), concluded in 2004, became the first regional Government-to-
Government agreement to promote and enhance co-operation against piracy and armed robbery.

At the turn of the last century, piracy was thought to have been eliminated, but as we know, in recent years there has been resurgence, particularly off the coast of Somalia and in the Gulf of Aden, and then beyond the Horn of Africa and in the western Indian Ocean.

IMO and, more recently, the United Nations have worked together to address the issue, taking several initiatives to coordinate appropriate action among interested parties, including Governments, international organisations, as well as political and defence organisations, and the industry.

In a further effort to tackle piracy from all possible angles, in January 2009, an IMO sub-regional meeting on maritime security, piracy and armed robbery against ships in the western Indian Ocean, Gulf of Aden and Red Sea States, held in Djibouti, adopted what has become known as the Djibouti Code of Conduct, which took immediate effect.

The Djibouti Code aims at ensuring co-operation among its (20) signatories on the following matters:

- investigation, arrest and prosecution of pirates;
- interdiction and seizure of suspect ships and property on board such ships;
- rescue of ships, persons and property subject to piracy and armed robbery; and
- conduct of shared operations – both between signatory States and also with navies from outside the region.

The Code also provides for the sharing of piracy information, through information-sharing centres in Sana’a (Yemen), Mombassa (Kenya) and Dar es Salaam (Tanzania).

The signatories to the Code also undertook to review their national legislation with a view to ensuring that they have laws in place to criminalise piracy and armed robbery against ships and to make adequate provision for the exercise of jurisdiction, conduct of investigations and prosecution of alleged offenders.

For the purposes of promoting full and effective implementation of the Djibouti Code of Conduct, IMO has established a Project Implementation Unit (PUI). This Unit also coordinates and manages the execution of relevant capacity building activities.

Such activities are carried out in cooperation with other entities concerned, including the UN Division for Ocean Affairs and the Law of the Sea (UN-DOALOS), the European Commission, the Information Sharing Centre of the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP-ISC), the United Nations Political Office for Somalia (UNPOS), the United Nations Office on Drugs and Crime (UNODC), and the International Criminal Police Organization (Interpol).
To date, the Project Implementation Unit has organized about 30 training courses, including train-the-trainer programmes on maritime law enforcement operations. About 500 persons from the region have attended these courses.

The establishment of a Regional Training Centre in Djibouti, in partnership with the EU, was another significant step towards the creation of regional capability to counteract pirate activities. We expect the construction of the new building for the Centre to be completed during the current year.

Among a range of activities envisaged ahead, IMO will, for example, assist Somalia to ratify and implement the International Convention for the Safety of Life at Sea (SOLAS) and incorporate its provisions into Somali legislation.

One important benefit of this is that SOLAS mandates compliance with the International Ship and Port Facility Security Code, which could provide a platform for the development of port security programmes and procedures to enable ports in Somalia to comply with international standards, thus promoting trade by sea and providing additional security to World Food Programme and other humanitarian shipments.

In addition, secure port areas could serve as a basis for the expansion of security controlled zones in coastal areas, policed by land based security forces, which could eventually link together to enable effective coastal monitoring. They could also serve as secure operating bases for maritime police, coast guards and fishing vessels, in due course.

Ladies and Gentlemen, the carriage of firearms on board merchant ships is a complex legal issue and countries hold diverse positions on the subject. Following an intense debate at IMO, a set of interim guidelines for privately contracted maritime security personnel (PCASP) was agreed which should help all those involved to reach the most appropriate conclusions.

As stated in the relevant IMO circulars, this interim guidance and recommendations “are not intended to endorse or institutionalise” the use of armed guards. It is for each flag State to decide whether or not privately contracted maritime security personnel should be authorised for use on board ships flying its flag. If a flag State decides to permit this practice, it is up to that State to determine the conditions under which the authorisation will be granted.

It should be noted that the use of privately contracted maritime security personnel should not be considered as an alternative to Best Management Practices (BMP) and other protective measures developed by the industry.

Before passing the floor to the other distinguished guest speakers, I would like to stress that IMO is heavily involved also in the creation of an effective legal framework to deal with pirates, and that the IMO Legal Committee, for the last few sessions, has considered a variety of issues related to the problem of piracy.
A notable initiative of the IMO Secretariat was to undertake a review of existing national legislations to prevent, combat and punish the crimes of piracy and armed robbery at sea. This was done in cooperation with UN Division for Ocean Affairs and the Law of the Sea (UN-DOALOS) and the UN Office on Drugs and Crimes (UNODC).

An analysis by the Legal Office of IMO of the legislations submitted by States showed that there was no harmonization and that there was an uneven incorporation into national law of the definition of piracy and other relevant provisions of UNCLOS. Relatively few countries fully incorporated the definition of piracy contained in Article 101 of UNCLOS, as well as a jurisdictional framework based upon the concept of universal jurisdiction regulated by that Convention. In most cases, piracy was not addressed as a separate offence, with its own jurisdictional framework, but was merged within more general categories of crimes, such as robbery, kidnapping, and violence against persons. In these cases, prosecution and punishment can only take place in accordance with a jurisdictional scope that is more restricted than the scope of universal jurisdiction regulated in UNCLOS. All these factors, alone or in combination, make legislation less effective in achieving successful prosecutions.

These, and other findings, were referred to the IMO Legal Committee for further consideration.

The Committee agreed that there was a need for all States to have in place a comprehensive legal regime to prosecute pirates, consistent with international law, based on UNCLOS, customary international law and elements of the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA), which complement the UNCLOS provisions.

The view was also expressed that the development of a new international instrument might be premature, or unnecessary, in light of the existing international legal framework on piracy, which was generally considered to be adequate and that, for the present, guidelines or model legislation might be more useful, along with capacity building in States to assist with enactment or revision of domestic laws.

To facilitate this process, the documents prepared by the Secretariat, UN-DOALOS and UNODC, for the consideration of the Committee, have been circulated to the IMO Members. These documents identify the key elements contained in the SUA Convention, the UNCLOS Convention, the Organized Crime Convention and the Hostage Convention that may be included in national law, in order to facilitate a full and uniform implementation of the provisions of these Conventions.

In addition to the above, IMO actively supports the Contact Group on Piracy off the Coasts of Somalia, which was established pursuant to UN Security Council resolution 1851. This Contact Group is a mechanism of cooperation whose aim is to facilitate the discussion and coordination among States and organisations to suppress piracy off the coast of Somalia. Within the Contact Group there are five main Working Groups that deal with:
1. Military coordination, information sharing and the establishment of a regional coordination centre;
2. Legal issues, and particularly the judicial aspects of piracy;
3. Reinforcing the awareness of the threat represented by piracy;
4. Enhancing the public information on every aspect of piracy; and
5. Coordination of international efforts to identify and disrupt the illegal financial flows.

Ladies and gentlemen, recent figures suggest that all this work is beginning to pay off. The number of attacks and successful hijacking this year are at the lowest level in comparison with the last three years.

This decrease may be attributed to a combination of factors, including: the presence of naval forces disrupting pirate operations; implementation of self-protection measures on board merchant ships and better situational awareness of where the threats are; coupled with more effective action ashore in Somalia by the Somali authorities and the international community.

IMO gives a cautious welcome to this downward trend in successful attacks. In fact, this year, the IMO Secretary General has refocused the Organization’s efforts by setting the bold targets of eradicating maritime piracy and ensuring the release of all hostages as soon as possible. To this end he has sent letters to the States and the organisations most involved in the region, urging them to maintain the current level of naval forces in the Gulf of Aden.

Of course, it is not at sea that the ultimate solution to the problem of Piracy off the coast of Somalia is to be found, but on shore. Its root cause is centred on the political instability that has torn Somalia apart since 1991, making it a failed State for more than twenty years. With the first permanent central government in the country, which was inaugurated in the autumn of last year, there is hope that this situation can change and that the international community will be able to tackle this complex issue in a more effective way and to defeat piracy once and for all.

Thus there needs to be a concerted effort to stabilise Somalia, and to bring to some meaningful justice those who have used the crime of piracy for their personal gains, and this is where the international effort is concentrating.
APPENDIX 2

Some Remarks on Maritime Interdiction Operations and Maritime Security

Martin Fink, Royal Netherlands Navy, Netherlands Defense Academy

Introduction

In many aspects maritime security and maritime interdiction operations are closely related. One particular aspect is that maritime interdiction operations are one of the practical tools by which maritime security is implemented at sea. It is not the only tool by which maritime security is implemented in the maritime domain, but maritime interdiction operations are the only tool that involves the deployment of military, or more specifically, naval forces.

The undefined scope of maritime security

Because as lawyers we always like to have a definition of what is meant by terms we are using, it is first of all interesting to note that both the terms maritime security and maritime interdiction operations are not specifically defined and do not have internationally accepted or crystallized definitions. What is meant by maritime security can differ from State to State and may differ from international organization to international organization. This is even more so for what is meant by maritime interdiction operations. Maritime security is often defined not by what is meant by maritime security itself, but by listing the different threats that can be potentially harmful to maritime security. As an example, the UN-Report on Oceans and International Law of the Sea (2008) can be mentioned. In his report the UN-Secretary General did exactly this, and first stated that there is no universally accepted definition of maritime security, and went on to mention examples of how maritime security may be threatened. Among other issues he mentioned: piracy and armed robbery, actions against the integrity of the state, terrorist acts, illegal fishing, pollution and damage to the marine environment. Enhancing maritime security is thus done by minimizing the threats against it.

Maritime security and the role of naval forces

Whatever the exact scope of maritime security may be, it is clear that since 9/11 there has been a growing belief that naval forces can play a significant role in enhancing maritime security. When one views the list of threats against maritime security this appears only partly logical at first instance, as the subject are not all issues that traditionally fall within the scope of operations attributed to the military. Notwithstanding this, actual military operations, such as the anti-piracy operations by the EU (Operation Atalanta) and NATO (Operation Ocean Shield) and the evolved

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93 A/63/63, Oceans and the law of the sea, 10 March 2008, paragraph 39.
94 In this report armed conflict and peace and security are however considered to be outside the scope of maritime security.
NATO’s anti-terrorist operation *Active Endeavour*, are conducted to enhance maritime security. But even more important however is that the view that naval forces can play a significant role is now also formally embedded in military strategy documents. This is for instance the case in the most recent NATO Alliance Maritime strategy (AMS) that was issued by NATO in 2011.¹⁵

**NATO’s Alliance Maritime Strategy (AMS)**

NATO’s new maritime strategy explicitly mentions maritime security as one of the four roles that naval forces can perform within the Alliance context. With the AMS, NATO nations have committed themselves to contribute to enhancing maritime security through the military, and in particular by means of naval forces. Like the earlier mentioned UN-Report, the AMS also does not mention what exactly maritime security means, but instead sketches the maritime security environment and lists the threats perceived by NATO to be threatening maritime security. Notably, apart from the more traditional threats considered by NATO, such as terrorists, weapons of mass destruction, threats against peace and security and the territorial integrity of the member states, NATO now also considers to have a role in more economic threats, such as threats for instance against global trade, valuable resources, freedom of navigation and critical infrastructure. As such, NATO as a military collective defence organization has grown over the years from defending territorial integrity under Article 5, to peace support operations in the 1990’s, to enhancing also the economic security of its member states. Territorial integrity to NATO now appears to mean more than just the physical territory of the Alliance, but also its security interests that can be threatened beyond the physical boundaries of its member states.²⁶

**Legal consequences for maritime interdiction operations**

In very broad lines and from a legal point of view, committing naval forces to maritime security brings about at least three interesting points that can be noted: a further focus on the law enforcement paradigm within maritime operations, the applicability of international human rights law and the need for an interagency approach.

*The law enforcement paradigm*

Firstly, maritime security in relation to naval forces introduces another legal paradigm to contemporary naval operations and specifically in maritime interdiction operations. Whereas naval forces where mainly operating within the realm of armed conflict and peace and security, it now also has to deal with the paradigm of law enforcement. In other words, maritime security is pushing naval forces more and more into a role in which they are actually policing the high seas. This is a fundamental shift in focus because the basic point of departure in international law of the sea is that a general

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maritime policing task for states and their warships on the high seas does not exist in international law. This was underlined by the International Law Committee (ILC) in 1955. Yet, what we see is that politics and maritime strategy seem to be moving from the *mare liberum* concept to the *mare clausum* concept, in which governing the global commons by policing the seas is viewed essential for the security of states. Thus, some discrepancy appears to exist as to which direction politics and strategy have taken with regard to governing the global commons, and what the current status of international law can provide to support this evolution. The issue of where international law of the seas stands on this debate at present day is under debate.\(^{97}\)

*International human rights law*

The second point to note is that after the fall of the Berlin Wall maritime operations were very much focussing on enforcing economic sanctions imposed by the UNSC. These can be called maritime embargo operations. These operations primary mandate are to stop and seize sanctioned goods, based on the measures taken by the UNSC within the collective security system. Whereas embargo operations focus on goods, the effect of the law enforcement paradigm is however that these naval forces now also have to focus on human beings. Piracy may be the most obvious example. The obvious legal consequence of this shift is that under certain circumstances human beings introduce international human rights law (IHRL) to be applied in maritime interdiction operations. That IHRL cannot be ignored in maritime interdiction operations is also underlined in national court cases on piracy\(^{98}\) and in internationally, before the European Court of human rights (ECHR). The most famous cases are the *Medvedyev*\(^{99}\) and the *Hirsi case*.\(^{100}\) Furthermore, in the latter case we see also that traditional maritime law on rendering assistance is being caught up by and getting intertwined with norms of IHRL. Where this new marriage may end is yet to be discovered.

The applicability of IHRL to maritime interdiction operations brings in the first place practical challenges for naval forces at sea. Examples that can be mentioned are the right to legal counsel during the first interrogation and the obligation to bring a person promptly before a judge. Furthermore, it is often experienced that military did not have well enough training on evidence gathering so that it can be useful or admissible in courts.

*Interagency approach*

As a third point to note, which flows from the above mentioned points, is that the success of maritime operations is not anymore solely dependent on what naval forces do at sea, but has in fact many more stakeholders. Successful operations more frequently depend also on what happens in the aftermath of the actions at sea. The overall success of the mission is ultimately fought over in court rooms instead of only at sea. Practically, this has significant organizational effects.

\(^{97}\) See e.g., E. Papastavridis,‘The right of visit on the high seas in a theoretical perspective: Mare Liberum versus Mare Clausum revisited’, in *Leiden Journal of International Law*, no. 24 (2011), pp. 45-69.

\(^{98}\) See e.g., E. Papastavridis,‘The right of visit on the high seas in a theoretical perspective: Mare Liberum versus Mare Clausum revisited’, in *Leiden Journal of International Law*, no. 24 (2011), pp. 45-69.

\(^{99}\) Currently the Netherlands has had three court cases concerning piracy before a Dutch District Court that were the result of the anti-piracy operations off the coast of Somalia.


\(^{100}\) ECHR (Grand Chamber), *Hirsi Jamaa and others v. Italy*, appl. No. 27765/07, 23 February 2012.
In order to align these to processes at sea and in the aftermath an interagency approach in which more governmental organizations will have to be involved at certain stages in interdiction operations at a greater detail is essential. Without these other agencies, such as justice or foreign affairs, we may only achieve part of the mission. Naval forces can stop and thwart the act, but obviously cannot punish or extradite for further adjudication the possible suspected criminals themselves. For this interaction to work successfully on the one hand naval personnel has to learn the legal language of law enforcement and integrate this in operating procedures. On the other hand other agencies need to understand the essentials of military operations the manage expectations is to what naval forces can do for them at sea. One example may be the fact that it is necessary for military operations to treat certain information as secret, whereas the same information may also be needed in a court of law to try the suspects.

Interagency also fulfils another important factor: That of the issue of having the proper legal authority to be able to act against a certain threat. Naval personnel usually do not have law enforcement powers. These powers to act against threats of maritime security must then come from somewhere else, for instance the public prosecutor. Again, piracy is a good example of this. The United Nations Convention on the Law of the Sea (UNCLOS) may give warships the authority to act\textsuperscript{101}, but also national legislation will have to that ensure that naval personnel is given the proper authorities so that it can act as police. As such, the attribution of powers to or operating via naval forces may also ask for change in the national procedural laws if such combinations are not possible under domestic law.

**Maritime interdiction operations**

As mentioned in the introduction, maritime interdiction operations (MIO) are a practical tool of how maritime security is implemented at sea. Also the term MIO is as said not well defined. The essence of maritime interdiction operations is that MIO are naval operations that involve the possibility of boarding a foreign flagged merchant vessel by means of the crew of a warship. This obviously leads to jurisdictional issues, which goes to the exclusive jurisdiction of the flag state, which ultimately leads to the need to have a legal basis to be able to board a foreign flagged vessel.

As the story goes, the term MIO was coined by the US-Secretary of State during the Iraq-Kuwait conflict of 1990. The purpose of this term was to avoid the term blockade; which was a word that had too much of a connotation with the term war; a word that needed to be avoided in the new world order. After the adoption of UN-Res. 665 (1990) the term MIO then lived on to become a synonym for naval enforcement of economic sanctions imposed by the UNSC. In other words: maritime embargo operations. Maritime embargo operations since then became a much used tool in peace support operations. Embargo operations were used after Iraq, in the former Yugoslavia, Haiti and Sierra Leone. Later the UN established an embargo operation off the coast of Lebanon within the UNIFIL operation and most recently in 2011 with the adoption of SC-Res. 1973 the UN-Security Council authorized an embargo off the coast of Libya.

\textsuperscript{101} See Articles 100-107 and 110 UNCLOS on piracy.
The important point from this to note is that during the 1990’s the terms MIO and embargo operations were considered to be the same thing. And secondly, form a legal perspective MIO was therefore also only connected to one legal basis: namely the collective security system of the UN-Charter. Since 9/11 and the developing concept of maritime security, also the legal basis upon which a MIO is conducted has broadened in scope. Nowadays, there are more legal bases upon which a MIO can be considered to be undertaken.

9/11 and beyond

Since 9/11 the term MIO is used also for the MIO that are conducted in the fight against Al Qaida and the Taliban. The legal basis for these MIO was considered to be self-defence. Next to the fight against Al Qaida and Taliban, in the broader fight against terrorism, in particular in connection to WMD, a growing amount of bilateral and multilateral treaties were made to find more legal grounds that would allow under certain circumstances to board foreign flagged vessels for inspections against possible WMD and terrorist threats. Examples that can be mentioned in this context are the SUA-Protocol (2005) and the bilateral boarding treaties agreed between the US and other States.

Also, the existing possibilities under UNCLOS and more specifically article 110 UNCLOS, were revisited and explored. Not just the laws of piracy have been taken off the shelf and are now used to interdict pirates, but also the concept of stateless vessels is used as a legal basis for maritime interdiction operations. We see this legal ground for instance used by the French Government in the earlier mentioned Medvedyev-case, and also used as a legal basis for stopping the merchant vessel So San by the US and Spain in 2002. One of the challenges with the legal ground of statelessness is that the conditions under which a vessel may be considered stateless may not be clear. The Medvedyev case has underlined that it does not solely depend on the situation at sea and what the commander can determine with his own eyes, but must also be judged by the information that the State has received via other channels.

Lastly, and important within the context of enhancing maritime security, is the effort to try to seek for more so called maritime awareness at sea. Within this context maritime interdiction operations are then used to increase maritime security awareness (MSA) in NATO speak, or maritime domain awareness in US-speak- at sea. It is obvious that a certain level of awareness of what is happening at sea is needed to be able to act against possible threats at sea. One of the legal bases used for this is consent, which means basically asking another state to be allowed to come on board. One of the issues with consent based boardings however is the question of who actually gives the authority to board a vessel. Can the master of the vessel do so, or must it be a certain government official of the flag state itself? Different nations take different views on this point. Some say that the master is enough to board the vessel, whereas others tend to stay with the official authorities of the flag state as the

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only valid legal authority. This issue touches the validity of consent as one of the conditions for consent to be a legal ground. A second intertwined issue with consent that it has no clear applicable legal regime. With treaty based boardings or boardings under the law of naval warfare to certain extent it is clear what can or cannot be done, because the legal regime of the treaty or the legal regime of the laws of naval warfare provide the conditions. With consent based boarding this is less clear.

Conclusions

Involvement of naval forces to enhance of maritime security has underlined the importance of the law enforcement paradigm in the maritime dimension, which triggers several legal challenges, most notably the applicability of IHRL and the need for an interagency approach. MIO are a military tool in which maritime security is being implemented at sea. Under the growing understanding that naval forces should indeed play a role in enhancing maritime security, the scope of what is understood by maritime interdiction operations has also broadened. With the evolving scope of MIO has also ensured the development of a broadening of the legal basis upon which MIO can take place. This variety of legal basis for maritime interdiction operations also triggers various legal regimes that become applicable during interdiction operations.

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